

APPENDIX B

Overall Prey of 60 Predators Which Were Fully Sampled and Well Represented in Collections during the NEFSC's 1977-80 Bottom Trawl Surveys

Stomach content data for 60 predator species sampled during the 1977-80 NEFSC bottom trawl surveys are presented in Tables B-1 through B-60. These tables represent predator species for which 25 or more individuals each were sampled.

For 44 of these 60 species, stomach content data are given according both to predator length categories and to geographic areas of collection. Those 44 species were selected based on the greatest number of individuals (at least 25) and areas (at least two) represented by the samples. For the remaining 16 of these 60 species, stomach content data are given according only to predator length categories.

The tables for the 44 predators listed by both predator length and geographic area have two subtable numbers

(*e.g.*, Tables B-1a and B-1b, respectively). The tables for the 16 predators listed by only predator length have one main table number (*e.g.*, Table B-3).

Stomach content data have been summarized, when necessary, to fit on one page to aid in making comparisons among predator species. Whenever the list of prey species had to be so summarized, fish prey, in almost every instance, were left intact at the expense of those other prey which had contributed the least percentage by weight to the predator's diet, and which were then condensed into higher taxonomic groups. In instances when the list of fish prey had to be summarized, only species which made up <1% of the total stomach contents by weight and which were not commercially important were then lumped into higher taxonomic groups.

Table B-1a. Diet composition and sampling data for northern shortfin squid by squid length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)								Total
	1-5	6-10	11-15	16-20	21-25	26-30	31-35	>35	
PLATYHELMINTHES	[0.2]	<0.1	[0.1]	[0.7]	[0.5]	[0.4]	<0.1	[8.9]	[0.5]
Cestoda	0.2	<0.1	0.1	0.4	0.3	0.2	<0.1	-	0.3
Trematoda	-	-	-	0.3	0.2	0.2	-	8.9	0.2
RHYNCHOCOELA	-	-	-	<0.1	-	<0.1	-	[0.5]	<0.1
NEMATODA	-	<0.1	<0.1	<0.1	<0.1	<0.1	-	[0.2]	<0.1
CHAETOGNATHA	-	[0.1]	[1.8]	<0.1	<0.1	<0.1	-	-	[0.1]
<i>Sagitta elegans</i>	-	-	-	<0.1	-	-	-	-	<0.1
Chaetognatha unid.	-	0.1	1.8	-	<0.1	<0.1	-	-	0.1
CEPHALOPODA	-	[2.0]	[16.2]	[8.4]	[20.8]	[61.6]	[96.0]	[83.9]	[34.6]
<i>Loligo</i> sp.	-	-	-	-	<0.1	-	-	-	<0.1
Cephalopoda unid.	-	2.0	16.2	8.4	20.8	61.6	96.0	83.9	34.6
POLYCHAETA	-	-	[0.7]	-	<0.1	<0.1	-	-	<0.1
CRUSTACEA	[0.5]	[14.6]	[7.3]	[36.4]	[19.4]	[7.8]	-	-	[16.6]
Copepoda	-	-	-	<0.1	<0.1	-	-	-	<0.1
Cumacea	-	-	-	-	<0.1	-	-	-	<0.1
Amphipoda	-	-	-	<0.1	<0.1	-	-	-	<0.1
Hyperiididae	-	-	-	<0.1	<0.1	-	-	-	<0.1
Ampeliscaidae	-	-	-	-	<0.1	-	-	-	<0.1
<i>Unciola irrorata</i>	-	-	-	-	<0.1	-	-	-	<0.1
<i>Unciola</i> sp.	-	-	-	-	<0.1	-	-	-	<0.1
Caprellidae	-	-	-	<0.1	<0.1	-	-	-	<0.1
Amphipoda unid.	-	-	-	-	<0.1	-	-	-	<0.1
Mysidacea	-	-	-	-	<0.1	-	-	-	<0.1
Euphausiacea	-	-	-	(12.5)	(3.1)	(1.4)	-	-	(3.3)
<i>Meganyctiphanes norvegica</i>	-	-	-	<0.1	0.3	0.1	-	-	0.2
Euphausiacea unid.	-	-	-	12.5	2.8	1.3	-	-	3.1
Decapoda	-	-	(0.5)	(1.5)	(0.3)	<0.1	-	-	(0.4)
<i>Dichelopandalus leptocerus</i>	-	-	-	-	0.2	-	-	-	0.1
Pandalidae	-	-	-	-	<0.1	-	-	-	<0.1
<i>Crangon septemspinosa</i>	-	-	-	-	<0.1	-	-	-	<0.1
Crab unid.	-	-	<0.1	0.2	0.1	-	-	-	0.1
Shrimp unid.	-	-	-	<0.1	<0.1	<0.1	-	-	<0.1
Decapoda larvae	-	-	-	<0.1	<0.1	-	-	-	<0.1
Decapoda unid.	-	-	0.5	1.3	<0.1	-	-	-	0.2
Crustacea unid.	(0.5)	(14.6)	(6.8)	(22.4)	(16.0)	(6.4)	-	-	(12.9)
SALPIDAE	-	-	-	-	<0.1	[0.1]	-	-	<0.1
CHONDRICHTHYES	-	-	-	-	[0.2]	-	-	-	[0.1]
Rajidae	-	-	-	-	0.2	-	-	-	0.1
OSTEICHTHYES	[96.1]	[6.0]	[20.7]	[9.9]	[27.5]	[8.5]	-	[6.5]	[18.9]
Gadidae	-	-	-	-	<0.1	0.5	-	-	0.2
Osteichthyes eggs	-	-	-	-	<0.1	-	-	-	<0.1
Osteichthyes unid.	96.1	6.0	20.7	9.9	27.5	8.0	-	6.5	18.7
ANIMAL REMAINS AND MISC.	[3.2]	[77.3]	[53.2]	[44.6]	[31.6]	[21.6]	[4.0]	-	[29.2]
Number sampled	11	145	357	599	1064	257	10	4	2447
Number empty	0	48	116	164	226	69	4	1	628
Mean stomach content (g)	0.173	0.068	0.246	0.525	1.638	3.912	11.523	0.516	1.340
Mean squid length (cm)	4	8	13	18	22	27	31	39	19

Table B-1b. Diet composition and sampling data for northern shortfin squid by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area					
	Middle Atlantic	Southern New England	Georges Bank	Gulf of Maine	Scotian Shelf	Inshore North of Cape Hatteras
PLATYHELMINTHES	[1.0]	[0.4]	[0.6]	[0.3]	[0.3]	[<0.1]
Cestoda	1.0	0.4	0.3	0.1	<0.1	<0.1
Trematoda	<0.1	<0.1	0.3	0.2	0.3	-
RHYNCHOCOELA	-	[<0.1]	-	-	[<0.1]	-
NEMATODA	[<0.1]	[<0.1]	[<0.1]	[<0.1]	[<0.1]	[<0.1]
CHAETOGNATHA	[<0.1]	[<0.1]	[0.3]	-	-	-
<i>Sagitta elegans</i>	-	-	<0.1	-	-	-
Chaetognatha unid.	<0.1	<0.1	0.3	-	-	-
CEPHALOPODA	[36.1]	[30.3]	[40.8]	[22.7]	[70.0]	[3.2]
<i>Loligo</i> sp.	-	-	-	-	<0.1	-
Cephalopoda unid.	36.1	30.3	40.8	22.7	70.0	3.2
POLYCHAETA	-	-	-	-	[<0.1]	[0.1]
CRUSTACEA	[9.7]	[19.8]	[22.0]	[26.4]	[4.8]	[3.9]
Copepoda	-	(<0.1)	(<0.1)	-	-	(<0.1)
Cumacea	(<0.1)	-	-	-	-	-
Amphipoda	(<0.1)	(<0.1)	(<0.1)	-	(<0.1)	-
Hyperiididae	<0.1	-	-	-	<0.1	-
Ampeliscidae	-	<0.1	-	-	-	-
<i>Unciola irrorata</i>	<0.1	-	-	-	-	-
<i>Unciola</i> sp.	-	-	<0.1	-	-	-
Caprellidae	-	<0.1	<0.1	-	-	-
Amphipoda unid.	<0.1	<0.1	<0.1	-	-	-
Mysidacea	-	-	(<0.1)	-	(<0.1)	-
Euphausiacea	-	(12.9)	(1.8)	(4.6)	(0.2)	(0.3)
<i>Meganyctiphanes norvegica</i>	-	<0.1	<0.1	0.8	-	-
Euphausiacea unid.	-	12.9	1.8	3.8	0.2	0.3
Decapoda	(1.2)	(1.2)	(<0.1)	(<0.1)	(<0.1)	(<0.1)
<i>Dichelopandalus leptocerus</i>	-	0.6	<0.1	-	-	-
Pandalidae	-	<0.1	-	-	-	-
<i>Crangon septemspinosa</i>	-	<0.1	<0.1	-	-	-
Crab unid.	-	0.6	<0.1	-	-	<0.1
Shrimp unid.	-	<0.1	<0.1	<0.1	<0.1	-
Decapoda larvae	<0.1	-	<0.1	-	-	-
Decapoda unid.	1.2	<0.1	<0.1	<0.1	-	-
Crustacea unid.	(8.5)	(5.7)	(20.2)	(21.8)	(4.6)	(3.6)
SALPIDAE	-	-	[0.2]	-	-	-
CHONDRICHTHYES	-	-	[0.4]	-	-	-
Rajidae	-	-	0.4	-	-	-
OSTEICHTHYES	[23.0]	[12.3]	[5.2]	[13.1]	[7.1]	[73.3]
Gadidae	1.5	-	-	-	-	-
Osteichthyes eggs	-	-	<0.1	-	-	-
Osteichthyes unid.	21.5	12.3	5.2	13.1	7.1	73.3
ANIMAL REMAINS AND MISC.	[30.2]	[37.2]	[30.5]	[37.5]	[17.8]	[19.5]
Number sampled	423	518	792	318	202	195
Number empty	116	134	201	73	67	37
Mean stomach content (g)	0.783	0.820	1.056	2.341	2.564	2.180
Mean squid length (cm)	19	18	19	22	23	19

Table B-2a. Diet composition and sampling data for longfin inshore squid by squid length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)							Total
	1-5	6-10	11-15	16-20	21-25	26-30	31-35	
CESTODA	-	<0.1]	<0.1]	<0.1]	<0.1]	[0.1]	-	<0.1]
CHAETOGNATHA	[0.6]	[0.1]	[0.1]	<0.1]	-	-	-	[0.1]
<i>Sagitta elegans</i>	-	<0.1]	<0.1]	-	-	-	-	<0.1]
Chaetognatha unid.	0.6	0.1	0.1	<0.1]	-	-	-	0.1
MOLLUSCA	-	[2.8]	[5.1]	[8.4]	[2.3]	[10.9]	[9.5]	[5.6]
Gastropoda	-	-	-	<0.1]	-	-	-	<0.1]
Bivalvia	-	-	-	-	<0.1]	-	-	<0.1]
Cephalopoda	-	2.8	5.1	8.4	2.3	10.9	9.5	5.6
POLYCHAETA	-	[0.3]	<0.1]	-	<0.1]	-	-	<0.1]
Opheliidae	-	-	-	-	<0.1]	-	-	<0.1]
<i>Nereis zonata</i>	-	-	-	-	<0.1]	-	-	<0.1]
Polychaeta unid.	-	0.3	<0.1]	-	-	-	-	<0.1]
CRUSTACEA	[1.8]	[4.2]	[7.0]	[3.8]	[5.8]	[0.7]	-	[4.7]
Copepoda	-	(0.6)	(<0.1)	-	(<0.1)	-	-	(0.1)
<i>Candacia</i> sp.	-	0.6	-	-	-	-	-	0.1
Calanoida	-	-	<0.1]	-	<0.1]	-	-	<0.1]
Copepoda unid.	-	<0.1]	<0.1]	-	-	-	-	<0.1]
Amphipoda	(0.2)	(0.4)	(0.3)	(<0.1)	(<0.1)	(<0.1)	-	(0.2)
Hyperiididae	-	0.2	<0.1]	<0.1]	<0.1]	-	-	0.1
Ampeliscidae	-	-	-	-	-	<0.1]	-	<0.1]
Gammaridea	0.2	0.2	0.3	-	-	-	-	0.1
Amphipoda unid.	-	<0.1]	-	-	-	-	-	<0.1]
Mysidacea	-	(<0.1)	(<0.1)	(<0.1)	(<0.1)	-	-	(<0.1)
Euphausiacea	-	(0.8)	(3.5)	(2.1)	(3.7)	-	-	(2.1)
<i>Meganyctiphanes norvegica</i>	-	-	0.5	<0.1]	-	-	-	0.2
Euphausiacea unid.	-	0.8	3.0	2.1	3.7	-	-	1.9
Decapoda	-	(<0.1)	(0.4)	(<0.1)	(<0.1)	(0.7)	-	(0.2)
<i>Crangon septemspinosus</i>	-	-	<0.1]	<0.1]	-	-	-	<0.1]
<i>Munida iris</i>	-	-	<0.1]	-	-	0.7	-	0.1
Lithodidae	-	-	-	<0.1]	-	-	-	<0.1]
Crab unid.	-	-	-	<0.1]	-	<0.1]	-	<0.1]
Shrimp unid.	-	<0.1]	-	-	-	-	-	<0.1]
Decapoda unid.	-	<0.1]	0.4	<0.1]	<0.1]	-	-	0.1
Crustacea unid.	(1.6)	(2.4)	(2.8)	(1.7)	(2.1)	(<0.1)	-	(2.1)
OSTEICHTHYES	[3.1]	[5.6]	[11.4]	[12.3]	[23.7]	[17.0]	[3.4]	[13.7]
Gadidae	-	-	<0.1]	0.2	-	<0.1]	-	0.1
<i>Ammodytes dubius</i>	-	-	-	-	1.0	-	-	0.2
Osteichthyes larvae	-	0.1	-	-	-	-	-	<0.1]
Osteichthyes unid.	3.1	5.5	11.4	12.1	22.7	17.0	3.4	13.4
ANIMAL REMAINS AND MISC.	[94.5]	[87.0]	[76.4]	[75.5]	[68.2]	[71.3]	[87.1]	[75.9]
Number sampled	165	810	822	444	189	59	9	2498
Number empty	78	178	214	132	49	15	3	669
Mean stomach content (g)	0.028	0.231	0.449	0.976	1.503	1.055	1.568	0.542
Mean squid length (cm)	4	8	12	17	22	27	32	12

Table B-2b. Diet composition and sampling data for longfin squid by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area							
	Middle Atlantic	Southern New England	Georges Bank	Gulf of Maine	Scotian Shelf	Offshore South of Cape Hatteras	Inshore South of Cape Hatteras	Inshore North of Cape Hatteras
CESTODA	<0.1]	<0.1]	<0.1]	[2.3]	-	-	-	<0.1]
CHAETOGNATHA	[0.2]	[0.1]	<0.1]	-	-	-	-	<0.1]
<i>Sagitta elegans</i>	-	<0.1]	-	-	-	-	-	-
Chaetognatha unid.	0.2	0.1	<0.1]	-	-	-	-	<0.1]
MOLLUSCA	[10.1]	[8.0]	[0.3]	-	-	[8.0]	[0.5]	[8.0]
Gastropoda	-	<0.1]	-	-	-	-	-	-
Bivalvia	-	<0.1]	-	-	-	-	-	-
Cephalopoda	10.1	8.0	0.3	-	-	8.0	0.5	8.0
POLYCHAETA	<0.1]	<0.1]	<0.1]	-	-	-	-	[0.4]
Opheliidae	<0.1]	-	-	-	-	-	-	-
<i>Nereis zonata</i>	<0.1]	-	-	-	-	-	-	-
Polychaeta unid.	-	<0.1]	<0.1]	-	-	-	-	0.4
CRUSTACEA	[3.6]	[7.5]	[3.1]	[70.1]	-	[1.8]	[0.9]	[4.9]
Copepoda	(0.4)	<0.1]	-	-	-	-	-	<0.1]
<i>Candacia</i> sp.	0.4	-	-	-	-	-	-	-
Calanoida	-	-	-	-	-	-	-	<0.1]
Copepoda unid.	<0.1]	<0.1]	-	-	-	-	-	-
Amphipoda	(0.2)	<0.1]	<0.1]	-	-	<0.1]	-	(0.8)
Hyperiididae	0.2	<0.1]	<0.1]	-	-	-	-	-
Ampeliscidae	<0.1]	-	-	-	-	-	-	-
Gammaridea	-	-	<0.1]	-	-	<0.1]	-	0.8
Amphipoda unid.	-	<0.1]	-	-	-	-	-	-
Mysidacea	<0.1]	<0.1]	-	-	-	-	-	<0.1]
Euphausiacea	(0.5)	(6.6)	(1.0)	-	-	-	-	-
<i>Meganyctiphanes norvegica</i>	<0.1]	-	0.4	-	-	-	-	-
Euphausiacea unid.	0.5	6.6	0.6	-	-	-	-	-
Decapoda	(0.2)	<0.1]	<0.1]	-	-	-	-	(1.3)
<i>Crangon septemspinosa</i>	<0.1]	-	-	-	-	-	-	0.3
<i>Munida iris</i>	0.2	-	-	-	-	-	-	-
Lithodidae	<0.1]	-	-	-	-	-	-	-
Crab unid.	<0.1]	-	-	-	-	-	-	<0.1]
Shrimp unid.	-	-	<0.1]	-	-	-	-	-
Decapoda unid.	<0.1]	<0.1]	-	-	-	-	-	1.0
Crustacea unid.	(2.3)	(0.9)	(2.1)	(70.1)	-	(1.8)	(0.9)	(2.8)
OSTEICHTHYES	[17.0]	[15.3]	[7.6]	-	-	[26.6]	[7.0]	[21.4]
Gadidae	0.4	-	-	-	-	-	-	-
<i>Ammodytes dubius</i>	0.9	-	-	-	-	-	-	-
Osteichthyes larvae	<0.1]	-	-	-	-	-	-	-
Osteichthyes unid.	15.7	15.3	7.6	-	-	26.6	7.0	21.4
ANIMAL REMAINS AND MISC.	[69.1]	[69.1]	[89.0]	[27.6]	[100.0]	[63.6]	[91.6]	[65.3]
Number sampled	773	503	468	6	1	99	95	555
Number empty	213	122	126	0	0	28	28	154
Mean stomach content (g)	0.428	0.630	1.046	0.658	3.576	0.340	0.291	0.269
Mean squid length (cm)	13	12	13	24	20	12	14	11

Table B-3. Diet composition and sampling data for chain dogfish by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)							Total
	11-15	16-20	21-25	26-30	31-35	36-40	41-45	
NEMATODA	-	-	-	-	-	[1.0]	-	[0.1]
CEPHALOPODA	-	[4.9]	[15.9]	[57.3]	[0.2]	[13.8]	[30.3]	[20.7]
POLYCHAETA	[100.0]	[38.0]	[14.5]	[1.7]	[0.2]	-	[2.4]	[6.3]
<i>Eunice</i> sp.	-	15.5	9.7	1.3	-	-	-	2.3
Eunicidae	-	0.3	3.0	-	-	-	-	0.2
Glyceridae	-	-	0.3	-	-	-	-	<0.1
<i>Nereis</i> sp.	-	-	0.2	0.4	-	-	-	<0.1
Polychaeta unid.	100.0	22.2	1.3	-	0.2	-	2.4	3.8
CRUSTACEA	-	[54.1]	[60.7]	[41.0]	[20.3]	[3.4]	[13.3]	[22.4]
Stomatopoda	-	-	-	-	(12.7)	-	-	(2.6)
<i>Heterosquilla armata</i>	-	-	-	-	12.7	-	-	2.6
Amphipoda	-	(<0.1)	(0.8)	-	-	-	-	(<0.1)
<i>Ampelisca</i> sp.	-	<0.1	-	-	-	-	-	<0.1
<i>Byblis serrata</i>	-	<0.1	-	-	-	-	-	<0.1
<i>Unciola</i> sp.	-	-	0.8	-	-	-	-	<0.1
Mysidacea	-	-	-	-	-	(<0.1)	-	(<0.1)
<i>Mysidopsis bigelowi</i>	-	-	-	-	-	<0.1	-	<0.1
Euphausiacea	-	(14.2)	(22.1)	(11.5)	-	(2.0)	-	(3.7)
<i>Meganyctiphanes norvegica</i>	-	5.2	12.1	11.5	-	2.0	-	2.2
Euphausiacea unid.	-	9.0	10.0	-	-	-	-	1.5
Decapoda	-	(28.9)	(17.8)	(3.9)	-	-	(12.5)	(10.0)
<i>Cancer irroratus</i>	-	19.8	-	-	-	-	9.6	6.6
<i>Munida irrasa</i>	-	0.4	17.8	0.5	-	-	-	0.8
Sergestidae	-	-	-	-	-	-	2.9	1.3
Shrimp unid.	-	0.6	-	-	-	-	-	0.1
Decapoda unid.	-	8.1	-	3.4	-	-	-	1.2
Crustacea unid.	-	(11.0)	(20.0)	(25.6)	(7.6)	(1.4)	(0.8)	(6.1)
OSTEICHTHYES	-	-	[3.0]	-	[79.2]	[78.2]	[54.0]	[49.5]
Osteichthyes unid.	-	-	3.0	-	79.2	78.2	54.0	49.5
ANIMAL REMAINS AND MISC.	-	[3.0]	[5.9]	-	[0.1]	[3.6]	-	[1.0]
Number sampled	1	11	6	2	7	3	5	35
Number empty	0	0	0	0	1	0	1	2
Mean stomach content (g)	0.005	0.290	0.192	0.995	0.793	1.058	2.468	0.783
Mean fish length (cm)	15	18	22	28	32	37	42	27

Table B-4a. Diet composition and sampling data for dusky shark by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)							Total
	<61	61-70	71-80	81-90	91-100	101-110	>110	
NEMATODA	-	-	-	-	[<0.1]	-	-	[<0.1]
MOLLUSCA	-	[49.3]	-	[25.0]	[25.1]	[7.2]	[1.1]	[14.4]
Cephalopoda	-	(49.3)	-	(25.0)	(25.1)	(7.2)	(1.1)	(14.4)
<i>Loligo pealeii</i>	-	-	-	-	24.7	-	-	6.8
<i>Loligo</i> sp.	-	11.0	-	8.3	-	7.2	-	4.0
Cephalopoda unid.	-	38.3	-	16.7	0.4	<0.1	1.1	3.6
Mollusca unid.	-	-	-	-	-	(<0.1)	-	(<0.1)
CRUSTACEA	-	[0.1]	[0.2]	[2.3]	[22.2]	[29.7]	-	[17.6]
Copepoda	-	(0.1)	-	-	-	-	-	(<0.1)
Stomatopoda	-	-	-	-	-	(0.3)	-	(5.5)
<i>Squilla empusa</i>	-	-	-	-	8.3	8.0	-	5.4
Stomatopoda unid.	-	-	-	-	-	0.3	-	0.1
Amphipoda	-	-	-	(<0.1)	-	-	-	(<0.1)
Hyperiididae	-	-	-	<0.1	-	-	-	<0.1
Euphausiacea	-	(<0.1)	(0.2)	-	(<0.1)	-	-	(<0.1)
<i>Meganyctiphanes norvegica</i>	-	-	0.2	-	<0.1	-	-	<0.1
Euphausiacea unid.	-	<0.1	-	-	-	-	-	<0.1
Decapoda	-	-	-	(2.3)	(12.1)	(21.2)	-	(11.5)
<i>Cancer irroratus</i>	-	-	-	-	4.0	<0.1	-	1.1
<i>Pinnixa cylindrica</i>	-	-	-	-	0.2	-	-	<0.1
<i>Ovalipes ocellatus</i>	-	-	-	-	6.5	21.2	-	9.9
Crabs unid.	-	-	-	2.3	1.0	-	-	0.4
Decapoda unid.	-	-	-	-	0.4	-	-	0.1
Crustacea unid.	-	-	-	-	(1.8)	(0.2)	-	(0.6)
ECHINODERMATA	-	-	-	-	-	[0.8]	-	[0.3]
<i>Echinarachnius parma</i>	-	-	-	-	-	0.8	-	0.3
OSTEICHTHYES	[100.0]	[50.5]	[99.7]	[72.7]	[50.8]	[61.9]	[40.8]	[58.1]
Clupeidae	-	-	-	-	1.5	-	-	0.4
<i>Anchoa hepsetus</i>	-	-	-	2.3	-	-	-	0.2
Batrachoididae	-	-	-	22.7	-	-	-	1.6
<i>Urophycis regia</i>	-	7.0	-	-	-	-	-	0.4
<i>Centropristis striata</i>	-	-	-	7.2	-	-	-	0.5
<i>Stenotomus chrysops</i>	-	14.9	-	-	12.8	-	-	4.4
Sciaenidae	-	-	-	-	-	29.1	-	11.2
<i>Cynoscion regalis</i>	-	-	-	-	-	9.8	-	3.8
<i>Leiostomus xanthurus</i>	-	-	-	11.2	7.0	19.5	-	10.2
<i>Ammodytes dubius</i>	-	-	-	-	-	0.6	-	0.2
Scombridae	-	-	-	-	22.3	-	-	6.2
Pleuronectiformes	-	-	-	-	-	-	18.1	2.9
Osteichthyes unid.	100.0	28.6	99.7	29.3	7.2	2.9	22.7	16.1
ANIMAL REMAINS AND MISC.	-	[0.1]	[0.1]	[<0.1]	[1.6]	[0.4]	[58.1]	[9.5]
SAND	-	-	-	-	[0.3]	[<0.1]	-	[0.1]
Number sampled	2	6	2	13	18	7	5	53
Number empty	1	1	0	4	2	1	1	10
Mean stomach content (g)	0.060	15.210	46.768	8.477	24.705	88.173	50.676	30.385
Mean fish length (cm)	51	67	75	84	94	103	160	94

Table B-4b. Diet composition and sampling data for dusky shark by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area			
	Middle Atlantic	Offshore South of Cape Hatteras	Inshore South of Cape Hatteras	Inshore North of Cape Hatteras
NEMATODA	-	-	-	[<0.1]
MOLLUSCA	[0.1]	[60.5]	[7.2]	[12.2]
Cephalopoda	-	(60.5)	(7.2)	(12.2)
<i>Loligo pealeii</i>	-	-	-	12.0
<i>Loligo</i> sp.	-	39.9	-	-
Cephalopoda unid.	-	20.6	7.2	0.2
Mollusca unid.	(0.1)	-	-	-
CRUSTACEA	[79.0]	[1.2]	[33.5]	[1.3]
Copepoda	-	-	(<0.1)	-
Stomatopoda	-	-	(24.8)	(0.8)
<i>Squilla empusa</i>	-	-	24.2	0.8
Stomatopoda unid.	-	-	0.6	-
Amphipoda	-	-	-	(<0.1)
Hyperiididae	-	-	-	<0.1
Euphausiacea	-	(0.1)	(<0.1)	-
<i>Meganyctiphanes norvegica</i>	-	0.1	-	-
Euphausiacea unid.	-	-	<0.1	-
Decapoda	(79.0)	(0.9)	(6.7)	(0.2)
<i>Cancer irroratus</i>	<0.1	-	5.5	-
<i>Pinnixa cylindrica</i>	-	-	0.2	-
<i>Ovalipes ocellatus</i>	78.0	-	-	-
Crabs unid.	-	0.9	1.0	0.2
Decapoda unid.	1.0	-	-	-
Crustacea unid.	-	(0.2)	(2.0)	(0.3)
ECHINODERMATA	[2.4]	-	-	-
<i>Echinarachnius parma</i>	2.4	-	-	-
OSTEICHTHYES	[17.9]	[33.5]	[15.7]	[86.2]
Clupeidae	3.3	-	-	-
<i>Anchoa hepsetus</i>	-	-	0.8	-
Batrachoididae	-	15.7	-	-
<i>Urophycis regia</i>	-	4.0	-	-
<i>Centropristis striata</i>	-	-	-	0.9
<i>Stenotomus chrysops</i>	-	8.5	-	6.2
Sciaenidae	-	-	-	19.6
<i>Cynoscion regalis</i>	-	-	-	6.6
<i>Leiostomus xanthurus</i>	6.3	-	-	16.4
<i>Ammodytes dubius</i>	1.8	-	-	-
Scombridae	-	-	-	10.8
Pleuronectiformes	-	-	-	5.0
Osteichthyes unid.	6.5	5.3	14.9	20.7
ANIMAL REMAINS AND MISC.	[<0.1]	[4.8]	[43.6]	[0.3]
SAND	[0.6]	-	-	[<0.1]
Number sampled	8	19	13	13
Number empty	2	6	1	1
Mean stomach content (g)	25.608	8.393	25.243	70.608
Mean fish length (cm)	99	92	89	97

Table B-5a. Diet composition and sampling data for smooth dogfish by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)									Total
	<41	41-50	51-60	61-70	71-80	81-90	91-100	101-110	>110	
MOLLUSCA	[62.1]	[5.8]	[5.8]	[14.6]	[3.3]	[9.7]	[17.2]	[9.3]	[16.1]	[13.2]
Bivalvia	(0.2)	(4.1)	(5.0)	(0.4)	(0.8)	(0.8)	(1.5)	(5.3)	(15.6)	(4.4)
Cephalopoda	-	(1.7)	(0.3)	(13.2)	(2.5)	(8.7)	(15.3)	(2.8)	(0.5)	(8.2)
<i>Loligo pealeii</i>	-	-	-	-	0.1	5.6	6.7	0.7	-	3.5
<i>Loligo</i> sp.	-	-	-	-	0.3	2.1	6.5	0.7	<0.1	3.0
Cephalopoda unid.	-	1.7	0.3	13.2	2.1	1.0	2.1	1.4	0.5	1.7
Mollusca unid.	(61.9)	-	(0.5)	(1.0)	(<0.1)	(0.2)	(0.4)	(1.2)	(<0.1)	(0.6)
POLYCHAETA	[8.7]	[3.8]	[7.9]	[3.0]	[1.6]	[1.4]	[0.7]	[0.1]	[0.3]	[0.8]
SIPUNCULA	-	-	-	[3.0]	-	-	[0.2]	[0.1]	-	[0.2]
MEROSTOMATA	-	-	-	[<0.1]	-	-	[0.2]	[4.6]	[2.9]	[1.6]
<i>Limulus</i> sp.	-	-	-	<0.1	-	-	0.2	4.6	2.9	1.6
CRUSTACEA	[24.2]	[81.9]	[53.3]	[64.6]	[83.1]	[78.8]	[73.1]	[74.2]	[74.6]	[74.7]
Stomatopoda	-	(0.5)	(1.0)	-	-	(1.1)	(<0.1)	(<0.1)	(<0.1)	(0.2)
Decapoda	(15.8)	(67.4)	(34.2)	(58.6)	(75.8)	(75.4)	(71.4)	(72.8)	(69.8)	(72.1)
<i>Pagurus pollicaris</i>	-	9.1	5.6	0.6	1.0	-	0.4	<0.1	0.3	0.4
<i>Pagurus</i> sp.	15.6	10.4	2.9	1.0	0.5	0.4	0.9	0.5	0.1	0.7
Paguridae	-	11.8	1.4	-	0.5	-	0.2	<0.1	-	0.3
<i>Libinia</i> sp.	-	-	-	<0.1	-	0.3	0.9	0.3	2.1	0.8
Majidae	-	2.9	0.1	-	1.5	0.2	<0.1	0.2	<0.1	<0.1
<i>Cancer irroratus</i>	-	17.5	12.6	13.9	37.9	43.8	39.7	45.7	31.2	40.0
<i>Cancer borealis</i>	-	4.1	-	-	-	-	4.2	0.3	1.1	1.9
Canceridae	-	-	0.5	0.7	1.4	<0.1	2.4	1.7	0.9	1.7
<i>Ovalipes ocellatus</i>	-	3.4	4.4	17.9	20.4	11.0	8.9	13.9	24.5	13.1
<i>Ovalipes stephensoni</i>	-	-	-	1.5	5.2	8.1	3.7	1.7	0.2	3.1
<i>Albunea</i> sp.	-	-	3.3	10.0	0.4	3.5	1.3	0.2	<0.1	1.2
Decapoda unid.	0.2	8.2	3.4	13.0	7.0	8.1	8.8	8.3	9.4	8.9
Crustacea unid.	(8.4)	(14.0)	(18.1)	(6.0)	(7.3)	(2.3)	(1.4)	(1.4)	(4.8)	(2.4)
HOLOTHUROIDEA	-	-	[4.6]	-	-	-	[0.7]	[<0.1]	-	[0.3]
OSTEICHTHYES	-	[3.5]	[27.0]	[12.2]	[5.4]	[7.2]	[5.7]	[10.1]	[4.0]	[7.4]
<i>Ophichthus cruentifer</i>	-	-	-	0.2	-	-	-	-	-	<0.1
<i>Etrumeus teres</i>	-	-	-	-	-	-	<0.1	3.1	<0.1	1.0
Clupeidae	-	-	-	-	-	-	-	0.3	-	0.1
<i>Anchoa</i> sp.	-	-	-	0.7	<0.1	-	0.1	0.8	0.1	0.4
<i>Urophycis regia</i>	-	-	-	0.4	-	-	-	-	-	<0.1
Gadidae	-	-	-	-	0.1	-	0.2	-	-	0.1
<i>Trachurus lathami</i>	-	-	-	-	-	0.2	-	-	-	<0.1
<i>Stenotomus chrysops</i>	-	-	15.5	8.2	-	-	0.5	-	-	0.4
<i>Leiostomus xanthurus</i>	-	-	-	-	-	1.1	-	-	-	0.1
<i>Ammodytes dubius</i>	-	-	-	-	-	0.2	0.3	0.1	0.2	0.2
<i>Peprilus triacanthus</i>	-	-	-	-	-	<0.1	0.5	1.4	<0.1	0.6
<i>Prionotus</i> sp.	-	-	-	0.9	<0.1	2.0	-	-	-	0.3
Osteichthyes unid.	-	2.3	11.5	1.8	5.3	3.7	4.1	4.4	3.7	4.2
ANIMAL REMAINS AND MISC.	[5.0]	[5.0]	[1.4]	[2.6]	[6.6]	[2.9]	[2.2]	[1.6]	[2.1]	[1.8]
Number sampled	7	52	41	35	56	111	237	102	47	688
Number empty	2	0	2	0	1	6	5	4	1	21
Mean stomach content (g)	1.827	4.252	3.845	10.120	15.664	24.148	37.699	66.009	62.196	32.228
Mean fish length (cm)	32	46	55	65	76	86	95	104	115	86

Table B-5b. Diet composition and sampling data for smooth dogfish by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area			
	Middle Atlantic	Southern New England	Inshore South of Cape Hatteras	Inshore North of Cape Hatteras
MOLLUSCA	[7.4]	[0.7]	[<0.1]	[16.0]
Bivalvia	(2.9)	(<0.1)	(<0.1)	(5.2)
Cephalopoda	(3.7)	(0.7)	(<0.1)	(10.1)
<i>Loligo</i> sp.	2.1	0.2	-	8.3
Cephalopoda unid.	1.6	0.5	<0.1	1.8
Mollusca unid.	(0.8)	(<0.1)	(<0.1)	(0.7)
POLYCHAETA	[0.3]	[0.8]	[0.6]	[0.6]
SIPUNCULA	-	-	[3.3]	[<0.1]
MEROSTOMATA	[3.4]	-	[0.2]	[1.4]
<i>Limulus</i> sp.	3.4	-	0.2	1.4
CRUSTACEA	[76.5]	[89.6]	[69.8]	[72.5]
Stomatopoda	(<0.1)	(<0.1)	(4.6)	(<0.1)
Decapoda	(74.2)	(89.2)	(59.9)	(70.0)
<i>Pagurus pollicaris</i>	0.2	-	0.1	0.5
<i>Pagurus</i> sp.	-	1.4	0.4	0.8
Paguridae	-	-	-	0.3
<i>Libinia</i> sp.	1.5	-	-	0.7
Majidae	-	-	0.3	0.2
<i>Cancer irroratus</i>	54.3	68.8	3.2	35.8
<i>Cancer borealis</i>	0.9	4.7	1.3	1.9
Cancridae	0.5	-	0.6	2.1
<i>Ovalipes ocellatus</i>	5.3	-	10.5	16.1
<i>Ovalipes stephensoni</i>	-	9.5	-	3.3
<i>Albunea</i> sp.	0.5	-	8.7	1.1
Decapoda unid.	11.0	4.8	34.8	7.2
Crustacea unid.	(2.3)	(0.4)	(5.3)	(2.5)
HOLOTHUROIDEA	-	-	-	[0.4]
OSTEICHTHYES	[10.1]	[7.8]	[24.6]	[5.8]
<i>Ophichthus cruentifer</i>	-	-	-	<0.1
<i>Etrumeus teres</i>	-	-	-	1.3
Clupeidae	-	-	-	0.1
<i>Anchoa</i> sp.	-	-	-	0.5
<i>Urophycis regia</i>	-	-	-	<0.1
Gadidae	<0.1	-	-	<0.1
<i>Trachurus lathami</i>	-	-	-	<0.1
<i>Stenotomus chrysops</i>	2.8	-	-	-
<i>Leiostomus xanthurus</i>	-	-	-	0.2
<i>Ammodytes dubius</i>	0.2	1.0	-	0.1
<i>Peprilus triacanthus</i>	-	-	4.6	0.7
<i>Prionotus</i> sp.	1.5	-	0.5	-
Osteichthyes unid.	5.6	6.8	19.5	2.9
ANIMAL REMAINS AND MISC.	[2.3]	[1.1]	[1.5]	[3.3]
Number sampled	121	41	55	471
Number empty	3	3	3	12
Mean stomach content (g)	29.839	38.394	12.151	36.180
Mean fish length (cm)	86	86	83	87

Table B-6a. Diet composition and sampling data for Atlantic sharpnose shark by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)								Total
	<40	41-50	51-60	61-70	71-80	81-90	91-100	101-110	
CESTODA	-	-	-	-	-	[<0.1]	-	-	[<0.1]
RHYNCHOCOELA	-	[<0.1]	-	-	-	-	-	-	[<0.1]
NEMATODA	-	[<0.1]	-	-	-	-	-	-	[<0.1]
MOLLUSCA	[34.7]	[41.7]	[39.1]	-	[4.1]	[1.9]	[0.7]	[51.1]	[6.1]
Gastropoda	-	-	-	-	-	-	-	(51.1)	(0.7)
Cephalopoda	(34.7)	(41.7)	(39.1)	-	-	(1.9)	(0.6)	-	(5.2)
<i>Illex</i> sp.	0.4	-	-	-	-	-	-	-	<0.1
<i>Loligo</i> sp.	34.3	-	8.2	-	-	1.9	0.6	-	1.8
Cephalopoda unid.	-	41.7	30.9	-	-	<0.1	<0.1	-	3.4
Mollusca unid.	-	-	-	-	(4.1)	-	(0.1)	-	(0.2)
CRUSTACEA	[18.0]	[10.2]	[12.6]	-	[24.6]	[57.8]	[7.5]	-	[9.7]
Cirripedia	-	(<0.1)	-	-	-	-	-	-	(<0.1)
Stomatopoda	-	-	-	-	-	-	(1.6)	-	(1.2)
<i>Squilla empusa</i>	-	-	-	-	-	-	1.6	-	1.2
Decapoda	(15.7)	(8.2)	(12.6)	-	(24.6)	(57.8)	(5.9)	-	(8.3)
<i>Libinia emarginata</i>	-	-	-	-	-	-	0.8	-	0.6
Penaeidae	-	-	-	-	-	17.9	-	-	0.6
Pandalidae	-	0.5	-	-	-	-	-	-	<0.1
<i>Pagurus</i> sp.	-	-	-	-	-	-	1.8	-	1.5
Paguridae	-	-	-	-	-	-	<0.1	-	<0.1
<i>Sicyonia</i> sp.	-	-	-	-	-	4.2	-	-	0.1
<i>Ovalipes ocellatus</i>	15.7	7.5	-	-	-	35.7	3.1	-	4.6
<i>Portunus gibbesii</i>	-	-	-	-	24.6	-	0.2	-	0.5
Crab unid.	-	-	-	-	-	-	<0.1	-	0.1
Shrimp unid.	-	0.2	-	-	-	-	<0.1	-	<0.1
Decapoda unid.	-	-	12.6	-	-	-	-	-	0.3
Crustacea unid.	(2.3)	(2.0)	-	-	-	-	(<0.1)	-	(0.2)
OSTEICHTHYES	[46.6]	[48.1]	[48.3]	[100.0]	[71.3]	[35.9]	[87.3]	-	[80.0]
<i>Etrumeus teres</i>	-	-	-	-	-	-	1.9	-	1.5
Clupeidae	9.6	-	-	-	-	-	-	-	0.3
<i>Anchoa hepsetus</i>	-	16.0	-	-	-	27.8	0.4	-	2.3
Engraulidae	-	-	-	-	-	-	0.4	-	0.3
Syngnathidae	-	-	-	-	-	-	0.6	-	0.4
Sciaenidae	-	-	-	-	-	-	9.8	-	7.8
<i>Astroscopus guttatus</i>	-	-	-	-	-	-	13.5	-	10.7
<i>Citharichthys arctifrons</i>	-	-	-	-	63.5	-	-	-	1.0
Pleuronectiformes	15.3	-	-	-	-	-	-	-	0.5
<i>Monacanthus hispidus</i>	-	-	-	-	-	-	6.1	-	4.8
<i>Sphoeroides maculatus</i>	-	-	-	-	-	-	8.0	-	6.3
Osteichthyes unid.	21.7	32.1	48.3	100.0	7.8	8.1	46.6	-	44.1
ANIMAL REMAINS	[0.7]	-	-	-	-	[4.4]	[4.4]	[48.9]	[4.1]
SAND	-	-	-	-	-	-	[0.1]	-	[0.1]
Number sampled	20	12	4	2	3	11	31	2	85
Number empty	7	2	0	1	1	3	8	0	22
Mean stomach content (g)	1.166	3.967	3.452	10.571	3.638	2.066	17.951	4.491	9.918
Mean fish length (cm)	36	46	52	68	76	86	94	104	70

Table B-6b. Diet composition and sampling data for Atlantic sharpnose shark by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area		
	Offshore South of Cape Hatteras	Inshore South of Cape Hatteras	Inshore North of Cape Hatteras
CESTODA	[<0.1]	-	-
RHYNCHOCOELA	-	[<0.1]	-
NEMATODA	-	[<0.1]	-
MOLLUSCA	[0.2]	[16.0]	[0.3]
Gastropoda	-	(1.7)	-
Cephalopoda	(0.2)	(14.0)	-
<i>Illex</i> sp.	-	<0.1	-
<i>Loligo</i> sp.	0.2	4.8	-
Cephalopoda unid.	<0.1	9.2	-
Mollusca unid.	-	(0.3)	(0.3)
CRUSTACEA	[4.8]	[6.3]	[22.1]
Cirripedia	-	(<0.1)	-
Stomatopoda	(3.3)	-	-
<i>Squilla empusa</i>	3.3	-	-
Decapoda	(1.5)	(5.7)	(22.1)
<i>Libinia emarginata</i>	-	1.7	-
Penaeidae	1.5	-	-
Pandalidae	-	<0.1	-
<i>Pagurus</i> sp.	-	-	5.8
Paguridae	-	<0.1	-
<i>Sicyonia</i> sp.	-	0.4	-
<i>Ovalipes ocellatus</i>	-	2.7	14.3
<i>Portunus gibbesii</i>	-	-	2.0
Crab unid.	-	0.2	-
Shrimp unid.	-	<0.1	<0.1
Decapoda unid.	-	0.7	-
Crustacea unid.	-	(0.6)	(<0.1)
OSTEICHTHYES	[86.0]	[76.0]	[77.1]
<i>Etrumeus teres</i>	-	-	6.0
Clupeidae	-	0.9	-
<i>Anchoa hepsetus</i>	-	6.2	-
Engraulidae	-	-	1.2
Syngnathidae	1.2	-	-
Sciaenidae	-	-	30.8
<i>Astroscopus guttatus</i>	28.5	-	-
<i>Citharichthys arctifrons</i>	-	-	3.9
Pleuronectiformes	-	1.4	-
<i>Monacanthus hispidus</i>	12.9	-	-
<i>Sphoeroides maculatus</i>	16.8	-	-
Osteichthyes unid.	26.6	67.5	35.2
ANIMAL REMAINS	[9.0]	[1.7]	[0.1]
SAND	-	-	[0.4]
Number sampled	9	60	16
Number empty	0	18	4
Mean stomach content (g)	29.374	4.387	11.087
Mean fish length (cm)	89	63	83

Table B-7a. Diet composition and sampling data for spiny dogfish by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)									
	<31	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101-110	Total
CTENOPHORA	[2.6]	[2.3]	[1.7]	[0.8]	[0.7]	[0.6]	[0.9]	[<0.1]	-	[0.5]
MOLLUSCA	[20.2]	[51.5]	[36.5]	[58.3]	[16.6]	[28.4]	[27.3]	[23.1]	[25.1]	[26.6]
Bivalvia	(<0.1)	(27.0)	(8.4)	(1.7)	(0.9)	(1.9)	(7.4)	(11.3)	(12.4)	(7.7)
Pectinidae	-	27.0	8.4	1.7	-	-	3.7	6.1	12.4	4.2
Bivalvia unid.	<0.1	-	-	-	0.9	1.9	3.7	5.2	-	3.5
Cephalopoda	(20.2)	(24.5)	(24.0)	(56.6)	(15.7)	(23.1)	(19.9)	(10.9)	(12.7)	(17.8)
<i>Illex</i> sp.	-	-	-	4.9	3.0	7.3	6.5	4.2	-	5.2
<i>Loligo</i> sp.	-	-	-	5.3	5.2	3.4	2.6	3.3	8.9	3.4
Cephalopoda unid.	20.2	24.5	24.0	46.4	7.5	12.4	10.8	3.4	3.8	9.2
Mollusca unid.	-	-	(4.1)	(<0.1)	-	(3.4)	-	(0.9)	-	(1.1)
CRUSTACEA	[4.1]	[1.8]	[9.5]	[8.5]	[7.6]	[2.9]	[2.8]	[5.0]	[0.8]	[4.3]
Euphausiacea	(0.7)	(1.2)	(1.4)	(4.4)	(6.6)	(2.1)	(<0.1)	(<0.1)	-	(0.8)
Decapoda	(1.6)	-	(7.6)	(3.4)	(0.7)	(0.8)	(2.6)	(5.0)	(0.6)	(3.3)
<i>Cancer</i> spp.	0.6	-	6.8	0.2	0.3	0.2	1.9	4.5	0.6	2.5
Decapoda unid.	1.0	-	0.8	3.2	0.4	0.6	0.7	0.5	<0.1	0.8
Crustacea unid.	(1.8)	(0.6)	(0.5)	(0.7)	(0.3)	(<0.1)	(0.2)	(<0.1)	(0.2)	(0.2)
OSTEICHTHYES	[13.6]	[22.6]	[44.2]	[22.3]	[49.9]	[36.1]	[62.0]	[58.4]	[66.0]	[53.7]
Ophichthidae	-	-	-	-	-	-	-	1.2	-	0.5
<i>Alosa aestivalis</i>	-	-	-	-	-	-	3.3	-	-	0.9
<i>Alosa pseudoharengus</i>	-	-	-	-	-	1.7	-	4.3	-	2.1
<i>Brevoortia tyrannus</i>	-	-	-	-	-	0.4	-	-	-	0.1
<i>Clupea harengus</i>	-	-	-	-	-	2.9	-	1.3	-	1.1
<i>Etrumeus teres</i>	-	-	-	-	-	-	-	0.6	-	0.2
Clupeidae	-	-	-	2.5	1.6	5.4	0.3	-	-	1.3
<i>Melanogrammus aeglefinus</i>	-	-	-	-	-	-	1.9	-	-	0.5
<i>Merluccius bilinearis</i>	-	-	-	-	-	-	0.3	1.5	-	0.7
<i>Urophycis chesteri</i>	-	-	-	-	-	-	-	1.0	-	0.4
<i>Urophycis chuss</i>	-	-	-	-	-	-	4.3	1.5	-	1.8
<i>Urophycis</i> sp.	-	-	-	-	-	-	5.3	-	-	1.5
Gadidae	-	<0.1	-	<0.1	<0.1	3.8	2.0	-	<0.1	1.4
Belonidae	-	-	-	-	8.1	-	-	-	-	0.3
Carangidae	-	-	-	-	-	-	-	1.4	-	0.5
<i>Stenotomus chrysops</i>	-	-	-	-	-	-	0.7	-	-	0.2
<i>Astroscopus</i> sp.	-	-	-	-	-	-	-	0.9	-	0.4
<i>Anarhichas</i> sp.	-	-	-	-	-	-	-	2.2	-	0.9
<i>Ammodytes dubius</i>	-	-	-	0.1	2.6	2.4	0.6	6.5	2.0	3.4
<i>Scomber scombrus</i>	-	-	-	-	-	-	6.3	-	-	1.8
<i>Paralichthys dentatus</i>	-	-	-	-	-	0.1	-	1.0	-	0.4
<i>Scophthalmus aquosus</i>	-	-	-	-	-	-	0.3	0.6	-	0.3
<i>Symphurus</i> sp.	-	-	-	-	-	1.4	11.4	4.6	8.4	5.6
<i>Hippoglossus hippoglossus</i>	-	-	3.6	-	-	-	-	-	-	<0.1
<i>Pleuronectes ferruginus</i>	-	-	-	<0.1	-	-	-	0.4	-	0.2
Osteichthyes unid.	13.6	22.6	40.6	19.7	37.6	18.0	25.3	29.4	55.6	27.2
ANIMAL REMAINS AND MISC.	[59.5]	[21.8]	[8.1]	[10.1]	[25.2]	[32.0]	[7.0]	[13.5]	[8.1]	[14.9]
Number sampled	226	307	164	235	207	697	368	423	35	2662
Number empty	124	187	104	125	101	357	152	114	8	1272
Mean stomach content (g)	0.261	0.393	1.252	2.705	3.901	6.421	16.711	20.553	24.003	9.720
Mean fish length (cm)	27	34	45	55	66	75	85	94	103	78

Table B-7b. Diet composition and sampling data for spiny dogfish by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area						
	Middle Atlantic	Southern New England	Georges Bank	Gulf of Maine	Scotian Shelf	Inshore South of Cape Hatteras	Inshore North of Cape Hatteras
CTENOPHORA	[0.1]	[0.4]	[0.1]	[0.3]	[<0.1]	-	[2.6]
MOLLUSCA	[22.6]	[36.7]	[25.8]	[27.9]	[26.3]	[5.3]	[12.1]
Bivalvia	(17.3)	(13.6)	(7.3)	-	-	(1.9)	(2.8)
Pectinidae	3.6	9.4	4.6	-	-	-	2.1
Bivalvia unid.	13.7	4.2	2.7	-	-	1.9	0.7
Cephalopoda	(5.0)	(22.4)	(17.2)	(24.7)	(26.3)	(3.4)	(9.1)
<i>Illex</i> sp.	-	7.3	1.7	13.9	-	-	4.2
<i>Loligo</i> sp.	-	6.6	5.3	-	-	1.3	4.1
Cephalopoda unid.	5.0	8.5	10.2	10.8	26.3	2.1	0.8
Mollusca unid.	(0.3)	(0.7)	(1.3)	(3.2)	(<0.1)	-	(0.2)
CRUSTACEA	[1.3]	[1.3]	[5.7]	[3.5]	[0.4]	[1.6]	[14.5]
Euphausiacea	(<0.1)	(<0.1)	(<0.1)	(3.4)	(0.2)	-	(1.8)
Decapoda	(1.3)	(1.1)	(5.7)	(0.1)	(0.1)	(1.6)	(11.9)
<i>Cancer</i> spp.	1.0	1.1	4.5	-	<0.1	-	9.5
Decapoda unid.	0.3	<0.1	1.2	0.1	0.1	1.6	2.4
Crustacea unid.	(<0.1)	(0.2)	(<0.1)	(<0.1)	(0.1)	-	(0.8)
OSTEICHTHYES	[72.7]	[55.8]	[49.9]	[40.9]	[30.6]	[92.4]	[60.4]
Ophichthidae	-	-	-	-	-	14.3	-
<i>Alosa aestivalis</i>	-	-	3.9	-	-	-	-
<i>Alosa pseudoharengus</i>	-	6.6	0.9	0.7	-	-	-
<i>Brevoortia tyrannus</i>	-	-	-	-	1.1	-	-
<i>Clupea harengus</i>	-	1.9	-	-	-	-	6.0
<i>Etrumeus teres</i>	2.0	-	-	-	-	-	-
Clupeidae	-	1.0	<0.1	1.0	-	-	8.7
<i>Melanogrammus aeglefinus</i>	-	2.1	-	-	-	-	-
<i>Merluccius bilinearis</i>	-	1.2	1.4	-	-	-	-
<i>Urophycis chesteri</i>	-	1.6	-	-	-	-	-
<i>Urophycis chuss</i>	-	2.3	5.0	-	-	-	-
<i>Urophycis</i> sp.	0.1	5.6	-	-	-	-	-
Gadidae	-	5.2	<0.1	-	-	-	-
Belonidae	-	-	-	1.7	-	-	-
Carangidae	-	-	-	-	-	-	5.5
<i>Stenotomus chrysops</i>	-	0.7	-	-	-	-	-
<i>Astroscopus</i> sp.	-	-	-	-	-	10.7	-
<i>Anarhichas</i> sp.	-	-	-	4.9	-	-	-
<i>Ammodytes dubius</i>	3.6	2.1	0.5	12.2	-	0.1	1.0
<i>Scomber scombrus</i>	-	-	-	-	25.8	-	-
<i>Paralichthys dentatus</i>	-	1.5	0.1	-	-	-	-
<i>Scophthalmus aquosus</i>	-	0.9	-	-	-	2.2	-
<i>Symphurus</i> sp.	47.4	-	-	-	-	-	-
<i>Hippoglossus hippoglossus</i>	-	-	0.1	-	-	-	-
<i>Pleuronectes ferruginus</i>	-	-	-	0.9	-	-	<0.1
Osteichthyes unid.	19.6	23.1	38.0	19.5	3.7	65.1	39.2
ANIMAL REMAINS AND MISC.	[3.3]	[5.8]	[18.5]	[27.4]	[42.7]	[0.7]	[10.4]
Number sampled	276	735	783	417	238	17	196
Number empty	150	407	353	190	112	0	60
Mean stomach content (g)	9.464	7.787	6.783	9.395	6.351	43.469	11.083
Mean fish length (cm)	62	58	65	76	74	93	84

Table B-8. Diet composition and sampling data for Atlantic angel shark by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)					Total
	31-50	51-70	71-90	91-110	111-130	
NEMATODA	[0.1]	-	-	-	-	[<0.1]
CEPHALOPODA	[8.1]	[27.7]	[<0.1]	[<0.1]	[<0.1]	[7.7]
Ommastrephidae	0.4	-	-	-	-	<0.1
<i>Loligo pealeii</i>	6.6	-	-	-	-	0.7
<i>Loligo</i> sp.	-	27.5	-	-	-	6.8
Cephalopoda	1.1	0.2	<0.1	<0.1	<0.1	0.2
POLYCHAETA	[<0.1]	-	-	-	-	[<0.1]
<i>Ninoe nigripes</i>	<0.1	-	-	-	-	<0.1
CRUSTACEA	[0.6]	[<0.1]	[<0.1]	[0.2]	[0.8]	[0.2]
Isopoda	(<0.1)	-	-	-	-	(<0.1)
<i>Cirolana</i> sp.	<0.1	-	-	-	-	<0.1
Amphipoda	(<0.1)	-	-	-	-	(<0.1)
<i>Unciola irrorata</i>	<0.1	-	-	-	-	<0.1
Decapoda	(0.6)	(<0.1)	(<0.1)	-	(0.8)	(0.2)
Crangonidae	0.1	-	-	-	-	<0.1
Paguridae	0.3	<0.1	-	-	-	<0.1
<i>Cancer irroratus</i>	-	<0.1	-	-	-	<0.1
<i>Ovalipes ocellatus</i>	-	-	-	-	0.8	0.2
Decapoda unid.	0.2	-	<0.1	-	-	<0.1
Crustacea unid.	(<0.1)	(<0.1)	-	(0.2)	-	(<0.1)
OSTEICHTHYES	[71.1]	[62.8]	[96.3]	[89.2]	[90.9]	[83.3]
<i>Anchoa hepsetus</i>	-	0.3	-	-	-	0.1
<i>Merluccius bilinearis</i>	-	3.3	-	-	-	0.8
<i>Pomatomus saltatrix</i>	-	-	-	-	57.8	17.6
<i>Leiostomus xanthurus</i>	-	6.6	18.0	-	-	6.4
Sciaenidae	-	-	51.5	-	-	13.7
<i>Peprilus triacanthus</i>	-	15.5	-	-	0.9	4.1
<i>Prionotus carolinus</i>	-	-	-	-	20.5	6.3
Osteichthyes unid.	71.1	37.1	26.8	89.2	11.7	34.3
ANIMAL REMAINS	[20.0]	[8.6]	[2.1]	[5.8]	[8.3]	[7.7]
PLANT	[0.1]	-	[0.6]	-	-	[0.2]
ROCK AND SAND	-	[0.9]	[1.0]	[4.8]	-	[0.9]
Number sampled	18	24	6	4	6	58
Number empty	1	3	0	2	0	6
Mean stomach content (g)	6.169	11.561	49.841	18.741	57.076	19.051
Mean fish length (cm)	42	58	79	103	119	65

Table B-9. Diet composition and sampling data for clearnose skate by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)							Total
	31-35	36-40	41-45	46-50	51-55	56-60	61-65	
MOLLUSCA	-	-	[6.9]	-	[1.4]	[2.4]	[0.2]	[0.9]
Bivalvia	-	-	(6.9)	-	(0.6)	(<0.1)	(0.2)	(0.3)
<i>Ensis directus</i>	-	-	-	-	0.6	<0.1	-	0.1
Solenidae	-	-	6.9	-	-	-	-	0.1
Cephalopoda	-	-	-	-	(0.8)	(2.4)	-	(0.6)
Mollusca unid.	-	-	-	-	-	(<0.1)	0.2	(0.1)
POLYCHAETA	-	-	-	[6.5]	[<0.1]	-	[<0.1]	[0.4]
<i>Diopatra cuprea</i>	-	-	-	3.9	-	-	-	0.2
<i>Ophelia</i> sp.	-	-	-	2.6	-	-	-	0.2
Polychaeta unid.	-	-	-	<0.1	<0.1	-	<0.1	<0.1
CRUSTACEA	-	[100.0]	[90.4]	[72.8]	[16.8]	[83.8]	[24.0]	[39.4]
Stomatopoda	-	-	-	-	(1.6)	-	-	(0.3)
Amphipoda	-	-	(3.2)	(0.4)	(<0.1)	-	-	(0.1)
<i>Ampelisca verrilli</i>	-	-	3.2	-	-	-	-	0.1
<i>Byblis serrata</i>	-	-	-	-	<0.1	-	-	<0.1
<i>Acanthohaustorius millsii</i>	-	-	-	0.1	-	-	-	<0.1
<i>Rhepoxynius epistomus</i>	-	-	-	0.3	-	-	-	<0.1
Mysidacea	-	(1.1)	-	-	-	-	-	(<0.1)
Decapoda	-	(98.9)	(82.2)	(72.4)	(15.2)	(83.6)	(23.5)	(38.6)
<i>Penaeus aztecus</i>	-	-	-	-	-	-	5.9	3.3
Penaeidae	-	-	0.6	-	-	-	-	<0.1
<i>Crangon septemspinosa</i>	-	-	1.6	0.6	<0.1	0.2	-	0.1
Shrimp unid.	-	-	5.4	-	-	-	-	0.1
<i>Pagurus pollicaris</i>	-	-	-	-	-	0.4	-	0.1
<i>Sicyonia</i> sp.	-	-	-	-	1.9	1.5	-	0.6
<i>Cancer irroratus</i>	-	-	54.5	71.5	10.8	39.8	17.6	24.9
<i>Cancer</i> sp.	-	-	-	-	-	0.7	-	0.1
Cancridae	-	-	-	0.3	0.8	-	-	0.2
<i>Ovalipes ocellatus</i>	-	98.9	10.5	-	0.5	0.8	-	0.6
Portunidae	-	-	-	-	-	27.6	-	5.6
Scyllaridae	-	-	-	-	-	2.3	-	0.5
Crab unid.	-	-	-	-	0.1	10.3	-	2.1
Decapoda unid.	-	-	9.6	-	1.1	-	-	0.4
Crustacea unid.	-	-	(5.0)	-	-	(0.2)	(0.5)	(0.4)
OSTEICHTHYES	-	-	-	[19.7]	[78.6]	[13.4]	[74.3]	[57.8]
<i>Branchiostoma</i> sp.	-	-	-	8.2	-	-	-	0.5
<i>Myoxocephalus scorpius</i>	-	-	-	-	-	0.6	-	0.1
<i>Cynoscion regalis</i>	-	-	-	-	-	-	41.9	23.1
<i>Peprilus triacanthus</i>	-	-	-	-	7.1	-	-	1.2
Soleidae	-	-	-	-	65.7	-	-	10.8
Osteichthyes unid.	-	-	-	11.5	5.8	12.8	32.4	22.1
ANIMAL REMAINS AND MISC.	[100.0]	-	[2.7]	[1.0]	[3.2]	[0.4]	[1.5]	[1.5]
Number sampled	1	1	6	7	12	12	11	50
Number empty	0	0	0	1	0	1	4	6
Mean stomach content (g)	0.033	0.377	0.800	2.303	3.608	4.465	13.273	5.284
Mean fish length (cm)	33	38	42	48	53	58	62	53

Table B-10a. Diet composition and sampling data for little skate by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)									Total
	<15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	>51	
MOLLUSCA	-	-	-	[0.2]	[0.8]	[4.7]	[4.9]	[2.7]	[5.8]	[3.8]
Bivalvia	-	-	-	(0.2)	-	(1.7)	(3.1)	(1.4)	(5.8)	(2.4)
Mollusca unid.	-	-	-	-	(0.8)	(3.0)	(1.8)	(1.3)	-	(1.4)
POLYCHAETA	[0.3]	[7.1]	[2.2]	[11.8]	[17.9]	[6.6]	[11.1]	[15.2]	[6.2]	[12.9]
Maldanidae	-	-	-	4.3	0.4	1.3	0.4	1.2	0.6	0.9
Aphroditidae	-	-	-	-	-	0.6	-	3.4	1.9	1.7
<i>Nephtys</i> spp.	-	-	-	1.4	14.7	<0.1	1.8	1.0	-	1.9
Polychaeta unid.	0.3	7.1	2.2	6.2	2.8	4.7	8.9	9.6	3.7	8.4
CRUSTACEA	[86.1]	[85.9]	[96.6]	[83.5]	[38.7]	[62.3]	[64.4]	[66.3]	[69.5]	[65.5]
Stomatopoda	-	-	-	-	-	-	(1.4)	(<0.1)	(8.8)	(1.3)
Cumacea	(12.3)	(5.4)	(2.0)	(7.8)	(0.7)	(0.1)	(<0.1)	(<0.1)	(<0.1)	(0.3)
<i>Pseudoleptocuma minor</i>	3.8	3.8	-	-	-	-	<0.1	-	-	0.1
Cumacea unid.	8.5	1.6	2.0	7.8	0.7	0.1	<0.1	<0.1	<0.1	0.2
Isopoda	-	-	-	(6.9)	(0.6)	(5.3)	(3.3)	(2.2)	(<0.1)	(2.4)
<i>Cirolana</i> sp.	-	-	-	6.9	0.6	5.3	3.3	2.2	<0.1	2.4
Amphipoda	(35.1)	(44.8)	(62.1)	(48.3)	(15.9)	(22.3)	(13.2)	(13.9)	(15.4)	(15.7)
<i>Byblis serrata</i>	4.8	3.6	5.1	3.2	0.3	1.6	0.2	0.2	-	0.4
Ampeliscidae	1.3	5.1	3.5	0.7	0.2	0.3	<0.1	<0.1	<0.1	0.2
<i>Unciola</i> spp.	3.7	6.3	16.2	6.1	1.7	7.5	3.7	2.3	<0.1	2.9
<i>Gammarus annulatus</i>	-	-	0.7	11.0	-	0.7	0.5	<0.1	0.2	0.4
Oedicerotidae	10.9	13.2	8.4	0.5	2.8	1.1	0.8	1.3	<0.1	1.2
<i>Leptocheirus pinguis</i>	4.5	9.6	8.8	5.0	10.7	3.2	5.4	6.9	15.1	7.2
Amphipoda unid.	9.9	7.0	19.4	21.8	0.2	7.9	2.6	3.2	0.1	3.4
Decapoda	(21.9)	(22.7)	(21.6)	(13.1)	(19.7)	(32.2)	(40.0)	(46.2)	(37.2)	(40.5)
<i>Crangon septemspinosa</i>	15.5	18.9	18.7	8.8	4.1	7.3	5.7	4.4	5.8	5.4
<i>Axius serratus</i>	-	-	-	-	-	-	2.1	1.1	-	1.2
<i>Cancer borealis</i>	-	-	-	-	-	8.3	3.4	2.6	5.4	3.2
<i>Cancer irroratus</i>	-	0.2	2.2	3.1	7.4	13.1	22.0	27.1	9.9	21.2
<i>Pagurus acadianus</i>	-	-	-	-	-	0.4	0.2	3.0	7.7	2.2
Decapoda unid.	6.4	3.6	0.7	1.2	8.2	3.1	6.6	8.0	8.4	7.3
Crustacea unid.	(16.8)	(13.0)	(10.9)	(7.4)	(1.8)	(2.4)	(6.5)	(4.0)	(8.1)	(5.3)
OSTEICHTHYES	-	-	-	[2.4]	[37.2]	[5.3]	[10.8]	[5.4]	[10.7]	[9.5]
<i>Anchoa mitchilli</i>	-	-	-	-	-	-	1.7	-	-	0.6
Gadidae	-	-	-	-	-	-	1.1	<0.1	-	0.4
<i>Ammodytes dubius</i>	-	-	-	-	35.7	0.8	5.7	1.7	0.3	4.7
<i>Myoxocephalus octodecemspinus</i>	-	-	-	-	-	-	-	-	8.4	0.8
<i>Lepophidium profundorum</i>	-	-	-	-	-	-	0.2	-	-	0.1
Bothidae	-	-	-	-	0.5	-	-	<0.1	-	0.1
<i>Pleuronectes americanus</i>	-	-	-	-	0.2	-	-	-	-	<0.1
Pleuronectiformes	-	-	-	1.3	-	-	0.1	<0.1	0.7	0.1
Osteichthyes eggs or larvae	-	-	-	-	-	0.3	<0.1	<0.1	-	<0.1
Osteichthyes unid.	-	-	-	1.1	0.8	4.2	2.0	3.7	1.3	2.7
ANIMAL REMAINS AND MISC.	[13.6]	[7.0]	[1.2]	[2.1]	[5.4]	[21.1]	[8.8]	[10.4]	[7.8]	[8.3]
Number sampled	58	14	11	25	25	45	130	175	21	504
Number empty	2	0	1	3	3	6	14	17	1	47
Mean stomach content (g)	0.075	0.222	0.222	0.319	1.416	0.758	1.625	1.580	2.936	1.263
Mean fish length (cm)	10	18	22	28	33	38	43	47	52	38

Table B-10b. Diet composition and sampling data for little skate by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area			
	Middle Atlantic	Southern New England	Georges Bank	Inshore North of Cape Hatteras
MOLLUSCA	[12.8]	[3.4]	[1.5]	[0.9]
Bivalvia	6.3	2.3	1.5	0.9
Mollusca unid.	6.5	1.1	<0.1	<0.1
POLYCHAETA	[3.2]	[21.7]	[15.0]	[3.3]
Maldanidae	0.7	3.8	1.1	0.4
Aphroditidae	-	2.9	2.7	-
<i>Nephtys</i> spp.	-	2.1	4.2	-
Polychaeta unid.	2.5	12.9	7.0	2.9
CRUSTACEA	[53.5]	[61.7]	[67.4]	[73.0]
Stomatopoda	(<0.1)	(<0.1)	-	(5.4)
Cumacea	(<0.1)	(0.4)	(<0.1)	(0.3)
<i>Pseudoleptocuma minor</i>	-	-	<0.1	0.2
Cumacea unid.	<0.1	0.4	<0.1	0.1
Isopoda	(0.8)	(3.1)	(3.3)	(1.5)
<i>Cirolana</i> sp.	0.8	3.1	3.3	1.5
Amphipoda	(1.3)	(26.6)	(11.5)	(14.6)
<i>Byblis serrata</i>	<0.1	0.4	0.2	0.7
<i>Unciola</i> spp.	0.5	4.6	0.5	5.1
<i>Gammarus annulatus</i>	-	0.5	-	1.0
Oedicerotidae	<0.1	1.0	2.6	0.8
<i>Leptocheirus pinguis</i>	0.4	16.7	3.4	3.5
Amphipoda unid.	0.4	3.4	4.8	3.5
Decapoda	(42.8)	(25.7)	(47.1)	(49.4)
<i>Crangon septemspinosa</i>	3.0	6.2	4.8	6.5
<i>Axius serratus</i>	0.5	0.3	3.5	-
<i>Cancer borealis</i>	3.0	3.5	0.9	5.7
<i>Cancer irroratus</i>	26.1	9.7	24.1	29.7
<i>Pagurus acadianus</i>	-	0.9	6.0	0.7
Decapoda unid.	10.2	5.1	7.8	6.8
Crustacea unid.	(8.6)	(5.9)	(5.5)	(1.8)
OSTEICHTHYES	[24.2]	[1.7]	[2.9]	[17.5]
<i>Anchoa mitchilli</i>	-	-	-	2.3
Gadidae	2.3	-	-	0.2
<i>Ammodytes dubius</i>	19.5	0.3	-	6.4
<i>Myoxocephalus octodecemspinosus</i>	-	-	1.7	1.3
<i>Lepophidium profundorum</i>	-	-	-	0.3
Bothidae	0.3	-	-	<0.1
<i>Pleuronectes americanus</i>	-	<0.1	-	-
Pleuronectiformes	0.2	<0.1	0.4	<0.1
Osteichthyes eggs or larvae	-	<0.1	<0.1	0.2
Osteichthyes unid.	1.9	1.4	0.8	6.8
ANIMAL REMAINS AND MISC.	[6.3]	[11.5]	[13.2]	[5.3]
Number sampled	63	202	105	134
Number empty	1	31	8	7
Mean stomach content (g)	1.581	1.000	1.727	1.148
Mean fish length (cm)	35	41	42	33

Table B-11a. Diet composition and sampling data for winter skate by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)									Total
	<31	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101-110	
MOLLUSCA	[0.4]	[4.6]	[4.8]	[10.7]	[12.3]	[24.8]	[23.8]	[1.9]	-	[15.8]
Bivalvia	(0.4)	(4.6)	(4.6)	(10.7)	(10.4)	(16.6)	(9.4)	(0.8)	-	(8.8)
Solenidae	-	-	-	-	6.5	3.2	4.0	-	-	2.7
Bivalvia unid.	0.4	4.6	4.6	10.7	3.9	13.4	5.4	0.8	-	6.1
Cephalopoda	-	(<0.1)	(0.2)	-	(1.9)	(8.2)	(13.4)	(1.1)	-	(7.0)
<i>Illex</i> sp.	-	-	-	-	1.9	7.2	12.2	1.1	-	6.3
Cephalopoda unid.	-	<0.1	0.2	-	-	1.0	1.2	-	-	0.7
POLYCHAETA	[12.9]	[8.2]	[15.9]	[21.9]	[13.1]	[14.0]	[6.1]	[1.3]	[2.4]	[8.5]
<i>Lumbrineris fragilis</i>	-	0.9	3.3	1.6	0.4	1.4	<0.1	<0.1	-	0.5
<i>Ophelia</i> sp.	-	1.0	0.1	5.5	3.1	2.1	1.4	0.3	2.4	1.6
<i>Nephtys bucera</i>	-	<0.1	0.5	1.7	4.7	3.1	0.7	0.5	-	1.7
Nephtyidae	4.2	0.2	4.8	4.7	2.6	4.9	2.8	0.2	-	2.8
Polychaeta unid.	8.7	6.1	7.2	8.4	2.3	2.5	1.2	0.3	-	1.9
CRUSTACEA	[85.7]	[78.3]	[65.2]	[30.5]	[6.7]	[6.1]	[2.3]	[0.8]	[<0.1]	[7.4]
Isopoda	(4.9)	(3.2)	(4.3)	(4.3)	(1.5)	(1.2)	(0.1)	(<0.1)	-	(0.8)
<i>Cirolana</i> sp.	4.9	3.2	4.3	4.3	1.5	1.2	0.1	<0.1	-	0.8
Amphipoda	(51.9)	(31.6)	(11.6)	(8.6)	(0.7)	(0.4)	(<0.1)	(<0.1)	(<0.1)	(1.4)
<i>Byblis serrata</i>	7.4	1.9	0.6	0.1	<0.1	<0.1	<0.1	<0.1	-	0.1
<i>Unciola irrorata</i>	7.8	4.9	0.5	0.1	<0.1	<0.1	<0.1	-	-	0.1
Haustoriidae	7.1	5.9	0.2	2.4	0.4	0.4	<0.1	-	-	0.4
<i>Leptocheirus pinguis</i>	23.7	2.1	4.8	<0.1	<0.1	<0.1	<0.1	-	<0.1	0.2
Amphipoda unid.	5.9	16.8	5.5	6.0	0.3	<0.1	<0.1	<0.1	-	0.6
Decapoda	(27.6)	(39.8)	(45.1)	(16.5)	(4.4)	(4.4)	(1.9)	(0.8)	-	(4.8)
<i>Dichelopandalus leptocerus</i>	-	0.3	2.2	0.3	<0.1	0.3	<0.1	0.4	-	0.3
<i>Crangon septemspinosa</i>	7.0	6.7	29.5	6.9	0.8	0.5	0.2	<0.1	-	1.3
<i>Pagurus</i> spp.	-	5.6	0.1	4.4	0.1	0.7	<0.1	-	-	0.4
<i>Cancer irroratus</i>	20.1	24.0	7.1	1.2	2.0	1.0	1.7	0.3	-	1.7
<i>Ovalipes ocellatus</i>	-	0.9	4.0	3.6	0.5	1.2	<0.1	-	-	0.5
Decapoda unid.	0.5	2.3	2.2	0.1	1.0	0.7	<0.1	0.1	-	0.6
Crustacea unid.	(1.3)	(3.7)	(4.2)	(1.1)	(0.1)	(0.1)	(0.3)	(<0.1)	-	(0.4)
CHONDRICHTHYES	-	-	-	-	[0.5]	[0.2]	[1.1]	-	-	[0.5]
Rajidae	-	-	-	-	0.5	0.2	1.1	-	-	0.5
OSTEICHTHYES	[0.4]	[4.9]	[9.6]	[32.6]	[64.7]	[49.2]	[65.5]	[95.2]	[96.4]	[66.2]
<i>Ophichthus cruentifer</i>	-	-	-	0.2	-	-	-	-	-	<0.1
<i>Gadus morhua</i>	-	-	0.4	-	-	-	-	-	-	<0.1
<i>Merluccius bilinearis</i>	-	-	-	-	<0.1	0.2	-	11.7	-	2.7
Gadidae	-	-	-	-	-	<0.1	3.2	8.0	-	2.9
<i>Ammodytes dubius</i>	-	3.8	5.2	30.9	60.4	35.4	55.4	68.0	64.0	51.9
Cottidae	-	-	-	-	-	4.3	-	-	-	1.0
<i>Pleuronectes ferruginus</i>	-	-	0.2	-	-	-	-	-	-	<0.1
Osteichthyes larvae	-	-	-	<0.1	-	-	-	-	-	<0.1
Osteichthyes unid.	0.4	1.1	3.8	1.5	4.3	9.3	6.9	7.5	32.4	7.7
ANIMAL REMAINS AND MISC.	[0.6]	[4.0]	[4.5]	[4.3]	[2.7]	[5.7]	[1.2]	[0.8]	[1.2]	[1.6]
Number sampled	12	52	72	37	85	173	199	102	13	745
Number empty	0	4	4	7	16	36	39	38	6	150
Mean stomach content (g)	0.687	1.264	1.822	2.869	7.030	7.174	8.910	11.630	11.103	6.588
Mean fish length (cm)	24	36	45	55	66	76	84	94	103	72

Table B-11b. Diet composition and sampling data for winter skate by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area			
	Southern New England	Georges Bank	Gulf of Maine	Inshore North of Cape Hatteras
MOLLUSCA	[10.9]	[16.4]	[11.7]	[0.3]
Bivalvia	(0.7)	(9.5)	-	(0.3)
Solenidae	-	3.0	-	-
Bivalvia unid.	0.7	6.5	-	0.3
Cephalopoda	(10.2)	(6.9)	(11.7)	-
<i>Illex</i> sp.	-	6.9	-	-
Cephalopoda unid.	10.2	<0.1	11.7	-
POLYCHAETA	[9.0]	[8.4]	[<0.1]	[2.7]
<i>Lumbrineris fragilis</i>	-	0.6	-	-
<i>Ophelia</i> sp.	-	1.6	-	1.6
<i>Nephtys bucera</i>	4.7	1.7	-	-
Nephtyidae	0.9	2.9	<0.1	0.8
Polychaeta unid.	3.4	1.6	-	0.3
CRUSTACEA	[8.2]	[6.2]	[0.1]	[8.1]
Isopoda	(2.1)	(0.8)	-	(0.3)
<i>Cirolana</i> sp.	2.1	0.8	-	0.3
Amphipoda	(4.1)	(0.5)	-	(1.3)
<i>Byblis serrata</i>	0.2	<0.1	-	0.2
<i>Unciola irrorata</i>	1.0	<0.1	-	0.6
<i>Leptocheirus pinguis</i>	1.6	0.2	-	-
Amphipoda unid.	1.3	0.3	-	0.5
Decapoda	(1.5)	(4.5)	-	(6.5)
<i>Dichelopandalus leptocerus</i>	<0.1	0.3	-	-
<i>Crangon septemspinosa</i>	0.5	1.3	-	0.3
<i>Pagurus</i> spp.	<0.1	0.3	-	-
<i>Cancer irroratus</i>	1.0	1.8	-	0.3
<i>Ovalipes ocellatus</i>	-	0.4	-	5.9
Decapoda unid.	<0.1	0.4	-	-
Crustacea unid.	(0.5)	(0.4)	(0.1)	(<0.1)
CHONDRICHTHYES	-	[0.5]	-	-
Rajidae	-	0.5	-	-
OSTEICHTHYES	[66.6]	[64.7]	[88.1]	[88.2]
<i>Ophichthus cruentifer</i>	-	<0.1	-	-
<i>Gadus morhua</i>	-	<0.1	-	-
<i>Merluccius bilinearis</i>	-	2.9	-	-
Gadidae	-	3.1	-	-
<i>Ammodytes dubius</i>	64.1	50.3	88.1	48.2
Cottidae	-	1.1	-	-
<i>Pleuronectes ferruginus</i>	-	<0.1	-	-
Osteichthyes larvae	-	<0.1	-	-
Osteichthyes unid.	2.5	7.3	-	40.0
ANIMAL REMAINS AND MISC.	[5.3]	[3.8]	[0.1]	[0.7]
Number sampled	34	661	12	36
Number empty	8	122	2	16
Mean stomach content (g)	3.658	7.291	15.204	3.542
Mean fish length (cm)	62	72	87	83

Table B-12a. Diet composition and sampling data for thorny skate by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)									Total
	<21	21-30	31-40	41-50	51-60	61-70	71-80	81-90	>90	
CEPHALOPODA	-	[4.2]	[0.4]	[7.5]	[12.3]	[12.1]	[6.4]	[5.2]	[45.9]	[22.9]
<i>Illex</i> sp.	-	-	-	-	-	2.8	-	-	17.5	7.3
<i>Loligo</i> sp.	-	-	-	-	-	-	-	-	26.3	10.5
Octopoda	-	-	0.4	-	-	-	-	3.6	-	0.6
Cephalopoda unid.	-	4.2	<0.1	7.5	12.3	9.3	6.4	1.6	2.1	4.5
ANNELIDA	[34.7]	[37.5]	[25.1]	[30.7]	[39.2]	[11.7]	[15.3]	[16.0]	[0.9]	[10.7]
Aphroditidae	21.0	0.1	1.4	0.4	17.4	2.7	3.0	-	-	2.0
<i>Nephtys</i> spp.	7.8	6.2	5.2	1.3	5.1	5.0	3.0	1.9	<0.1	2.0
Nephtyidae	2.3	-	0.7	0.5	3.4	1.4	1.4	0.8	<0.1	0.8
<i>Nereis</i> sp.	-	-	-	-	2.4	-	3.6	2.8	-	1.4
Annelida unid.	3.6	31.2	17.8	28.5	10.9	2.6	4.3	10.5	0.9	4.5
CRUSTACEA	[48.7]	[30.4]	[70.3]	[32.1]	[18.7]	[19.0]	[10.6]	[25.7]	[3.3]	[13.0]
Isopoda	(0.2)	(3.6)	(0.4)	(0.3)	(0.4)	(<0.1)	(<0.1)	(0.1)	-	(0.1)
Amphipoda	(33.8)	(9.6)	(9.7)	(5.2)	(0.3)	(<0.1)	(<0.1)	-	-	(0.3)
Euphausiacea	(1.1)	(0.5)	(33.9)	(3.9)	(0.8)	(0.4)	(6.0)	(0.9)	(<0.1)	(2.3)
<i>Meganyctiphanes norvegica</i>	1.1	0.5	33.9	3.9	0.8	0.4	6.0	0.9	<0.1	2.3
Decapoda	(8.5)	(11.3)	(19.9)	(12.7)	(15.2)	(17.2)	(4.6)	(23.5)	(2.0)	(9.1)
<i>Dichelopandalus leptocerus</i>	-	-	-	-	1.4	1.4	0.1	3.0	0.5	1.0
Pandalidae	-	-	-	-	<0.1	2.0	<0.1	3.4	<0.1	0.9
<i>Crangon septemspinosa</i>	7.0	6.0	0.3	1.4	<0.1	0.5	-	-	-	0.1
Axiidae	-	-	-	9.1	1.8	0.3	-	0.3	1.5	0.8
Paguridae	0.7	4.9	13.5	-	-	2.6	0.6	0.3	-	0.5
<i>Hyas</i> sp.	-	-	3.8	0.5	-	9.9	3.6	8.2	-	3.5
<i>Cancer</i> spp.	0.3	0.2	-	-	8.0	-	-	4.6	-	1.1
Decapoda unid.	0.5	0.2	2.3	1.7	4.0	0.5	0.3	3.7	<0.1	1.2
Crustacea unid.	(5.1)	(5.4)	(6.4)	(10.0)	(2.0)	(1.4)	(<0.1)	(1.2)	(1.3)	(1.2)
AGNATHA	-	-	-	-	-	-	[1.3]	-	-	[0.3]
CHONDRICHTHYES	-	-	-	-	-	-	-	[15.1]	-	[2.3]
OSTEICHTHYES	[3.1]	[3.7]	[0.1]	-	[22.8]	[51.1]	[60.9]	[29.5]	[45.1]	[45.3]
<i>Clupea harengus</i>	-	-	-	-	-	36.5	-	-	20.8	12.9
<i>Clupea</i> sp.	-	-	-	-	-	-	25.5	-	-	6.5
<i>Ammodytes dubius</i>	-	-	-	-	-	8.2	13.2	2.0	-	4.7
Scombridae	-	-	-	-	-	-	-	-	1.9	0.7
Anarhichadidae	-	-	-	-	4.2	-	-	-	-	0.2
Cottidae	-	-	-	-	-	4.6	0.3	-	-	0.7
<i>Cryptacanthodes maculatus</i>	-	-	-	-	-	-	1.3	15.5	-	2.7
<i>Lumpenus maculatus</i>	-	-	-	-	-	-	7.7	-	-	1.9
<i>Scophthalmus</i> sp.	-	-	-	-	-	-	-	-	7.3	2.9
Pleuronectidae	3.1	3.1	-	-	-	-	-	-	-	<0.1
Osteichthyes eggs	-	-	-	-	-	-	6.1	-	-	1.5
Osteichthyes unid.	-	0.6	0.1	-	18.6	1.8	6.8	12.0	15.1	10.6
ANIMAL REMAINS AND MISC.	[13.5]	[24.2]	[4.1]	[29.7]	[7.0]	[6.1]	[5.5]	[8.5]	[4.8]	[5.5]
Number sampled	31	16	30	29	36	36	42	31	18	269
Number empty	2	0	6	3	3	4	6	0	2	26
Mean stomach content (g)	0.241	0.434	1.170	0.670	3.098	9.065	15.467	12.595	56.514	9.532
Mean fish length (cm)	16	26	34	45	55	65	75	85	95	56

Table B-12b. Diet composition and sampling data for thorny skate by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area			
	Georges Bank	Gulf of Maine	Scotian Shelf	Inshore North of Cape Hatteras
CEPHALOPODA	[6.4]	[32.6]	[16.3]	[<0.1]
<i>Illex</i> sp.	1.4	10.9	-	-
<i>Loligo</i> sp.	-	16.4	-	-
Octopoda	-	0.9	-	-
Cephalopoda unid.	5.0	4.4	16.3	<0.1
ANNELIDA	[5.6]	[8.5]	[45.5]	[29.6]
Aphroditidae	1.7	1.1	12.9	5.9
<i>Nephtys</i> spp.	1.6	1.3	20.6	3.1
Nephtyidae	<0.1	1.3	-	<0.1
<i>Nereis</i> sp.	-	-	-	18.0
Annelida unid.	2.3	4.8	12.0	2.6
CRUSTACEA	[17.5]	[10.7]	[20.7]	[4.0]
Isopoda	(<0.1)	(<0.1)	-	(<0.1)
Amphipoda	(0.2)	(<0.1)	(4.5)	(0.3)
Euphausiacea	(<0.1)	(3.5)	(0.2)	(<0.1)
<i>Meganyctiphanes norvegica</i>	<0.1	3.5	0.2	<0.1
Decapoda	(17.1)	(5.8)	(10.9)	(3.5)
<i>Dichelopandalus leptocerus</i>	0.2	1.2	4.9	0.1
Pandalidae	-	1.3	-	0.2
<i>Crangon septemspinosa</i>	0.2	<0.1	-	0.9
Axiidae	-	0.9	3.3	0.9
Paguridae	2.1	<0.1	-	<0.1
<i>Hyas</i> sp.	13.3	-	1.0	0.7
<i>Cancer</i> spp.	<0.1	1.6	-	-
Decapoda unid.	1.3	0.8	1.7	0.7
Crustacea unid.	(0.2)	(1.4)	(5.1)	(0.2)
AGNATHA	-	[0.5]	-	-
CHONDRICHTHYES	[8.9]	-	-	-
OSTEICHTHYES	[59.2]	[38.3]	[15.4]	[64.8]
<i>Clupea harengus</i>	-	13.0	-	57.8
<i>Clupea</i> sp.	25.0	-	-	-
<i>Ammodytes dubius</i>	18.2	-	-	-
Scombridae	-	1.2	-	-
Anarhichadidae	-	-	7.8	-
Cottidae	0.2	0.9	-	-
<i>Cryptacanthodes maculatus</i>	<0.1	4.2	-	-
<i>Lumpenus maculatus</i>	-	3.0	-	-
<i>Scophthalmus</i> sp.	-	4.5	-	-
Pleuronectidae	<0.1	-	-	-
Osteichthyes eggs	6.0	-	-	-
Osteichthyes unid.	9.8	11.5	7.6	7.0
ANIMAL REMAINS AND MISC.	[2.4]	[9.4]	[2.1]	[1.6]
Number sampled	67	156	16	30
Number empty	5	18	1	2
Mean stomach content (g)	9.861	10.491	3.794	6.871
Mean fish length (cm)	50	59	56	52

Table B-13. Diet composition and sampling data for smooth skate by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)									Total
	<26	26-30	31-35	36-40	41-45	46-50	51-55	56-60	>60	
NEMATODA	-	-	-	-	[0.7]	-	-	[0.1]	-	[0.1]
CRUSTACEA	[56.7]	[72.2]	[100.0]	[93.2]	[99.3]	[100.0]	[99.5]	[98.2]	[100.0]	[96.6]
Isopoda	-	-	-	-	-	-	(23.2)	-	-	(1.5)
Amphipoda	-	(0.8)	-	-	-	-	-	-	-	[<0.1]
Mysidacea	-	(5.3)	-	-	-	(0.1)	-	-	-	(<0.1)
<i>Erythrops erythrophthalma</i>	-	1.1	-	-	-	0.1	-	-	-	<0.1
<i>Pseudomma affine</i>	-	4.2	-	-	-	-	-	-	-	<0.1
Euphausiacea	(56.7)	(51.2)	-	-	-	-	-	(66.0)	-	(23.1)
<i>Meganyctiphanes norvegica</i>	56.7	51.2	-	-	-	-	-	66.0	-	23.1
Decapoda	-	-	(55.8)	(93.2)	(97.9)	(97.5)	(51.3)	(29.5)	(100.0)	(69.2)
<i>Dichelopandalus leptocerus</i>	-	-	-	41.6	97.9	5.5	-	-	-	15.7
<i>Pandalus borealis</i>	-	-	-	51.1	-	-	-	22.8	-	14.4
<i>Pandalus montagui</i>	-	-	-	0.5	-	7.4	-	-	-	2.0
Pandalidae	-	-	-	-	-	43.5	-	<0.1	-	11.5
<i>Crangon septemspinosa</i>	-	-	-	-	-	10.9	-	-	-	2.9
Paguridae	-	-	-	-	-	-	51.3	-	-	3.3
<i>Cancer borealis</i>	-	-	-	-	-	-	-	4.0	-	1.4
<i>Cancer irroratus</i>	-	-	-	-	-	4.5	-	-	-	1.2
Shrimp unid.	-	-	-	-	-	-	-	2.7	100.0	8.9
Decapoda unid.	-	-	55.8	-	-	25.7	-	-	-	7.9
Crustacea unid.	-	(14.9)	(44.2)	-	(1.4)	(2.4)	(25.0)	(2.7)	-	(4.3)
OSTEICHTHYES	-	-	-	-	-	-	[0.3]	-	-	[<0.1]
ANIMAL REMAINS	[43.3]	[27.8]	-	[6.8]	-	-	[0.2]	[1.7]	-	[3.3]
Number sampled	1	6	2	3	3	5	4	4	1	29
Number empty	0	3	1	1	1	1	1	0	0	8
Mean stomach content (g)	0.171	0.088	0.641	2.900	2.028	3.545	1.089	5.734	5.383	2.316
Mean fish length (cm)	17	27	33	37	42	49	53	58	66	43

Table B-14. Diet composition and sampling data for bluntnose stingray by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)				Total
	21-40	41-60	61-80	>80	
CESTODA	-	[<0.1]	-	-	[<0.1]
MOLLUSCA	-	[91.4]	[19.3]	[0.1]	[19.7]
<i>Spisula solidissima</i>	-	-	0.4	0.1	<0.1
Bivalvia	-	91.4	18.9	-	19.7
POLYCHAETA	[1.1]	[0.1]	[11.6]	[0.2]	[10.2]
<i>Nereis</i> sp.	-	-	-	0.2	<0.1
Polychaeta unid.	1.1	0.1	11.6	-	10.2
SIPUNCULA	-	-	[2.2]	-	[2.0]
<i>Golfingia</i> sp.	-	-	2.2	-	2.0
CRUSTACEA	[85.2]	[0.7]	[19.0]	[97.1]	[24.2]
Amphipoda	(77.4)	(0.4)	-	-	(0.4)
<i>Ampelisca macrocephala</i>	49.5	-	-	-	0.1
<i>Ampelisca verrilli</i>	15.2	-	-	-	0.2
<i>Unciola</i> sp.	-	<0.1	-	-	<0.1
Gammaridea	9.6	-	-	-	0.1
Amphipoda unid.	3.1	0.4	-	-	<0.1
Euphausiacea	-	-	-	(1.8)	(0.1)
<i>Meganyctiphanes norvegica</i>	-	-	-	1.7	0.1
Euphausiacea unid.	-	-	-	0.1	<0.1
Decapoda	(2.3)	(0.3)	(18.5)	(95.3)	(23.2)
Hippolytidae	-	-	-	<0.1	<0.1
<i>Crangon septemspinosa</i>	2.3	0.3	-	20.0	1.5
<i>Callinassa setimanus</i>	-	-	14.2	-	12.5
<i>Callinassa</i> sp.	-	-	0.2	-	0.1
Callinassidae	-	-	3.6	-	3.2
<i>Cancer irroratus</i>	-	-	-	9.3	0.7
<i>Munida iris</i>	-	-	-	0.2	<0.1
<i>Munida valida</i>	-	-	-	2.0	0.1
<i>Ranilia muricata</i>	-	-	-	49.0	3.6
Decapoda unid.	-	-	0.5	14.8	1.5
Crustacea unid.	(5.5)	-	(0.5)	-	(0.5)
OSTEICHTHYES	[<0.1]	-	[46.2]	[0.2]	[40.9]
<i>Anchoa mitchilli</i>	-	-	0.5	-	0.4
<i>Osmerus mordax</i>	-	-	-	0.2	<0.1
<i>Leiostomus xanthurus</i>	-	-	39.4	-	34.9
<i>Stenotomus chrysops</i>	-	-	6.2	-	5.5
Osteichthyes eggs	<0.1	-	-	-	<0.1
Osteichthyes unid.	-	-	0.1	-	0.1
ANIMAL REMAINS	[12.3]	[7.8]	[1.7]	[2.4]	[3.0]
SAND	[1.4]	-	-	-	[<0.1]
Number sampled	8	7	8	3	26
Number empty	3	1	0	0	4
Mean stomach content (g)	0.572	2.068	48.777	10.689	16.974
Mean fish length (cm)	26	51	72	119	58

Table B-15a. Diet composition and sampling data for alewife by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)						Total
	6-10	11-15	16-20	21-25	26-30	31-35	
CNIDARIA	-	-	-	[0.9]	[2.1]	-	[1.5]
CHAETOGNATHA	-	-	[0.3]	[1.3]	[0.8]	-	[0.9]
MOLLUSCA	-	-	-	<0.1]	[0.4]	[0.3]	[0.3]
Opisthobranchia	-	-	-	-	0.2	<0.1	0.1
Gastropoda	-	-	-	<0.1	0.1	0.3	0.1
Cephalopoda	-	-	-	-	0.1	-	0.1
CRUSTACEA	[98.5]	[99.8]	[79.2]	[89.1]	[90.2]	[37.7]	[88.7]
Copepoda	(67.5)	(29.6)	(17.2)	(27.2)	(17.7)	(10.5)	(21.3)
<i>Candacia armata</i>	-	-	-	-	<0.1	0.6	<0.1
Calanoida	5.6	14.4	4.4	3.1	8.6	1.6	6.3
Copepoda unid.	61.9	15.2	12.8	24.1	9.1	8.3	15.0
Amphipoda	(0.8)	(0.5)	(0.4)	(3.4)	(6.5)	(8.3)	(5.2)
<i>Hyperia glaba</i>	-	-	-	-	-	0.4	<0.1
<i>Parathemisto</i> sp.	-	-	<0.1	1.9	5.2	7.9	3.7
Hyperiidæ	0.8	0.5	0.4	<0.1	<0.1	<0.1	0.1
<i>Unciola</i> sp.	-	-	-	-	<0.1	-	<0.1
<i>Rhachotropis oculata</i>	-	-	-	<0.1	<0.1	-	<0.1
<i>Gammarus</i> sp.	-	-	-	0.2	0.2	-	0.2
<i>Protohaustorius wigleyi</i>	-	<0.1	-	-	-	-	<0.1
<i>Monoculodes</i> sp.	-	-	-	0.4	<0.1	-	0.2
<i>Leptocheirus pinguis</i>	-	-	-	-	<0.1	-	<0.1
<i>Pontogeneia inermis</i>	-	-	-	<0.1	<0.1	-	<0.1
Amphipoda unid.	-	-	-	0.9	1.1	-	1.0
Mysidacea	-	-	-	(6.1)	(2.9)	-	(3.8)
<i>Neomysis americana</i>	-	-	-	5.8	2.9	-	3.7
Mysidacea unid.	-	-	-	0.3	-	-	0.1
Euphausiacea	-	(27.1)	(19.7)	(45.1)	(53.9)	(2.3)	(47.1)
<i>Meganyctiphanes norvegica</i>	-	10.1	19.7	39.6	51.8	2.1	43.7
Euphausiacea unid.	-	17.0	-	5.5	2.1	0.2	3.4
Decapoda	-	(0.4)	(1.8)	(3.9)	(1.7)	(<0.1)	(2.5)
<i>Dichelopandalus leptocerus</i>	-	-	-	-	0.2	-	0.1
<i>Crangon septemspinosa</i>	-	-	-	<0.1	-	-	<0.1
Paguroidea	-	-	0.1	<0.1	<0.1	-	<0.1
Decapoda larvae	-	0.4	1.7	3.9	1.5	<0.1	2.4
Crustacea unid.	(30.2)	(42.2)	(40.1)	(3.4)	(7.5)	(16.6)	(8.8)
THALIACEA	-	-	-	[0.4]	[1.4]	[6.1]	[1.0]
Salpidae	-	-	-	0.2	<0.1	6.1	0.2
Thaliacea unid.	-	-	-	0.2	1.4	-	0.8
LARVACEA	-	-	-	-	[0.2]	[4.4]	[0.2]
OSTEICHTHYES	-	-	[17.6]	[0.8]	[0.4]	-	[1.7]
<i>Ammodytes dubius</i>	-	-	15.0	-	-	-	1.0
Osteichthyes unid.	-	-	2.6	0.8	0.4	-	0.7
ANIMAL REMAINS AND MISC.	[1.5]	[0.2]	[2.9]	[7.5]	[4.5]	[51.5]	[5.7]
Number sampled	11	25	40	70	87	7	240
Number empty	0	5	8	5	9	1	28
Mean stomach content (g)	0.011	0.100	0.276	0.905	1.056	0.484	0.718
Mean fish length (cm)	8	13	18	23	27	32	22

Table B-15b. Diet composition and sampling data for alewife by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area					Inshore North of Cape Hatteras
	Middle Atlantic	Southern New England	Georges Bank	Gulf of Maine	Scotian Shelf	
CNIDARIA	-	-	-	-	-	[9.6]
CHAETOGNATHA	[36.4]	-	-	[<0.1]	-	[0.1]
MOLLUSCA	[2.5]	[0.3]	-	[0.2]	-	-
Opisthobranchia	-	-	-	0.2	-	-
Gastropoda	-	0.3	-	<0.1	-	-
Cephalopoda	2.5	-	-	-	-	-
CRUSTACEA	[56.5]	[92.4]	[82.1]	[93.1]	[99.9]	[68.3]
Copepoda	(28.6)	(46.6)	-	(8.6)	-	(42.2)
<i>Candacia armata</i>	-	-	-	<0.1	-	-
Calanoida	28.6	2.6	-	1.7	-	26.3
Copepoda unid.	-	44.0	-	6.9	-	15.9
Amphipoda	(8.4)	(15.2)	(79.3)	(1.3)	-	(<0.1)
<i>Hyperia glaba</i>	-	-	-	<0.1	-	-
<i>Parathemisto</i> sp.	7.6	13.8	-	1.3	-	<0.1
Hyperiididae	0.8	-	-	<0.1	-	<0.1
<i>Unciola</i> sp.	-	-	<0.1	-	-	-
<i>Rhachotropis oculata</i>	-	-	1.3	-	-	-
<i>Gammarus</i> sp.	-	1.1	-	-	-	-
<i>Monoculodes</i> sp.	-	-	12.1	-	-	-
<i>Leptocheirus pinguis</i>	-	-	<0.1	-	-	-
<i>Pontogeneia inermis</i>	-	-	0.6	-	-	-
Amphipoda unid.	-	0.3	65.3	-	-	-
Mysidacea	-	(19.0)	-	-	-	-
<i>Neomysis americana</i>	-	18.4	-	-	-	-
Mysidacea unid.	-	0.6	-	-	-	-
Euphausiacea	-	(5.9)	-	(70.9)	(99.9)	(7.1)
<i>Meganyctiphanes norvegica</i>	-	5.7	-	64.8	99.9	7.1
Euphausiacea unid.	-	0.2	-	6.1	-	<0.1
Decapoda	-	(0.7)	(0.3)	(<0.1)	-	(15.4)
<i>Dichelopandalus leptocerus</i>	-	0.7	-	-	-	-
<i>Crangon septemspinosa</i>	-	<0.1	0.3	-	-	-
Paguroidea	-	-	-	-	-	0.2
Decapoda larvae	-	-	-	<0.1	-	15.2
Crustacea unid.	(19.5)	(5.0)	(2.5)	(12.3)	-	(3.6)
THALIACEA	-	-	-	[0.4]	-	[5.2]
Salpidae	-	-	-	0.4	-	-
Thaliacea unid.	-	-	-	-	-	5.2
LARVACEA	-	-	-	[0.3]	-	-
OSTEICHTHYES	[1.9]	[2.0]	[0.4]	[0.1]	-	[7.3]
<i>Ammodytes dubius</i>	-	-	-	-	-	6.2
Osteichthyes unid.	1.9	2.0	0.4	0.1	-	1.1
ANIMAL REMAINS AND MISC.	[2.7]	[5.3]	[17.5]	[5.9]	[0.1]	[9.5]
Number sampled	10	26	10	126	5	64
Number empty	0	7	1	15	1	5
Mean stomach content (g)	0.431	1.317	0.238	0.749	2.059	0.417
Mean fish length (cm)	25	25	26	20	29	23

Table B-16. Diet composition and sampling data for Atlantic menhaden by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)			Total
	16-20	21-25	26-30	
FORAMINIFERA	[2.3]	-	-	[0.2]
CRUSTACEA	[14.4]	[57.5]	[19.5]	[49.8]
Copepoda	(12.5)	(45.2)	(19.5)	(39.6)
Calanoida	12.5	44.7	19.5	39.2
Copepoda unid.	-	0.5	-	0.4
Mysidacea	-	(12.0)	-	(9.7)
<i>Neomysis americana</i>	-	12.0	-	9.7
Decapoda	(1.9)	(0.3)	-	(0.5)
<i>Pagurus</i> sp.	-	<0.1	-	0.1
<i>Pagurus</i> larvae	1.5	-	-	0.1
Decapoda larvae	0.4	0.3	-	0.3
Crustacea larvae	-	(<0.1)	-	(<0.1)
ANIMAL REMAINS	[29.1]	[9.4]	[80.5]	[18.1]
SAND	[54.2]	[33.1]	-	[31.9]
Number sampled	11	15	6	32
Number empty	3	0	0	3
Mean stomach content (g)	0.024	0.151	0.045	0.087
Mean fish length (cm)	17	22	26	21

Table B-17a. Diet composition and sampling data for Atlantic herring by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)					Total
	11-15	16-20	21-25	26-30	31-35	
TREMATODA	-	-	[<0.1]	-	-	[<0.1]
CHAETOGNATHA	-	-	[15.1]	[4.0]	-	[7.5]
GASTROPODA	-	-	[<0.1]	-	-	[<0.1]
CRUSTACEA	[98.9]	[95.9]	[68.6]	[93.4]	[98.4]	[85.2]
Copepoda	(0.6)	-	(2.6)	(4.2)	(98.4)	(3.8)
<i>Calanus</i> sp.	-	-	-	<0.1	-	<0.1
Calanoida	0.6	-	1.1	0.1	16.1	0.5
Copepoda unid.	-	-	1.5	4.1	82.3	3.3
Cirripedia	-	-	(<0.1)	-	-	(<0.1)
Cumacea	-	-	(0.3)	-	-	(0.1)
Diastylidae	-	-	0.3	-	-	0.1
Amphipoda	(1.2)	(8.5)	(1.2)	(5.1)	-	(3.7)
<i>Parathemisto gaudichaudii</i>	-	-	0.4	4.8	-	3.0
<i>Parathemisto</i> sp.	-	0.1	0.8	0.3	-	0.4
Hyperiididae	1.2	8.4	<0.1	-	-	0.3
<i>Calliopius laeviusculus</i>	-	-	<0.1	<0.1	-	<0.1
Gammaridea	-	-	<0.1	-	-	<0.1
Mysidacea	-	-	(<0.1)	-	-	(<0.1)
<i>Erythrops erythrophthalma</i>	-	-	<0.1	-	-	<0.1
<i>Mysidopsis bigelowi</i>	-	-	<0.1	-	-	<0.1
Euphausiacea	(83.6)	(43.2)	(62.9)	(83.8)	-	(75.1)
<i>Euphausia</i> sp.	-	-	1.1	-	-	0.4
<i>Meganyctiphanes norvegica</i>	1.5	10.3	37.0	82.0	-	61.8
<i>Thysanoessa raschii</i>	81.9	-	10.4	1.8	-	7.0
Euphausiacea unid.	0.2	32.9	14.4	-	-	5.9
Decapoda	(0.3)	-	(<0.1)	(<0.1)	-	(<0.1)
Decapoda larvae	0.3	-	<0.1	<0.1	-	<0.1
Decapoda unid.	-	-	-	<0.1	-	<0.1
Crustacea larvae	-	-	(<0.1)	-	-	(<0.1)
Crustacea unid.	(13.2)	(44.2)	(1.6)	(0.3)	-	(2.5)
OSTEICHTHYES	-	-	-	[<0.1]	-	[<0.1]
<i>Pholis gunnellus</i>	-	-	-	<0.1	-	<0.1
ANIMAL REMAINS	[0.7]	[4.1]	[16.3]	[2.6]	[1.6]	[7.3]
ROCK	[0.4]	-	-	-	-	[<0.1]
Number sampled	21	18	51	45	4	139
Number empty	4	2	12	11	2	31
Mean stomach content (g)	0.101	0.126	0.472	0.946	0.076	0.513
Mean fish length (cm)	13	17	23	27	31	22

Table B-17b. Diet composition and sampling data for Atlantic herring by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area				
	Georges Bank	Gulf of Maine	Scotian Shelf	Offshore South of Cape Hatteras	Inshore North of Cape Hatteras
TREMATODA	[<0.1]	-	-	-	-
CHAETOGNATHA	[58.0]	-	-	-	-
GASTROPODA	-	[<0.1]	-	-	-
CRUSTACEA	[4.3]	[97.6]	[97.2]	-	[2.3]
Copepoda	(2.8)	(4.5)	(0.3)	-	(2.3)
<i>Calanus</i> sp.	-	<0.1	-	-	-
Calanoida	2.8	0.2	0.3	-	2.3
Copepoda unid.	-	4.3	-	-	-
Cirripedia	-	(<0.1)	-	-	-
Cumacea	-	(0.1)	-	-	-
Diastylidae	-	0.1	-	-	-
Amphipoda	(1.3)	(4.7)	(0.1)	-	-
<i>Parathemisto gaudichaudii</i>	1.1	3.7	0.1	-	-
<i>Parathemisto</i> sp.	-	0.6	-	-	-
Hyperiididae	<0.1	0.4	-	-	-
<i>Calliopius laeviusculus</i>	0.2	-	-	-	-
Gammaridea	-	<0.1	-	-	-
Mysidacea	(<0.1)	(<0.1)	-	-	-
<i>Erythrops erythrophthalma</i>	-	<0.1	-	-	-
<i>Mysidopsis bigelowi</i>	<0.1	-	-	-	-
Euphausiacea	(0.2)	(85.7)	(92.1)	-	-
<i>Euphausia</i> sp.	-	-	3.6	-	-
<i>Meganyctiphanes norvegica</i>	-	80.4	-	-	-
<i>Thysanoessa raschii</i>	0.2	4.6	34.8	-	-
Euphausiacea unid.	-	0.7	53.7	-	-
Decapoda	-	(<0.1)	-	-	-
Decapoda larvae	-	<0.1	-	-	-
Decapoda unid.	-	<0.1	-	-	-
Crustacea larvae	(<0.1)	-	-	-	-
Crustacea unid.	(<0.1)	(2.6)	(4.7)	-	-
OSTEICHTHYES	-	[<0.1]	-	-	-
<i>Pholis gunnellus</i>	-	<0.1	-	-	-
ANIMAL REMAINS	[37.7]	[2.4]	[2.8]	[100.0]	[97.7]
ROCK	-	[<0.1]	-	-	-
Number sampled	10	91	22	6	10
Number empty	0	19	2	3	8
Mean stomach content (g)	0.923	0.603	0.326	0.001	0.009
Mean fish length (cm)	24	23	19	15	27

Table B-18. Diet composition and sampling data for round herring by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)			Total
	6-10	11-15	16-20	
GASTROPODA	-	[<0.1]	-	[<0.1]
CRUSTACEA	[80.6]	[65.0]	[57.7]	[62.6]
Copepoda	(26.4)	(41.7)	(1.6)	(27.7)
<i>Candacia armata</i>	-	0.3	-	0.2
Calanoida	26.4	10.4	-	6.9
Copepoda unid.	-	31.0	1.6	20.6
Cirripedia larvae (cypris)	-	(<0.1)	-	(<0.1)
Stomatopoda	-	(0.5)	-	(0.4)
Amphipoda	-	(0.6)	(2.7)	(1.3)
Hyperiididae	-	<0.1	-	<0.1
<i>Ampelisca</i> sp.	-	-	0.1	<0.1
<i>Byblis serrata</i>	-	<0.1	0.2	0.1
<i>Gammarus lawrencianus</i>	-	0.6	2.4	1.2
Mysidacea	-	(3.7)	(15.6)	(7.8)
<i>Neomysis americana</i>	-	3.7	15.6	7.8
Mysidacea	-	<0.1	-	<0.1
Decapoda	-	(16.2)	(31.0)	(21.3)
<i>Lucifer faxoni</i>	-	0.2	0.1	0.2
Decapoda larvae	-	16.0	29.4	20.6
Shrimp	-	<0.1	-	<0.1
Decapoda unid.	-	-	1.5	0.5
Crustacea larvae	-	(0.2)	(4.4)	(1.6)
Crustacea unid.	(54.2)	(2.1)	(2.4)	(2.5)
OSTEICHTHYES	-	[27.9]	[42.3]	[32.8]
Pleuronectiformes	-	0.8	-	0.5
Osteichthyes larvae	-	11.8	-	7.7
Osteichthyes unid.	-	15.3	42.3	24.6
ANIMAL REMAINS	[19.4]	[7.1]	-	[4.6]
Number sampled	12	81	5	98
Number empty	1	14	0	15
Mean stomach content (g)	0.006	0.113	0.978	0.144
Mean fish length (cm)	9	11	17	11

Table B-19. Diet composition and sampling data for Atlantic argentine by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)						Total
	16-20	21-25	26-30	31-35	36-40	41-45	
HYDROZOA	-	-	-	[3.5]	[2.7]	-	[1.2]
Siphonophora	-	-	-	3.5	2.7	-	1.2
CTENOPHORA	-	[9.2]	[0.9]	-	-	-	[1.8]
TREMATODA	-	-	[<0.1]	-	-	-	[<0.1]
NEMATODA	-	[<0.1]	[<0.1]	[<0.1]	-	-	[<0.1]
CHAETOGNATHA	-	[7.3]	[0.6]	-	-	-	[1.4]
CEPHALOPODA	-	-	-	[1.4]	-	-	[0.5]
POLYCHAETA	[52.8]	-	[0.1]	-	-	-	[1.0]
<i>Trochochaeta</i> sp.	-	-	0.1	-	-	-	0.1
Polychaeta unid.	52.8	-	-	-	-	-	0.9
CRUSTACEA	[40.5]	[9.0]	[86.3]	[79.9]	[85.0]	[100.0]	[72.4]
Copepoda	-	-	-	(1.1)	(37.2)	-	(0.9)
Isopoda	-	-	(0.2)	-	-	-	(0.1)
Amphipoda	-	(2.3)	(2.3)	(0.5)	-	-	(1.8)
<i>Hyperia glaba</i>	-	0.2	0.8	-	-	-	0.4
<i>Hyperia</i> sp.	-	-	-	0.4	-	-	0.1
<i>Parathemisto gaudichaudii</i>	-	-	0.4	-	-	-	0.2
<i>Parathemisto</i> sp.	-	1.3	0.4	0.1	-	-	0.5
Hyperiididae	-	0.1	0.7	<0.1	-	-	0.4
Gammaridea	-	0.4	-	-	-	-	0.1
Amphipoda unid.	-	0.3	-	-	-	-	0.1
Euphausacea	(40.5)	(4.8)	(77.9)	(76.5)	(47.8)	(100.0)	(65.8)
<i>Meganyctiphanes norvegica</i>	40.5	4.8	77.9	75.6	47.8	100.0	65.5
Euphausacea unid.	-	-	-	0.9	-	-	0.3
Decapoda	-	(0.4)	(2.6)	(0.7)	-	-	(1.6)
Shrimp unid.	-	-	2.6	-	-	-	1.3
Decapoda larvae	-	0.4	<0.1	-	-	-	0.1
Decapoda unid.	-	-	-	0.7	-	-	0.2
Crustacea unid.	-	(1.5)	(3.3)	(1.1)	-	-	(2.2)
THALIACEA	-	-	-	[2.6]	-	-	[0.8]
Salpidae	-	-	-	2.6	-	-	0.8
OSTEICHTHYES	-	[41.2]	[4.8]	[5.6]	-	-	[10.3]
<i>Maurolicus muelleri</i>	-	-	-	4.2	-	-	1.4
Osteichthyes unid.	-	41.2	4.8	1.4	-	-	8.9
ANIMAL REMAINS	-	[33.3]	[7.3]	[7.0]	[12.3]	-	[10.5]
ROCK	[6.7]	-	-	-	-	-	[0.1]
Number sampled	4	24	54	69	27	6	184
Number empty	2	6	24	49	22	5	108
Mean stomach content (g)	0.126	0.178	0.266	0.137	0.015	0.027	0.158
Mean fish length (cm)	18	23	28	33	38	41	31

Table B-20. Diet composition and sampling data for cusk by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)						Total
	<51	51-60	61-70	71-80	81-90	91-100	
TREMATODA	-	-	[<0.1]	[<0.1]	-	-	[<0.1]
MOLLUSCA	-	-	[0.1]	[1.0]	-	-	[0.1]
Cephalopoda	-	-	-	1.0	-	-	0.1
Mollusca unid.	-	-	0.1	-	-	-	<0.1
ANNELIDA	[14.9]	-	[<0.1]	-	-	-	[2.2]
Onuphidae	0.3	-	-	-	-	-	<0.1
Polychaeta	-	-	<0.1	-	-	-	<0.1
Annelida unid.	14.6	-	-	-	-	-	2.2
CRUSTACEA	[85.1]	[100.0]	[3.9]	[46.1]	[40.7]	[89.4]	[51.4]
Isopoda	-	-	-	-	(6.1)	-	(0.4)
<i>Cirolana</i> sp.	-	-	-	-	6.1	-	0.4
Amphipoda	(2.1)	-	-	-	-	-	(0.3)
Caprellidae	2.0	-	-	-	-	-	0.3
Gammaridea	0.1	-	-	-	-	-	<0.1
Euphausiacea	(1.9)	(100.0)	(0.9)	(9.4)	-	-	(1.8)
<i>Meganyctiphanes norvegica</i>	1.9	-	-	9.4	-	-	1.0
Euphausiacea unid.	-	100.0	0.9	-	-	-	0.8
Decapoda	(77.1)	-	(3.0)	(36.7)	(27.0)	(89.4)	(47.7)
<i>Spirontocaris liljeborgii</i>	-	-	3.0	-	-	-	1.1
Hippolytidae	-	-	-	36.7	-	-	2.7
<i>Dichelopandalus leptocerus</i>	-	-	-	-	-	25.2	8.6
Pandalidae	-	-	-	-	27.0	-	1.9
<i>Crangon septemspinosa</i>	31.9	-	-	-	-	-	4.8
Paguridae	45.2	-	-	-	-	-	6.8
Majidae	-	-	-	-	-	64.2	21.8
Crustacea unid.	(4.0)	-	-	-	(7.6)	-	(1.2)
ECHINODERMATA	-	-	[37.5]	-	[20.1]	-	[15.0]
<i>Ophiura sarsi</i>	-	-	37.5	-	-	-	13.6
<i>Ophiura</i> sp.	-	-	-	-	20.1	-	1.4
OSTEICHTHYES	[<0.1]	-	[42.6]	[<0.1]	-	-	[15.5]
<i>Artediellus uncinatus</i>	-	-	26.7	-	-	-	9.7
Osteichthyes scales	<0.1	-	-	<0.1	-	-	<0.1
Osteichthyes unid.	-	-	15.9	-	-	-	5.8
ANIMAL REMAINS	-	-	[8.2]	[25.8]	[39.2]	[10.6]	[11.0]
ROCK	-	-	[7.7]	[27.1]	-	-	[4.8]
Number sampled	9	6	9	8	11	6	49
Number empty	5	5	4	5	5	3	27
Mean stomach content (g)	0.385	0.016	0.925	0.210	0.148	1.307	0.470
Mean fish length (cm)	43	58	63	72	85	96	69

Table B-21a. Diet composition and sampling data for Atlantic cod by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)									Total
	1-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	>80	
CNIDARIA	-	-	-	[2.4]	[<0.1]	[1.7]	[0.2]	[0.3]	-	[0.2]
MOLLUSCA	-	[18.4]	[<0.1]	[2.8]	[5.6]	[9.5]	[23.3]	[40.2]	[10.7]	[14.9]
Pectinidae	-	(17.9)	-	-	(1.1)	(<0.1)	(0.5)	(3.2)	-	(0.6)
Cephalopoda	-	-	-	-	-	(4.6)	(19.7)	(32.7)	(9.8)	(12.5)
<i>Illex illecebrosus</i>	-	-	-	-	-	-	7.1	14.5	8.8	2.4
<i>Loligo</i> sp.	-	-	-	-	-	-	-	11.1	0.9	1.9
Cephalopoda unid.	-	-	-	-	-	4.6	12.6	7.1	0.1	8.2
Mollusca unid.	-	(0.5)	(<0.1)	(2.8)	(4.5)	(4.9)	(3.1)	(4.3)	(0.9)	(1.8)
POLYCHAETA	[0.5]	[0.7]	[10.4]	[2.4]	[2.7]	[0.8]	[1.3]	[0.3]	[2.3]	[2.5]
CRUSTACEA	[92.9]	[80.6]	[43.2]	[45.1]	[49.3]	[41.8]	[30.3]	[35.2]	[12.8]	[21.1]
Amphipoda	(6.4)	(26.2)	(20.6)	(4.8)	(3.3)	(2.7)	(1.5)	(1.0)	(0.4)	(1.2)
<i>Aeginina longicornis</i>	-	-	5.3	0.1	-	<0.1	<0.1	-	-	0.1
<i>Unciola irrorata</i>	-	8.0	3.9	1.1	0.9	<0.1	<0.1	0.7	<0.1	0.2
<i>Leptocheirus pinguis</i>	0.3	15.4	5.4	1.2	1.1	0.2	<0.1	<0.1	-	0.1
Amphipoda unid.	6.1	2.8	6.0	2.4	1.3	2.5	1.5	0.3	0.4	0.8
Mysidacea	(79.6)	-	(0.6)	-	(<0.1)	(<0.1)	-	-	-	(0.1)
Euphausiacea	(0.4)	(4.3)	(<0.1)	(2.4)	(6.3)	(6.4)	(2.1)	(<0.1)	(<0.1)	(0.9)
<i>Meganyctiphanes norvegica</i>	0.4	4.3	<0.1	2.4	6.3	6.4	2.1	<0.1	<0.1	0.9
Decapoda	(2.7)	(34.5)	(19.4)	(34.3)	(32.9)	(30.2)	(23.8)	(32.2)	(12.2)	(17.8)
<i>Dichelopandalus leptocerus</i>	0.6	-	1.2	1.8	4.8	0.7	0.4	0.7	0.2	0.5
<i>Pandalus borealis</i>	-	-	-	0.3	1.3	2.1	2.9	0.6	<0.1	0.5
<i>Crangon septemspinosa</i>	0.1	7.3	10.6	6.0	1.0	0.6	0.1	<0.1	<0.1	0.3
<i>Pagurus</i> spp.	-	-	0.6	2.9	2.8	2.8	2.3	1.2	0.2	0.8
<i>Hyas</i> spp.	-	25.1	2.8	2.8	6.1	2.8	3.1	6.1	0.2	1.6
<i>Cancer borealis</i>	-	-	-	1.3	3.6	8.4	5.1	6.9	3.5	4.3
<i>Cancer irroratus</i>	-	-	2.0	7.2	9.2	9.2	7.0	6.7	5.6	6.2
Decapoda unid.	2.0	2.1	2.2	12.0	4.1	3.6	2.9	10.0	2.5	3.6
Crustacea unid.	(3.8)	(15.6)	(2.6)	(3.6)	(6.8)	(2.5)	(2.9)	(2.0)	(0.2)	(1.1)
ECHINODERMATA	-	-	[1.9]	[0.6]	[5.5]	[4.4]	[1.7]	[2.2]	[0.3]	[1.1]
CHORDATA	-	-	[40.2]	[39.3]	[24.8]	[36.4]	[38.8]	[20.1]	[70.3]	[56.8]
<i>Squalus acanthias</i>	-	-	-	-	-	-	-	-	6.9	4.6
Clupeidae	-	-	-	-	-	-	4.4	9.7	6.5	5.9
<i>Gadus morhua</i>	-	-	-	-	-	-	-	-	6.2	4.1
<i>Merluccius bilinearis</i>	-	-	-	17.2	-	4.1	-	-	6.2	4.7
Gadidae	-	-	-	-	0.8	15.0	0.3	-	-	1.2
<i>Ammodytes dubius</i>	-	-	-	10.8	11.1	7.2	16.9	4.4	13.0	11.5
<i>Macrozoarces americanus</i>	-	-	-	-	-	-	-	-	3.9	2.6
<i>Scophthalmus aquosus</i>	-	-	-	-	-	-	3.7	1.0	2.4	2.0
<i>Pleuronectes ferruginus</i>	-	-	0.4	-	-	-	-	-	-	<0.1
<i>Pleuronectes americanus</i>	-	-	-	0.2	-	-	-	-	1.7	1.1
Fish eggs and larvae	-	-	<0.1	<0.1	0.8	<0.1	-	-	0.2	0.2
Chordata unid.	-	-	39.8	11.1	12.1	10.1	13.5	5.0	23.3	18.9
ANIMAL REMAINS AND MISC.	[6.6]	[0.3]	[4.3]	[7.4]	[12.1]	[5.4]	[4.4]	[1.7]	[3.6]	[3.4]
Number sampled	134	14	81	73	78	109	86	52	91	718
Number empty	8	1	4	1	2	5	4	4	4	33
Mean stomach content (g)	0.096	0.781	2.406	3.302	5.888	12.096	15.733	39.021	120.157	23.056
Mean fish length (cm)	5	18	25	35	45	55	65	75	95	46

Table B-21b. Diet composition and sampling data for Atlantic cod by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area					Inshore North of Cape Hatteras
	Middle Atlantic	Southern New England	Georges Bank	Gulf of Maine	Scotian Shelf	
CNIDARIA	-	<[0.1]	[1.1]	-	-	[0.2]
MOLLUSCA	-	[0.2]	[11.0]	[43.6]	-	[3.7]
Pectinidae	-	<(0.1)	(3.7)	-	-	(0.5)
Cephalopoda	-	<(0.1)	(1.6)	(43.6)	-	<(0.1)
<i>Illex</i> sp.	-	-	-	29.2	-	-
<i>Loligo</i> sp.	-	-	-	6.9	-	-
Cephalopoda unid.	-	<0.1	1.6	7.5	-	<0.1
Mollusca unid.	-	(0.2)	(5.7)	<(0.1)	-	(3.2)
POLYCHAETA	[1.1]	[5.4]	[2.4]	[0.1]	<[0.1]	[1.9]
CRUSTACEA	[24.3]	[19.2]	[39.5]	[9.3]	[31.1]	[24.7]
Amphipoda	<(0.1)	(0.5)	(2.3)	(0.5)	<(0.1)	(1.6)
<i>Unciola irrorata</i>	-	0.4	0.1	0.2	-	<0.1
<i>Leptocheirus pinguis</i>	-	<0.1	<0.1	0.3	-	0.1
Amphipoda unid.	<0.1	0.1	2.2	<0.1	<0.1	1.5
Mysidacea	-	(0.2)	<(0.1)	-	-	<(0.1)
Euphausiacea	-	<(0.1)	<(0.1)	(3.1)	(2.2)	(0.2)
<i>Meganyctiphanes norvegica</i>	-	<0.1	<0.1	3.1	2.2	0.2
Decapoda	(24.3)	(17.9)	(34.1)	(5.5)	(10.0)	(21.6)
<i>Dichelopandalus leptocerus</i>	-	0.3	2.3	<0.1	1.6	0.3
<i>Pandalus borealis</i>	-	-	-	1.2	3.1	0.7
<i>Crangon septemspinosa</i>	-	0.2	0.1	<0.1	-	0.9
<i>Pagurus</i> spp.	-	0.5	3.1	<0.1	-	0.2
<i>Hyas</i> spp.	-	<0.1	8.2	<0.1	-	1.7
<i>Cancer borealis</i>	-	9.6	2.8	-	-	4.0
<i>Cancer irroratus</i>	17.4	5.5	14.7	<0.1	-	9.0
Decapoda unid.	6.9	1.8	2.9	4.3	5.3	4.8
Crustacea unid.	<(0.1)	(0.6)	(3.1)	(0.2)	(18.9)	(1.3)
ECHINODERMATA	-	[0.5]	[1.5]	[0.4]	[49.7]	[2.0]
CHORDATA	[74.2]	[71.9]	[40.3]	[43.8]	[4.0]	[61.4]
<i>Squalus acanthias</i>	-	15.8	-	-	-	-
Clupeidae	-	-	-	15.3	-	5.4
<i>Gadus morhua</i>	-	14.1	-	-	-	-
<i>Merluccius bilinearis</i>	-	-	-	16.8	-	-
Gadidae	-	-	0.2	-	-	4.2
<i>Ammodytes dubius</i>	-	17.8	7.4	-	-	18.4
<i>Macrozoarces americanus</i>	-	7.1	-	-	-	1.7
<i>Scophthalmus aquosus</i>	-	1.5	-	-	-	5.4
<i>Pleuronectes ferruginus</i>	-	-	-	-	-	<0.1
<i>Pleuronectes americanus</i>	-	-	-	-	-	3.9
Fish eggs and larvae	-	-	<0.1	0.5	-	<0.1
Chordata unid.	74.2	15.6	32.7	11.2	4.0	22.4
ANIMAL REMAINS AND MISC.	[0.4]	[2.8]	[4.2]	[2.8]	[15.2]	[6.1]
Number sampled	6	142	179	130	12	250
Number empty	1	5	7	10	0	11
Mean stomach content (g)	15.969	33.870	11.999	35.706	1.767	19.350
Mean fish length (cm)	21	45	40	59	26	46

Table B-22a. Diet composition and sampling data for haddock by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)									Total
	1-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	
CNIDARIA	[2.9]	-	[<0.1]	[<0.1]	-	[0.2]	[<0.1]	-	-	[0.7]
MOLLUSCA	-	[3.4]	[0.7]	[8.1]	[4.4]	[5.9]	[1.5]	[5.0]	[<0.1]	[4.3]
Gastropoda	-	-	-	(2.7)	(0.4)	(<0.1)	-	-	-	(0.4)
Bivalvia	-	(3.1)	(0.7)	(5.3)	(2.4)	(4.6)	(1.0)	(0.3)	(<0.1)	(2.4)
Cephalopoda	-	-	-	(<0.1)	(1.5)	(0.3)	-	(4.7)	-	(1.1)
Mollusca unid.	-	(0.3)	-	(0.1)	(0.1)	(1.0)	(0.5)	(<0.1)	-	(0.4)
POLYCHAETA	[0.9]	[20.2]	[7.1]	[14.1]	[17.0]	[24.5]	[4.7]	[8.0]	[<0.1]	[14.1]
Nephtyidae	-	2.7	<0.1	<0.1	2.1	0.3	0.4	0.6	<0.1	0.6
Spionidae	-	0.5	0.3	1.4	1.2	2.0	<0.1	0.3	-	0.8
Polychaeta unid.	0.9	17.0	6.8	12.7	13.7	22.2	4.3	7.1	<0.1	12.7
CRUSTACEA	[56.3]	[47.1]	[11.3]	[31.4]	[27.4]	[14.3]	[13.7]	[3.0]	[61.3]	[18.3]
Cumacea	(4.0)	(3.2)	(0.4)	(0.2)	(<0.1)	(<0.1)	-	(<0.1)	-	(0.1)
Amphipoda	(31.6)	(16.9)	(6.0)	(17.6)	(8.8)	(9.6)	(6.0)	(0.4)	(<0.1)	(6.7)
<i>Parathemisto</i> sp.	2.3	0.4	<0.1	<0.1	0.3	2.2	2.8	<0.1	<0.1	1.4
Hyperiididae	6.0	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1
<i>Erichthonius rubricornis</i>	14.3	0.2	0.3	0.2	<0.1	<0.1	<0.1	-	-	<0.1
<i>Unciola irrorata</i>	0.3	5.5	2.0	8.9	3.1	3.3	1.4	0.4	-	2.2
<i>Leptocheirus pinguis</i>	-	5.2	1.2	0.6	0.4	2.3	0.5	<0.1	-	1.0
Amphipoda unid.	8.7	5.6	2.5	7.9	5.0	1.8	1.3	<0.1	<0.1	2.1
Mysidacea	-	(14.7)	-	-	-	-	-	-	-	(0.1)
Euphausacea	-	-	(0.6)	(6.3)	(13.4)	(0.8)	(6.1)	(0.1)	(61.3)	(8.0)
<i>Meganyctiphanes norvegica</i>	-	-	0.6	6.3	13.4	0.8	6.1	0.1	61.3	8.0
Decapoda	(0.9)	(4.2)	(3.4)	(6.4)	(3.7)	(3.6)	(1.4)	(2.1)	-	(2.9)
<i>Dichelopandalus leptocerus</i>	-	0.5	2.5	0.5	0.7	0.3	<0.1	-	-	0.3
<i>Crangon septemspinosa</i>	-	2.3	0.9	0.9	0.6	<0.1	-	<0.1	-	0.2
Decapoda unid.	0.9	1.4	<0.1	5.0	2.4	3.3	1.4	2.1	-	2.4
Crustacea unid.	(19.8)	(8.1)	(0.9)	(0.9)	(1.5)	(0.3)	(0.2)	(0.4)	-	(0.5)
ECHINODERMATA	-	[0.7]	[4.4]	[18.4]	[28.5]	[32.5]	[57.4]	[71.5]	[34.2]	[43.7]
Crinoidea	-	-	-	-	(2.3)	-	(3.1)	-	-	(1.0)
Holothuroidea	-	-	-	-	(0.7)	(1.0)	(2.4)	(0.6)	-	(1.1)
Echinoidea	-	(0.4)	(<0.1)	(2.7)	(1.0)	(2.0)	(1.2)	(2.6)	-	(1.5)
Ophiuroidea	-	(0.1)	(2.6)	(12.5)	(22.0)	(26.8)	(47.1)	(65.4)	(33.7)	(37.3)
<i>Amphiura</i> sp.	-	-	-	-	-	1.8	-	10.0	-	2.4
<i>Ophiopholis aculeata</i>	-	-	<0.1	5.9	6.9	6.5	19.5	2.5	-	8.3
<i>Ophiura sarsi</i>	-	-	1.0	3.5	8.8	8.5	14.5	27.0	33.4	14.7
<i>Ophiura</i> sp.	-	-	0.5	0.4	0.1	1.3	4.2	16.1	-	4.4
Ophiuroidea unid.	-	0.1	1.1	2.7	6.2	8.7	8.9	9.8	0.3	7.5
Echinodermata unid.	-	(0.2)	(1.8)	(3.2)	(2.5)	(2.7)	(3.6)	(2.9)	(0.5)	(2.8)
OSTEICHTHYES	-	[0.6]	[68.3]	[<0.1]	[<0.1]	[<0.1]	[<0.1]	[<0.1]	-	[3.0]
<i>Ammodytes dubius</i>	-	-	61.6	-	-	-	-	-	-	2.6
Osteichthyes unid.	-	0.6	6.7	<0.1	<0.1	<0.1	<0.1	<0.1	-	0.4
ANIMAL REMAINS AND MISC.	[27.3]	[26.5]	[7.3]	[21.9]	[17.9]	[16.9]	[20.8]	[11.7]	[4.4]	[12.8]
SAND AND ROCK	[12.6]	[1.5]	[0.9]	[6.1]	[4.8]	[5.7]	[1.9]	[0.8]	[0.1]	[3.1]
Number sampled	11	124	77	117	157	251	144	60	9	950
Number empty	0	5	0	5	4	5	3	0	0	22
Mean stomach content (g)	0.032	0.128	2.023	1.473	2.254	4.382	6.582	11.203	30.498	3.887
Mean fish length (cm)	9	16	25	36	45	55	64	75	83	46

Table B-22b. Diet composition and sampling data for haddock by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area					
	Middle Atlantic	Southern New England	Georges Bank	Gulf of Maine	Scotian Shelf	Inshore North of Cape Hatteras
CNIDARIA	-	-	[<0.1]	[0.8]	[0.7]	[0.3]
MOLLUSCA	-	[0.2]	[1.5]	[3.3]	[15.3]	[3.8]
Gastropoda	-	-	(<0.1)	(0.2)	(2.7)	(0.3)
Bivalvia	-	(0.2)	(1.3)	(1.5)	(10.0)	(3.2)
Cephalopoda	-	-	-	(1.3)	(1.9)	-
Mollusca unid.	-	-	(0.2)	(0.3)	(0.7)	(0.3)
POLYCHAETA	-	[47.1]	[18.6]	[7.8]	[29.4]	[42.2]
Nephtyidae	-	0.4	0.1	0.2	0.2	7.5
Spionidae	-	-	4.7	<0.1	0.9	0.7
Polychaeta unid.	-	46.7	13.8	7.6	28.3	34.0
CRUSTACEA	[100.0]	[14.2]	[22.3]	[16.6]	[12.7]	[20.6]
Cumacea	-	(0.1)	(<0.1)	(<0.1)	(0.3)	(0.8)
Amphipoda	(100.0)	(5.6)	(19.0)	(3.9)	(3.5)	(8.5)
<i>Parathemisto</i> sp.	27.8	-	-	1.9	0.7	<0.1
<i>Erichthonius rubricornis</i>	-	<0.1	<0.1	<0.1	<0.1	0.4
<i>Unciola irrorata</i>	-	1.4	11.9	0.1	1.7	3.8
<i>Leptocheirus pinguis</i>	-	<0.1	1.6	0.9	<0.1	0.9
Amphipoda unid.	72.2	4.2	5.5	1.0	1.1	3.4
Mysidacea	-	(<0.1)	(0.4)	(<0.1)	(<0.1)	(<0.1)
Euphausacea	-	-	-	(10.8)	(0.5)	-
<i>Meganctiphanes norvegica</i>	-	-	-	10.8	0.5	-
Decapoda	-	(8.1)	(2.2)	(1.7)	(7.0)	(8.9)
<i>Dichelopandalus leptocerus</i>	-	-	0.4	0.3	0.3	-
<i>Crangon septemspinosa</i>	-	0.8	0.7	<0.1	0.3	0.9
Decapoda unid.	-	7.3	1.1	1.4	6.4	8.0
Crustacea unid.	-	(0.4)	(0.7)	(0.2)	(1.4)	(2.4)
ECHINODERMATA	-	[13.3]	[31.0]	[50.1]	[17.7]	[17.1]
Crinoidea	-	-	-	(1.4)	-	-
Holothuroidea	-	-	(<0.1)	(1.3)	(1.3)	-
Echinoidea	-	-	(0.6)	(1.3)	(5.7)	(0.5)
Ophiuroidea	-	-	(30.2)	(42.6)	(7.9)	(10.4)
<i>Amphiura</i> sp.	-	-	-	3.2	-	-
<i>Ophiopholis aculeata</i>	-	-	4.3	10.0	3.8	2.4
<i>Ophiura sarsi</i>	-	-	<0.1	19.6	1.2	8.0
<i>Ophiura</i> sp.	-	-	25.9	0.3	<0.1	-
Ophiuroidea unid.	-	-	<0.1	9.5	2.9	<0.1
Echinodermata unid.	-	(13.3)	(0.2)	(3.5)	(2.8)	(6.2)
OSTEICHTHYES	-	[<0.1]	[<0.1]	[3.9]	[<0.1]	-
<i>Ammodytes dubius</i>	-	-	-	3.5	-	-
Osteichthyes unid.	-	<0.1	<0.1	0.4	<0.1	-
ANIMAL REMAINS AND MISC.	-	[17.9]	[14.6]	[16.5]	[18.2]	[14.3]
SAND AND ROCK	-	[7.3]	[12.0]	[1.0]	[6.0]	[1.7]
Number sampled	1	12	139	578	157	63
Number empty	0	2	2	15	3	0
Mean stomach content (g)	0.018	1.681	4.222	4.699	1.728	1.559
Mean fish length (cm)	10	54	44	51	34	30

Table B-23a. Diet composition and sampling data for silver hake by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)									Total
	<10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	>45	
CEPHALOPODA	-	-	-	-	[3.4]	-	[0.1]	[2.1]	[14.4]	[7.7]
<i>Loligo</i> sp.	-	-	-	-	-	-	-	1.6	13.1	6.8
Cephalopoda unid.	-	-	-	-	3.4	-	0.1	0.5	1.3	0.9
CRUSTACEA	[95.2]	[92.2]	[96.5]	[63.2]	[66.3]	[66.6]	[57.8]	[26.0]	[4.8]	[28.6]
Cumacea	(1.6)	(0.8)	(0.1)	(<0.1)	(<0.1)	(<0.1)	(<0.1)	(<0.1)	-	(<0.1)
Amphipoda	(5.9)	(9.0)	(8.2)	(0.6)	(1.9)	(2.2)	(0.4)	(0.4)	(<0.1)	(0.7)
<i>Parathemisto gaudichaudii</i>	2.4	5.3	5.1	<0.1	0.5	<0.1	<0.1	-	-	0.1
<i>Parathemisto</i> spp.	2.7	1.5	1.6	0.4	0.7	0.2	<0.1	<0.1	<0.1	0.1
<i>Gammarus annulatus</i>	-	<0.1	-	-	-	1.0	0.4	0.4	<0.1	0.2
Amphipoda unid.	0.8	2.2	1.5	0.2	0.7	1.0	<0.1	<0.1	<0.1	0.3
Mysidacea	(9.9)	(4.0)	(2.0)	(0.3)	(0.9)	(1.4)	(<0.1)	(<0.1)	(<0.1)	(0.2)
<i>Mysis mixta</i>	5.3	0.8	1.2	<0.1	-	<0.1	-	-	-	<0.1
<i>Neomysis americana</i>	3.7	2.7	0.7	<0.1	0.9	1.4	<0.1	<0.1	<0.1	0.2
Mysidacea unid.	0.9	0.5	0.1	0.3	<0.1	<0.1	<0.1	-	-	<0.1
Euphausiacea	(66.9)	(60.2)	(67.9)	(39.0)	(48.2)	(51.8)	(46.0)	(20.8)	(3.7)	(21.9)
<i>Meganyciphanes norvegica</i>	45.2	45.0	61.9	37.5	44.5	51.7	44.3	20.8	3.7	21.2
<i>Nyctiphanes couchii</i>	1.6	-	-	-	-	-	1.5	-	-	0.2
<i>Thysanoessa inermis</i>	2.4	-	0.7	-	-	-	-	-	-	<0.1
<i>Thysanoessa raschii</i>	9.4	0.9	0.4	-	-	-	-	-	-	<0.1
Euphausiacea unid.	8.3	14.3	4.9	1.5	3.7	0.1	0.2	-	-	0.5
Decapoda	(4.9)	(9.0)	(15.3)	(20.3)	(13.4)	(10.0)	(11.0)	(4.5)	(0.9)	(5.2)
<i>Pasiphaea multidentata</i>	-	-	-	-	1.2	1.3	3.8	-	-	0.7
Penaeidae	-	-	-	1.7	-	-	-	-	-	<0.1
<i>Dichelopandalus leptocerus</i>	-	2.2	13.5	11.0	4.1	2.5	3.8	1.4	<0.1	1.7
<i>Pandalus borealis</i>	-	-	0.1	1.2	1.1	2.9	<0.1	0.3	0.2	0.5
<i>Pandalus montagui</i>	-	-	-	2.8	0.7	<0.1	0.6	0.8	-	0.3
Pandalidae	<0.1	1.2	1.3	0.9	0.8	0.3	<0.1	1.2	-	0.3
<i>Crangon septemspinosa</i>	4.6	4.1	0.3	1.9	2.8	2.0	2.6	0.8	0.8	1.4
Decapoda unid.	0.3	1.5	0.1	0.8	2.7	1.0	0.2	<0.1	-	0.3
Crustacea unid.	(6.0)	(9.2)	(3.0)	(3.0)	(1.9)	(1.2)	(0.4)	(0.3)	(0.2)	(0.6)
OSTEICHTHYES	[2.5]	[6.1]	[2.6]	[35.8]	[29.6]	[32.4]	[41.6]	[70.9]	[80.6]	[63.0]
<i>Clupea harengus</i>	-	-	-	-	-	11.1	-	12.6	3.2	4.7
<i>Etrumeus teres</i>	-	-	-	6.4	-	-	-	-	-	0.2
Clupeidae	-	-	-	-	4.0	-	-	7.9	20.1	11.5
<i>Anchoa hepsetus</i>	-	-	-	-	-	-	-	-	0.3	0.1
<i>Merluccius bilinearis</i>	-	-	0.3	0.9	5.8	2.1	3.1	9.4	10.2	7.5
<i>Urophycis</i> sp.	-	-	-	-	-	-	0.5	-	<0.1	0.1
<i>Ammodytes dubius</i>	-	0.7	-	24.5	18.6	4.3	11.8	22.7	7.0	10.5
<i>Scomber scombrus</i>	-	-	-	-	-	-	5.0	-	-	0.7
Bothidae	-	-	-	-	-	-	3.4	-	-	0.5
Osteichthyes eggs	-	-	-	-	<0.1	-	-	-	-	<0.1
Osteichthyes unid.	2.5	5.4	2.3	4.0	1.2	14.9	17.8	18.3	39.8	27.2
ANIMAL REMAINS AND MISC.	[2.3]	[1.7]	[0.9]	[1.0]	[0.7]	[1.0]	[0.5]	[1.0]	[0.2]	[0.7]
Number sampled	196	425	280	266	323	373	253	72	75	2263
Number empty	29	87	68	95	107	133	83	20	20	642
Mean stomach content (g)	0.045	0.109	0.251	0.495	0.819	1.574	3.048	11.004	36.325	2.385
Mean fish length (cm)	6	13	17	23	28	33	37	42	52	24

Table B-23b. Diet composition and sampling data for silver hake by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area					
	Middle Atlantic	Southern New England	Georges Bank	Gulf of Maine	Scotian Shelf	Inshore North of Cape Hatteras
CEPHALOPODA	[17.0]	[3.2]	-	-	[3.5]	[32.7]
<i>Loligo</i> sp.	-	2.4	-	-	3.3	29.7
Cephalopoda unid.	17.0	0.8	-	-	0.2	3.0
CRUSTACEA	[8.2]	[6.8]	[37.3]	[48.7]	[10.3]	[15.2]
Cumacea	(<0.1)	(<0.1)	(<0.1)	(<0.1)	(<0.1)	(<0.1)
Amphipoda	(0.9)	(1.3)	(0.8)	(0.5)	(0.1)	(1.1)
<i>Parathemisto gaudichaudii</i>	<0.1	<0.1	-	0.3	<0.1	-
<i>Parathemisto</i> spp.	<0.1	-	-	<0.1	<0.1	-
<i>Gammarus annulatus</i>	-	0.7	-	-	-	0.8
Amphipoda unid.	0.9	0.6	0.8	0.2	0.1	0.3
Mysidacea	(<0.1)	(0.5)	(<0.1)	(<0.1)	(<0.1)	(0.9)
<i>Mysis mixta</i>	-	-	-	<0.1	-	<0.1
<i>Neomysis americana</i>	<0.1	0.5	-	<0.1	<0.1	0.9
Mysidacea unid.	-	<0.1	<0.1	<0.1	<0.1	<0.1
Euphausiacea	(4.4)	(0.1)	(30.3)	(40.7)	(8.1)	(6.7)
<i>Meganyctiphanes norvegica</i>	0.8	0.1	30.1	39.5	7.7	6.7
<i>Nyctiphanes couchii</i>	-	-	-	0.5	-	-
<i>Thysanoessa inermis</i>	-	-	<0.1	<0.1	-	-
Euphausiacea unid.	3.6	<0.1	0.2	0.7	0.4	<0.1
Decapoda	(2.8)	(4.5)	(5.6)	(6.8)	(1.9)	(5.5)
<i>Pasiphaea multidentata</i>	0.3	-	-	1.8	-	-
Penaeidae	-	-	-	-	0.2	-
<i>Dichelopandalus leptocerus</i>	-	2.0	3.8	2.2	1.1	0.5
<i>Pandalus borealis</i>	-	-	<0.1	1.2	<0.1	-
<i>Pandalus montagui</i>	-	<0.1	-	0.6	0.2	-
Pandalidae	-	<0.1	<0.1	0.6	0.2	<0.1
<i>Crangon septemspinosa</i>	2.5	2.2	0.9	<0.1	<0.1	5.0
Decapoda unid.	<0.1	0.3	0.9	0.4	0.2	<0.1
Crustacea unid.	(0.1)	(0.4)	(0.6)	(0.7)	(0.2)	(1.0)
OSTEICHTHYES	[74.1]	[88.9]	[62.2]	[50.2]	[85.7]	[51.6]
<i>Clupea harengus</i>	-	-	-	-	21.9	-
<i>Etrumeus teres</i>	-	-	-	-	-	0.8
Clupeidae	-	-	62.2	17.9	-	-
<i>Anchoa hepsetus</i>	-	-	-	-	-	0.7
<i>Merluccius bilinearis</i>	6.6	15.5	-	8.2	7.3	5.0
<i>Urophycis</i> sp.	-	0.1	-	-	-	0.3
<i>Ammodytes dubius</i>	56.3	3.3	-	9.4	-	28.7
<i>Scomber scombrus</i>	-	-	-	-	3.4	-
Bothidae	-	-	-	-	-	2.4
Osteichthyes eggs	-	<0.1	-	-	-	-
Osteichthyes unid.	11.2	70.0	<0.1	14.7	53.1	13.7
ANIMAL REMAINS AND MISC.	[0.7]	[1.1]	[0.5]	[1.1]	[0.5]	[0.5]
Number sampled	76	176	196	1209	413	193
Number empty	32	74	57	293	129	57
Mean stomach content (g)	0.784	3.036	1.841	1.833	2.782	5.575
Mean fish length (cm)	24	28	29	23	23	27

Table B-24a. Diet composition and sampling data for pollock by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)								Total
	<31	31-40	41-50	51-60	61-70	71-80	81-90	>90	
NEMATODA	[0.3]	-	[2.8]	[12.4]	[0.1]	[0.1]	[0.1]	[0.3]	[0.3]
CHAETOGNATHA	[42.8]	-	-	-	[<0.1]	-	-	-	[<0.1]
<i>Sagitta elegans</i>	21.2	-	-	-	-	-	-	-	<0.1
Chaetognatha unid.	21.6	-	-	-	<0.1	-	-	-	<0.1
CEPHALOPODA	-	[5.1]	-	-	[44.5]	[21.8]	[1.2]	[22.9]	[23.5]
<i>Illex</i> sp.	-	-	-	-	-	20.7	-	-	0.9
<i>Loligo</i> sp.	-	-	-	-	43.8	-	-	14.3	16.7
Octopoda	-	-	-	-	-	1.1	-	-	0.1
Cephalopoda unid.	-	5.1	-	-	0.7	-	1.2	8.6	5.8
CRUSTACEA	[53.4]	[84.8]	[63.3]	[20.9]	[32.3]	[17.9]	[58.1]	[8.3]	[20.9]
Isopoda	-	-	-	-	(<0.1)	(0.6)	-	(<0.1)	(<0.1)
<i>Cirolana</i> sp.	-	-	-	-	<0.1	0.6	-	<0.1	<0.1
Amphipoda	(11.6)	(0.1)	(6.0)	(1.5)	(<0.1)	(0.2)	(0.5)	(0.4)	(0.3)
<i>Hyperia</i> sp.	-	-	-	-	-	-	0.3	-	<0.1
<i>Parathemisto</i> sp.	-	-	-	-	<0.1	<0.1	0.1	0.4	0.3
Hyperiididae	-	-	3.6	-	<0.1	-	0.1	-	<0.1
<i>Calliopius laeviusculus</i>	-	-	-	-	<0.1	0.2	-	-	<0.1
<i>Erichthonius rubricornis</i>	9.9	-	-	-	-	-	-	-	<0.1
Lysianassidae	-	-	-	1.5	-	-	-	-	<0.1
<i>Monoculodes intermedius</i>	-	-	1.4	-	-	-	-	-	<0.1
<i>Leptocheirus pinguis</i>	-	0.1	0.9	-	-	-	-	-	<0.1
<i>Photis</i> sp.	0.2	-	-	-	-	-	-	-	<0.1
Caprellidae	0.5	-	-	-	-	-	-	-	<0.1
Amphipoda unid.	1.0	-	0.1	-	<0.1	<0.1	-	<0.1	<0.1
Euphausacea	(21.2)	(83.4)	(51.3)	(10.4)	(32.3)	(3.8)	(44.8)	(7.6)	(17.8)
<i>Meganyctiphanes norvegica</i>	17.5	83.4	51.3	10.4	32.3	3.8	44.8	7.6	17.8
Euphausiacea unid.	3.7	-	-	-	-	-	<0.1	-	<0.1
Decapoda	-	-	(6.0)	(9.0)	(<0.1)	(12.1)	(12.5)	(0.3)	(2.6)
Pasiphaeidae	-	-	-	-	-	4.7	-	-	0.2
<i>Dichelopandalus leptocerus</i>	-	-	-	-	-	6.7	0.7	0.3	0.6
<i>Pandalus borealis</i>	-	-	-	-	-	-	11.4	-	1.6
<i>Crangon septemspinosa</i>	-	-	-	9.0	<0.1	0.7	-	-	0.1
Decapoda unid.	-	-	6.0	-	<0.1	-	0.4	-	0.1
Crustacea unid.	(20.6)	(1.3)	-	-	-	(1.2)	(0.3)	(<0.1)	(0.2)
UROCHORDATA	-	-	-	-	[0.6]	[8.5]	-	-	[0.5]
OSTEICHTHYES	-	-	-	-	[22.0]	[46.9]	[38.3]	[68.2]	[54.1]
Myctophidae	-	-	-	-	-	11.0	-	-	0.5
<i>Merluccius bilinearis</i>	-	-	-	-	0.2	2.0	-	-	0.1
<i>Ammodytes dubius</i>	-	-	-	-	18.4	27.5	-	66.0	46.1
Anarhichadidae	-	-	-	-	-	-	9.0	-	1.2
<i>Pholis gunnellus</i>	-	-	-	-	0.7	-	<0.1	-	0.1
Osteichthyes unid.	-	-	-	-	2.7	6.4	29.3	2.2	6.1
ANIMAL REMAINS AND MISC.	[3.5]	[10.1]	[33.9]	[66.7]	[0.5]	[4.8]	[2.3]	[0.3]	[0.7]
Number sampled	5	11	7	10	11	14	13	11	82
Number empty	0	2	0	3	3	1	0	1	10
Mean stomach content (g)	0.551	1.497	0.497	0.115	23.071	4.281	15.212	83.988	17.795
Mean fish length (cm)	23	34	48	56	65	74	85	98	65

Table B-24b. Diet composition and sampling data for pollock by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area			
	Georges Bank	Gulf of Maine	Scotian Shelf	Inshore North of Cape Hatteras
NEMATODA	[0.5]	[0.5]	[<0.1]	-
CHAETOGNATHA	-	[<0.1]	[0.8]	-
<i>Sagitta elegans</i>	-	-	0.4	-
Chaetognatha unid.	-	<0.1	0.4	-
CEPHALOPODA	[5.9]	[46.8]	[80.9]	-
<i>Illex</i> sp.	4.6	-	-	-
<i>Loligo</i> sp.	-	28.9	80.9	-
Octopoda	0.3	-	-	-
Cephalopoda unid.	1.0	17.9	-	-
CRUSTACEA	[35.8]	[44.5]	[2.6]	-
Isopoda	(0.2)	-	-	-
<i>Cirolana</i> sp.	0.2	-	-	-
Amphipoda	(1.7)	(0.1)	(0.2)	-
<i>Hyperia</i> sp.	0.2	-	-	-
<i>Parathemisto</i> sp.	1.5	<0.1	-	-
Hyperiididae	-	0.1	-	-
<i>Erichthonius rubricornis</i>	-	-	0.2	-
Lysianassidae	<0.1	-	-	-
<i>Monoculodes intermedius</i>	<0.1	-	-	-
<i>Leptocheirus pinguis</i>	<0.1	-	-	-
<i>Photis</i> sp.	-	-	<0.1	-
<i>Calliopius laeviusculus</i>	<0.1	-	-	-
Amphipoda unid.	<0.1	-	<0.1	-
Euphausacea	(30.2)	(38.9)	(0.3)	-
<i>Meganyctiphanes norvegica</i>	30.2	38.9	0.3	-
Euphausiacea unid.	-	<0.1	<0.1	-
Decapoda	(3.4)	(5.2)	(2.1)	-
Pasiphaeidae	-	-	2.1	-
<i>Dichelopandalus leptocerus</i>	3.1	-	-	-
<i>Pandalus borealis</i>	-	5.0	-	-
<i>Crangon septemspinosa</i>	0.3	-	-	-
Decapoda unid.	<0.1	0.2	-	-
Crustacea unid.	(0.3)	(0.3)	(<0.1)	-
UROCHORDATA	-	[1.5]	-	-
OSTEICHTHYES	[56.1]	[4.9]	[15.4]	[100.0]
Myctophidae	-	-	4.8	-
<i>Merluccius bilinearis</i>	-	0.4	-	-
<i>Ammodytes dubius</i>	28.5	-	-	100.0
Anarhichadidae	<0.1	3.9	-	-
<i>Pholis gunnellus</i>	-	0.4	-	-
Osteichthyes unid.	27.6	0.2	10.6	-
ANIMAL REMAINS AND MISC.	[1.7]	[1.8]	[0.3]	-
Number sampled	46	28	7	1
Number empty	6	4	0	0
Mean stomach content (g)	5.838	16.310	19.654	596.400
Mean fish length (cm)	62	72	48	106

Table B-25a. Diet composition and sampling data for red hake by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)									Total
	1-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	>45	
MOLLUSCA	-	-	[1.6]	<0.1]	[0.9]	[5.9]	[16.5]	[4.6]	[8.4]	[8.7]
Bivalvia	-	-	1.6	<0.1	0.8	0.3	5.3	0.3	2.6	2.1
Cephalopoda	-	-	-	-	<0.1	5.6	10.8	1.3	5.8	5.7
Mollusca unid.	-	-	-	-	0.1	<0.1	0.4	3.0	<0.1	0.9
POLYCHAETA	[0.3]	[5.3]	[0.7]	[1.5]	[3.6]	[2.3]	[2.3]	[1.4]	[3.0]	[2.6]
CRUSTACEA	[88.1]	[81.6]	[58.6]	[74.6]	[84.8]	[69.7]	[64.4]	[66.1]	[44.4]	[63.3]
Amphipoda	(55.6)	(44.6)	(35.4)	(10.1)	(15.3)	(3.8)	(2.4)	(0.8)	(0.4)	(3.9)
<i>Parathemisto</i> sp.	4.0	-	3.1	1.6	0.9	<0.1	<0.1	0.1	-	0.3
<i>Aeginina longicornis</i>	-	2.4	-	0.5	0.9	0.2	<0.1	<0.1	<0.1	0.2
<i>Unciola inermis</i>	1.6	0.5	-	0.6	0.8	0.1	0.3	<0.1	<0.1	0.2
<i>Unciola irrorata</i>	0.8	1.2	2.5	1.9	1.2	0.4	0.3	<0.1	<0.1	0.3
<i>Leptocheirus pinguis</i>	3.8	11.5	0.3	2.1	10.4	2.0	1.3	0.4	0.1	1.6
<i>Pontogeneia inermis</i>	35.0	21.9	25.4	0.7	<0.1	<0.1	<0.1	-	-	0.4
Amphipoda unid.	10.4	7.1	4.1	2.7	1.1	1.1	0.5	0.3	0.3	0.9
Mysidacea	(2.5)	(3.4)	(0.1)	(0.6)	(0.7)	(<0.1)	(0.1)	(0.1)	(<0.1)	(0.2)
<i>Neomysis americana</i>	1.0	3.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mysidacea unid.	1.5	0.3	0.1	0.6	0.7	<0.1	0.1	0.1	<0.1	0.2
Euphausiacea	(4.3)	(1.1)	(9.3)	(15.4)	(34.6)	(32.2)	(34.2)	(40.0)	(18.8)	(30.4)
<i>Meganyctiphanes norvegica</i>	2.8	0.4	9.3	13.7	32.9	31.2	33.4	36.5	18.4	29.0
Euphausiacea unid.	1.5	0.7	-	1.7	1.7	1.0	0.8	3.5	0.4	1.4
Decapoda	(15.8)	(29.1)	(8.8)	(45.5)	(29.7)	(29.8)	(24.9)	(23.6)	(22.8)	(25.9)
<i>Dichelopandalus leptocerus</i>	-	-	2.2	15.5	13.9	12.6	6.5	9.7	3.1	8.2
<i>Pandalus borealis</i>	-	-	0.2	1.6	-	-	0.6	0.4	7.1	2.0
Pandalidae	-	-	1.1	0.7	2.0	2.5	1.3	2.9	0.8	1.8
<i>Crangon septemspinosa</i>	2.1	8.8	3.3	23.4	3.4	2.5	1.6	2.6	1.4	2.7
Crangonidae	1.7	<0.1	-	0.5	1.9	0.6	0.2	<0.1	0.1	0.3
Axiidae	-	-	-	-	3.9	<0.1	0.9	1.0	0.4	0.9
Paguridae	<0.1	19.4	0.2	<0.1	0.5	4.2	1.8	1.5	2.2	2.1
<i>Cancer irroratus</i>	-	-	-	1.7	1.5	4.9	6.0	5.0	4.9	4.8
Canceridae	0.3	-	-	1.3	<0.1	0.1	2.6	0.1	1.6	1.1
Decapoda unid.	11.7	0.9	1.8	0.8	2.6	2.4	3.4	0.4	1.2	2.0
Crustacea unid.	(9.9)	(3.4)	(5.0)	(3.0)	(4.5)	(3.9)	(2.8)	(1.6)	(2.4)	(2.9)
CHONDRICHTHYES	-	-	-	-	-	-	-	-	[1.1]	[0.3]
OSTEICHTHYES	[<0.1]	[9.7]	[37.6]	[21.5]	[7.2]	[17.2]	[11.1]	[24.3]	[34.9]	[21.4]
<i>Melanogrammus aeglefinus</i>	-	-	-	-	-	-	-	0.3	4.3	1.1
<i>Merluccius bilinearis</i>	-	-	30.7	19.7	1.0	4.7	-	-	16.7	5.9
Gadidae	-	-	-	-	-	1.4	4.7	2.9	-	2.0
<i>Ammodytes dubius</i>	-	-	1.8	-	6.0	6.2	2.0	1.2	2.4	2.9
<i>Scomber scombrus</i>	-	-	-	-	-	-	0.6	-	0.6	0.3
Triglidae	-	8.3	-	-	-	-	-	-	-	<0.1
Osteichthyes larvae	-	-	2.6	-	-	<0.1	-	-	-	<0.1
Osteichthyes unid.	<0.1	1.4	2.5	1.8	0.2	4.9	3.8	19.9	10.9	9.2
ANIMAL REMAINS AND MISC.	[11.6]	[3.4]	[1.5]	[2.4]	[3.5]	[4.9]	[5.7]	[3.6]	[8.2]	[3.7]
Number sampled	103	48	55	88	216	346	344	173	109	1482
Number empty	11	13	16	15	39	92	79	50	18	333
Mean stomach content (g)	0.035	0.214	0.555	0.954	0.865	1.596	2.060	3.881	5.505	1.921
Mean fish length (cm)	6	12	18	23	28	33	37	42	49	32

Table B-25b. Diet composition and sampling data for red hake by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area					
	Middle Atlantic	Southern New England	Georges Bank	Gulf of Maine	Scotian Shelf	Inshore North of Cape Hatteras
MOLLUSCA	[3.4]	[30.1]	[11.2]	[3.8]	[23.6]	[0.5]
Bivalvia	3.4	<0.1	2.6	2.4	<0.1	<0.1
Cephalopoda	-	30.1	6.2	1.4	23.6	0.5
Mollusca unid.	-	<0.1	2.4	<0.1	-	<0.1
POLYCHAETA	[0.6]	[1.8]	[0.6]	[2.4]	[1.2]	[9.4]
CRUSTACEA	[42.6]	[32.4]	[71.9]	[66.0]	[42.0]	[33.3]
Amphipoda	(0.4)	(3.8)	(6.8)	(1.5)	(2.3)	(1.1)
<i>Parathemisto</i> sp.	-	-	<0.1	0.6	-	-
<i>Aeginina longicornis</i>	-	1.5	<0.1	<0.1	0.3	0.2
<i>Unciola inermis</i>	-	-	0.5	<0.1	<0.1	-
<i>Unciola irrorata</i>	<0.1	0.2	0.9	<0.1	0.2	<0.1
<i>Leptocheirus pinguis</i>	-	0.4	4.4	0.1	1.4	0.2
<i>Pontogeneia inermis</i>	-	-	0.3	0.6	-	-
Amphipoda unid.	0.4	1.7	0.7	0.2	0.4	0.7
Mysidacea	(<0.1)	(<0.1)	(<0.1)	(0.3)	(<0.1)	(0.5)
<i>Neomysis americana</i>	<0.1	<0.1	<0.1	<0.1	-	0.2
Mysidacea unid.	-	<0.1	<0.1	0.3	<0.1	0.3
Euphausiacea	-	-	(27.7)	(42.8)	(7.6)	(<0.1)
<i>Meganyctiphanes norvegica</i>	-	-	27.6	40.0	7.6	-
Euphausiacea unid.	-	-	0.1	2.8	<0.1	<0.1
Decapoda	(41.0)	(25.5)	(33.3)	(19.3)	(30.3)	(29.0)
<i>Dichelopandalus leptocerus</i>	1.6	3.8	9.4	7.8	8.0	11.8
<i>Pandalus borealis</i>	-	-	-	4.0	1.4	-
Pandalidae	-	<0.1	0.6	2.6	4.4	0.2
<i>Crangon septemspinosa</i>	4.3	0.9	3.9	0.8	4.4	11.7
Crangonidae	-	<0.1	0.3	0.4	-	0.2
Axiidae	-	3.1	1.1	0.5	1.9	0.1
Paguridae	-	<0.1	5.7	0.5	2.4	<0.1
<i>Cancer irroratus</i>	33.5	2.3	10.1	0.7	5.6	3.7
Cancridae	-	15.3	0.8	0.2	-	-
Decapoda unid.	1.6	0.1	1.4	1.8	2.2	1.3
Crustacea unid.	(1.2)	(3.1)	(4.1)	(2.1)	(1.8)	(2.7)
CHONDRICHTHYES	-	-	[0.8]	-	-	-
OSTEICHTHYES	[51.9]	[31.5]	[8.9]	[22.6]	[30.9]	[51.3]
<i>Melanogrammus aeglefinus</i>	-	-	-	2.1	0.9	-
<i>Merluccius bilinearis</i>	-	-	-	10.1	1.0	16.0
Gadidae	-	21.9	2.9	-	-	-
<i>Ammodytes dubius</i>	33.5	-	3.6	1.4	7.0	-
<i>Scomber scombrus</i>	-	-	-	-	-	5.1
Triglidae	-	-	-	<0.1	-	-
Osteichthyes larvae	-	-	-	<0.1	0.2	-
Osteichthyes unid.	18.4	9.6	2.4	9.0	21.8	30.2
ANIMAL REMAINS AND MISC.	[1.5]	[4.2]	[6.6]	[5.2]	[2.3]	[5.5]
Number sampled	5	97	521	681	87	94
Number empty	2	23	69	192	25	23
Mean stomach content (g)	10.429	1.553	1.818	2.164	2.226	1.735
Mean fish length (cm)	34	31	29	34	32	32

Table B-26. Diet composition and sampling data for spotted hake by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)					Total
	6-10	11-15	16-20	21-25	>25	
MOLLUSCA	-	[14.7]	[15.6]	[2.6]	[43.2]	[30.9]
Bivalvia	-	(14.7)	(15.5)	-	-	(5.7)
<i>Ensis directus</i>	-	-	0.2	-	-	0.1
Solenidae	-	-	1.1	-	-	0.4
Bivalvia unid.	-	14.7	14.2	-	-	5.2
Cephalopoda	-	-	-	-	(43.2)	(25.0)
Mollusca unid.	-	-	(0.1)	(2.6)	-	(0.2)
POLYCHAETA	-	[3.2]	[2.1]	-	-	[0.9]
Maldanidae	-	-	0.6	-	-	0.2
<i>Pherusa affinis</i>	-	-	1.5	-	-	0.5
Polychaeta unid.	-	3.2	<0.1	-	-	0.2
CRUSTACEA	[100.0]	[65.2]	[63.7]	[83.4]	[0.2]	[28.3]
Cumacea	-	(<0.1)	(<0.1)	-	-	(<0.1)
<i>Pseudoleptocuma minor</i>	-	<0.1	<0.1	-	-	<0.1
Isopoda	-	(<0.1)	-	-	-	(<0.1)
<i>Edotea</i> sp.	-	<0.1	-	-	-	<0.1
Amphipoda	-	(1.2)	(45.5)	(24.4)	-	(16.0)
<i>Parathemisto</i> sp.	-	-	-	<0.1	-	<0.1
<i>Ampelisca verrilli</i>	-	-	40.5	23.0	-	14.2
<i>Ampelisca declivitatiss</i>	-	-	<0.1	-	-	<0.1
<i>Byblis serrata</i>	-	-	-	<0.1	-	<0.1
<i>Unciola irrorata</i>	-	0.1	5.0	-	-	1.6
<i>Synchelidium americanum</i>	-	-	<0.1	-	-	<0.1
<i>Rhepoxynius epistomus</i>	-	1.1	-	-	-	0.1
<i>Aeginina longicornis</i>	-	-	<0.1	-	-	<0.1
Gammaridea	-	-	-	1.4	-	0.1
Mysidacea	-	-	(<0.1)	-	-	(<0.1)
<i>Mysidopsis bigelowi</i>	-	-	<0.1	-	-	<0.1
Decapoda	(100.0)	(64.0)	(17.6)	(57.5)	-	(11.9)
<i>Crangon septemspinosa</i>	16.1	1.3	0.8	0.9	-	0.4
<i>Cancer irroratus</i>	-	0.3	14.2	56.0	-	7.9
<i>Cancer</i> sp.	83.9	11.2	-	-	-	0.5
Canceridae	-	0.5	-	-	-	<0.1
Crab unid.	-	-	-	0.6	-	<0.1
Decapoda larvae	-	-	-	<0.1	-	<0.1
Decapoda unid.	-	50.7	2.6	-	-	3.1
Crustacea unid.	-	-	(0.6)	(1.5)	(0.2)	(0.4)
OSTEICHTHYES	-	-	[18.1]	[14.0]	[56.6]	[39.1]
Ophidiidae	-	-	-	-	56.6	32.6
<i>Ammodytes dubius</i>	-	-	13.9	-	-	4.4
Pleuronectiformes	-	-	0.4	-	-	0.1
Osteichthyes unid.	-	-	3.8	14.0	-	2.0
ANIMAL REMAINS AND MISC.	-	[16.9]	[0.5]	-	-	[0.8]
Number sampled	1	22	16	5	3	47
Number empty	0	4	1	1	0	6
Mean stomach content (g)	0.031	0.190	1.805	1.111	17.573	1.944
Mean fish length (cm)	9	13	18	22	32	17

Table B-27a. Diet composition and sampling data for white hake by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)									Total
	<11	11-20	21-30	31-40	41-50	51-60	61-70	71-80	>80	
CEPHALOPODA	-	-	-	[0.8]	[15.4]	[2.0]	[25.0]	[63.7]	[1.3]	[21.4]
<i>Illex</i> sp.	-	-	-	-	-	-	20.5	63.1	-	16.5
<i>Loligo pealeii</i>	-	-	-	-	6.3	-	-	-	-	1.0
Cephalopoda unid.	-	-	-	0.8	9.1	2.0	4.5	0.6	1.3	3.9
POLYCHAETA	-	[5.2]	[1.1]	[1.1]	[<0.1]	-	-	-	-	[0.1]
CRUSTACEA	[100.0]	[81.9]	[93.7]	[64.8]	[27.8]	[45.8]	[2.8]	[25.8]	[5.5]	[20.6]
Calanoida	(16.4)	(0.8)	-	-	-	-	-	-	-	(<0.1)
Isopoda	-	(1.7)	(0.2)	(<0.1)	-	-	-	-	-	(<0.1)
Amphipoda	(0.3)	(28.1)	(4.5)	(0.2)	(<0.1)	(<0.1)	(<0.1)	-	-	(0.1)
<i>Unciola irrorata</i>	-	0.6	1.3	0.1	-	-	-	-	-	<0.1
<i>Anonyx sarsi</i>	-	5.5	-	-	-	-	-	-	-	<0.1
<i>Hippomedon serratus</i>	-	2.0	-	<0.1	-	-	-	-	-	<0.1
<i>Leptocheirus pinguis</i>	-	-	2.4	0.1	-	<0.1	-	-	-	0.1
Amphipoda unid.	0.3	20.0	0.8	<0.1	<0.1	-	<0.1	-	-	<0.1
Mysidacea	(1.0)	(<0.1)	-	(1.9)	(<0.1)	-	-	(2.5)	-	(0.4)
<i>Mysidopsis bigelowi</i>	1.0	<0.1	-	-	-	-	-	-	-	<0.1
Mysidacea unid.	-	-	-	1.9	<0.1	-	-	2.5	-	0.4
Euphausiacea	-	-	(13.8)	(36.9)	(19.9)	(26.4)	(1.4)	(17.8)	(5.5)	(12.2)
<i>Meganyctiphanes norvegica</i>	-	-	7.6	35.7	18.0	23.8	1.4	17.8	3.8	11.3
Euphausiacea unid.	-	-	6.2	1.2	1.9	2.6	<0.1	-	1.7	0.9
Decapoda	(82.3)	(40.9)	(73.4)	(22.4)	(7.5)	(16.2)	(1.3)	(4.9)	-	(7.1)
Pasiphaeidae	-	-	-	-	0.4	-	-	4.4	-	0.5
<i>Dichelopandalus leptocerus</i>	-	-	53.0	10.8	4.9	9.9	0.6	-	-	3.9
<i>Pandalus borealis</i>	-	-	8.0	-	-	4.1	0.3	-	-	0.7
<i>Pandalus montagui</i>	-	-	-	1.2	-	-	-	-	-	0.1
<i>Pandalus</i> sp.	-	-	-	0.8	0.1	0.9	<0.1	-	-	0.2
Pandalidae	-	-	0.7	-	0.6	1.1	-	-	-	0.2
<i>Crangon septemspinosa</i>	82.3	36.2	8.9	4.1	0.9	0.2	-	-	-	0.7
<i>Axius serratus</i>	-	-	-	1.7	-	-	-	-	-	0.1
Paguridae	-	-	2.7	<0.1	0.3	-	-	<0.1	-	<0.1
<i>Cancer irroratus</i>	-	-	-	3.8	-	-	0.4	-	-	0.5
Cancridae	-	1.9	-	-	-	-	-	-	-	<0.1
Decapoda unid.	-	2.8	0.1	<0.1	0.3	<0.1	-	0.5	-	0.2
Crustacea unid.	-	(10.4)	(1.8)	(3.4)	(0.4)	(3.2)	(0.1)	(0.6)	(<0.1)	(0.8)
OSTEICHTHYES	-	[4.8]	[1.9]	[30.8]	[55.8]	[50.9]	[72.1]	[9.1]	[92.6]	[57.1]
<i>Merluccius bilinearis</i>	-	-	-	1.3	14.7	-	-	-	76.8	7.4
<i>Urophycis chuss</i>	-	-	-	-	-	-	19.5	-	-	9.0
<i>Urophycis tenuis</i>	-	-	-	-	17.0	-	-	-	-	2.6
Gadidae	-	-	-	11.9	-	8.9	9.2	-	-	6.2
<i>Ammodytes dubius</i>	-	-	-	-	0.5	3.0	-	-	-	0.4
Pleuronectiformes	-	-	-	1.9	-	-	2.4	-	-	1.3
Osteichthyes unid.	-	4.8	1.9	15.7	23.6	39.0	41.0	9.1	15.8	30.2
ANIMAL REMAINS AND MISC.	-	[8.1]	[3.3]	[2.5]	[1.0]	[1.3]	[0.1]	[1.4]	[0.6]	[0.8]
Number sampled	9	14	42	79	69	28	21	12	9	283
Number empty	0	0	12	21	17	2	1	1	1	55
Mean stomach content (g)	0.035	0.208	1.416	3.670	7.844	13.439	77.570	32.290	25.716	12.431
Mean fish length (cm)	7	15	27	36	44	54	64	75	87	39

Table B-27b. Diet composition and sampling data for white hake by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area				
	Southern New England	Georges Bank	Gulf of Maine	Scotian Shelf	Inshore North of Cape Hatteras
CEPHALOPODA	-	-	[29.5]	[40.1]	-
<i>Illex</i> sp.	-	-	21.8	40.1	-
<i>Loligo pealeii</i>	-	-	1.5	-	-
Cephalopoda unid.	-	-	6.2	-	-
POLYCHAETA	-	[0.2]	[<0.1]	-	[0.3]
CRUSTACEA	[1.9]	[42.8]	[26.5]	[7.7]	[5.2]
Calanoida	-	(<0.1)	-	-	-
Isopoda	-	(<0.1)	-	-	(<0.1)
Amphipoda	(0.3)	(1.1)	(<0.1)	-	(0.1)
<i>Unciola irrorata</i>	-	0.2	-	-	0.1
<i>Leptocheirus pinguis</i>	<0.1	0.8	-	-	<0.1
Amphipoda unid.	0.3	0.1	<0.1	-	<0.1
Mysidacea	-	(<0.1)	(0.7)	-	(<0.1)
<i>Mysidopsis bigelowi</i>	-	<0.1	-	-	-
Mysidacea unid.	-	-	0.7	-	<0.1
Euphausiacea	-	(0.5)	(19.2)	-	(<0.1)
<i>Meganyctiphanes norvegica</i>	-	0.5	17.8	-	<0.1
Euphausiacea unid.	-	<0.1	1.4	-	-
Decapoda	(1.6)	(39.3)	(5.4)	(7.7)	(5.1)
Pasiphaeidae	-	-	<0.1	7.1	-
<i>Dichelopandalus leptocerus</i>	1.1	26.7	3.0	-	3.2
<i>Pandalus borealis</i>	-	-	1.1	-	-
<i>Pandalus montagui</i>	-	-	<0.1	-	0.4
<i>Pandalus</i> sp.	-	-	0.3	-	-
Pandalidae	-	-	0.3	-	<0.1
<i>Crangon septemspinosa</i>	0.5	9.6	<0.1	-	0.6
<i>Axius serratus</i>	-	-	0.2	-	-
Paguridae	-	0.1	0.2	-	-
<i>Cancer irroratus</i>	-	2.9	0.3	-	0.9
Cancridae	-	<0.1	-	-	-
Decapoda unid.	<0.1	<0.1	<0.1	0.6	<0.1
Crustacea unid.	(<0.1)	(1.9)	(1.2)	-	(<0.1)
OSTEICHTHYES	[97.8]	[55.2]	[42.9]	[51.0]	[93.5]
<i>Merluccius bilinearis</i>	-	-	6.3	51.0	-
<i>Urophycis chuss</i>	-	-	14.4	-	-
<i>Urophycis tenuis</i>	-	51.9	-	-	-
Gadidae	13.9	-	1.6	-	23.1
<i>Ammodytes dubius</i>	-	-	0.6	-	-
Pleuronectidae	-	-	-	-	0.9
Pleuronectiformes	-	-	1.8	-	-
Osteichthyes unid.	83.9	3.3	18.2	-	69.5
ANIMAL REMAINS AND MISC.	[0.3]	[1.8]	[1.1]	[1.2]	[1.0]
Number sampled	18	43	191	4	27
Number empty	6	2	45	1	1
Mean stomach content (g)	13.406	4.125	11.591	59.595	23.970
Mean fish length (cm)	44	24	46	63	39

Table B-28a. Diet composition and sampling data for fawn cusk-eel by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)				Total
	11-15	16-20	21-25	26-30	
POLYCHAETA	[18.8]	[30.8]	[24.1]	[24.0]	[25.7]
<i>Ninoe nigripes</i>	-	8.8	-	-	2.1
<i>Nothria conchylega</i>	-	11.6	-	1.7	3.3
<i>Aglaophamus</i> sp.	-	1.2	<0.1	14.0	4.3
<i>Nephtys incisa</i>	-	-	-	6.4	1.8
Nephtyidae	-	0.5	6.6	<0.1	3.3
<i>Syllides</i> sp.	18.8	-	0.2	-	0.1
Polychaeta unid.	-	8.7	17.3	1.9	10.8
CRUSTACEA	[6.3]	[48.5]	[54.4]	[47.3]	[51.2]
Stomatopoda	-	(4.8)	-	-	(1.1)
Isopoda	-	-	(3.1)	(2.2)	(2.1)
<i>Cirolana</i> sp.	-	-	3.1	2.2	2.1
Amphipoda	(6.3)	(26.2)	(19.7)	(24.6)	(22.9)
<i>Ampelisca agassizi</i>	-	0.3	3.3	4.4	2.9
Ampeliscidae	-	1.6	<0.1	3.3	1.4
<i>Unciola irrorata</i>	-	19.8	11.5	7.6	12.4
<i>Unciola</i> sp.	6.3	-	0.3	-	0.2
<i>Casco bigelowi</i>	-	-	0.2	3.3	1.0
<i>Leptocheirus pinguis</i>	-	0.7	3.9	3.8	3.1
Amphipoda unid.	-	3.8	0.5	2.2	1.9
Decapoda	-	(17.0)	(30.5)	(19.1)	(23.9)
<i>Dichelopandalus leptocerus</i>	-	-	2.2	-	1.0
<i>Crangon septemspinosa</i>	-	6.6	10.9	14.5	10.9
<i>Pontophilus brevisrostris</i>	-	-	2.6	-	1.2
<i>Pontophilus norvegicus</i>	-	-	5.7	-	2.7
Crangonidae	-	-	1.5	-	0.7
<i>Munida iris</i>	-	4.3	-	0.7	1.2
<i>Munida</i> sp.	-	2.9	1.7	-	1.5
<i>Caridion gordonii</i>	-	-	3.1	-	1.5
<i>Pagurus</i> sp.	-	-	-	2.5	0.7
Cancridae	-	1.4	2.1	0.5	1.5
Decapoda unid.	-	1.8	0.7	0.9	1.0
Crustacea unid.	-	(0.5)	(1.1)	(1.4)	(1.2)
ECHINODERMATA	[74.9]	[18.3]	[7.3]	[3.8]	[9.2]
Echinoidea	-	-	(0.3)	(3.8)	(1.2)
Ophiuroidea	(74.9)	(18.3)	(7.0)	-	(8.0)
<i>Axiognathus squamatus</i>	-	8.1	-	-	2.0
Ophiuroidea unid.	74.9	10.2	7.0	-	6.0
OSTEICHTHYES	-	[0.6]	[7.1]	[22.3]	[9.8]
<i>Brosme brosme</i>	-	-	4.3	-	2.0
Pleuronectiformes	-	-	2.8	14.7	5.5
Osteichthyes unid.	-	0.6	-	7.6	2.3
ANIMAL REMAINS AND MISC.	-	[1.8]	[7.1]	[2.6]	[4.1]
Number sampled	4	65	69	27	165
Number empty	2	22	22	10	56
Mean stomach content (g)	0.004	0.018	0.034	0.052	0.030
Mean fish length (cm)	14	18	23	27	21

Table B-28b. Diet composition and sampling data for fawn cusk-eel by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area			
	Middle Atlantic	Southern New England	Georges Bank	Inshore North of Cape Hatteras
POLYCHAETA	[46.4]	[13.6]	[26.3]	[22.1]
<i>Ninoe nigripes</i>	7.6	-	-	-
<i>Nothria conchylega</i>	10.0	-	2.4	-
<i>Aglaophamus</i> sp.	1.0	8.1	-	-
<i>Nephtys incisa</i>	-	-	9.1	-
Nephtyidae	10.6	0.5	-	-
Polychaeta unid.	17.2	5.0	14.8	22.1
CRUSTACEA	[48.5]	[44.6]	[65.0]	[77.9]
Stomatopoda	-	-	-	(38.3)
Isopoda	-	-	(10.4)	-
<i>Cirolana</i> sp.	-	-	10.4	-
Amphipoda	(29.0)	(13.3)	(35.4)	(28.2)
<i>Ampelisca agassizi</i>	0.2	<0.1	14.1	-
Ampeliscidae	-	0.3	4.0	12.8
<i>Unciola irrorata</i>	27.0	2.9	15.2	13.4
<i>Unciola</i> sp.	0.1	0.2	-	-
<i>Casco bigelowi</i>	-	2.1	-	-
<i>Leptocheirus pinguis</i>	0.6	5.6	0.9	-
Amphipoda unid.	1.1	2.2	1.2	2.0
Decapoda	(19.0)	(30.1)	(17.4)	(11.4)
<i>Dichelopandalus leptocerus</i>	-	-	5.3	-
<i>Crangon septemspinosa</i>	17.9	8.9	7.5	-
<i>Pontophilus brevisrostris</i>	-	2.5	-	-
<i>Pontophilus norvegicus</i>	-	5.5	-	-
Crangonidae	-	1.4	-	-
<i>Munida iris</i>	-	2.1	1.0	-
<i>Munida</i> sp.	0.9	2.5	-	-
<i>Caridion gordonii</i>	-	3.0	-	-
<i>Pagurus</i> sp.	-	-	3.6	-
Cancridae	-	2.3	-	11.4
Decapoda unid.	0.2	1.9	-	-
Crustacea unid.	(0.5)	(1.2)	(1.8)	-
ECHINODERMATA	[2.7]	[17.0]	-	-
Echinoidea	-	(2.4)	-	-
Ophiuroidea	(2.7)	(14.6)	-	-
<i>Axiognathus squamatus</i>	-	4.0	-	-
Ophiuroidea unid.	2.7	10.6	-	-
OSTEICHTHYES	-	[19.9]	-	-
<i>Brosme brosme</i>	-	4.1	-	-
Pleuronectiformes	-	11.2	-	-
Osteichthyes unid.	-	4.6	-	-
ANIMAL REMAINS AND MISC.	[2.4]	[4.9]	[8.7]	-
Number sampled	41	96	23	5
Number empty	11	33	11	1
Mean stomach content (g)	0.034	0.026	0.043	0.030
Mean fish length (cm)	19	21	25	18

Table B-29a. Diet composition and sampling data for goosefish by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)									Total
	1-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	>90	
CEPHALOPODA	[0.3]	[3.3]	[8.8]	[27.3]	[27.6]	[40.5]	[28.5]	[28.2]	[17.9]	[24.9]
<i>Illex</i> sp.	-	-	-	8.7	22.3	16.1	14.6	15.5	16.6	15.3
<i>Loligo</i> sp.	-	-	-	3.6	1.0	5.5	-	-	0.9	1.3
Cephalopoda unid.	0.3	3.3	8.8	15.0	4.3	18.9	13.9	12.7	0.4	8.3
CHONDRICHTHYES	-	-	-	[0.7]	[3.7]	[15.8]	[8.7]	[5.4]	[10.3]	[8.8]
Rajiformes	-	-	-	-	3.7	15.3	6.0	5.4	10.3	8.2
<i>Squalus acanthias</i>	-	-	-	0.7	-	0.5	2.7	-	-	0.6
OSTEICHTHYES	[98.2]	[96.2]	[89.6]	[71.9]	[67.0]	[42.6]	[62.5]	[62.5]	[70.3]	[65.1]
<i>Alosa pseudoharengus</i>	-	-	-	-	5.6	-	-	-	1.0	0.7
<i>Clupea harengus</i>	-	-	-	-	-	-	-	-	0.8	0.3
Clupeidae	-	-	-	-	1.9	-	-	1.2	14.2	5.6
<i>Enchelyopus cimbrius</i>	-	5.1	4.5	-	2.7	-	-	-	-	0.4
<i>Melanogrammus aeglefinus</i>	-	-	-	-	-	-	-	5.1	0.5	0.9
<i>Merluccius bilinearis</i>	15.0	34.6	-	14.7	14.3	7.8	3.4	4.0	2.5	5.4
<i>Pollachius virens</i>	-	-	-	-	3.5	-	-	-	-	0.2
<i>Urophycis chesteri</i>	-	-	-	-	2.3	-	0.4	0.6	-	0.3
<i>Urophycis chuss</i>	-	-	-	-	0.2	<0.1	-	-	4.8	1.9
<i>Urophycis tenuis</i>	-	-	0.3	-	-	-	-	-	-	<0.1
<i>Urophycis</i> sp.	-	2.5	-	-	-	-	-	-	-	0.1
Gadidae	-	3.7	1.6	2.5	<0.1	-	15.1	-	7.8	6.2
Macrouridae	-	-	-	-	1.2	-	-	-	-	0.1
Lophiidae	-	-	-	-	-	-	-	-	4.0	1.6
<i>Ammodytes dubius</i>	24.2	-	-	0.8	-	0.6	0.2	<0.1	-	0.2
<i>Peprilus triacanthus</i>	-	-	-	-	1.8	1.7	0.9	2.0	-	0.8
<i>Sebastes fasciatus</i>	-	-	-	-	-	3.0	-	-	-	0.4
<i>Helicolenus dactylopterus</i>	-	-	-	-	-	-	-	-	0.4	0.1
<i>Lopholatilus chamaeleonticeps</i>	-	-	-	-	-	-	-	-	0.7	0.3
<i>Hemitripterus americanus</i>	-	-	-	-	-	-	-	-	0.3	0.1
<i>Myoxocephalus octodecemspinosus</i>	-	-	-	-	7.7	1.7	2.4	-	0.9	1.5
<i>Lumpenus lumpretaeformis</i>	-	-	-	1.2	-	-	-	-	-	0.1
Triglidae	-	-	-	-	-	-	0.9	3.6	-	0.7
<i>Etropus microstomus</i>	-	-	-	-	-	-	-	-	0.9	0.4
<i>Paralichthys oblongus</i>	-	-	-	-	-	-	-	2.1	-	0.3
<i>Scophthalmus aquosus</i>	-	-	-	-	-	-	-	-	0.7	0.3
Bothidae	-	1.2	-	-	0.3	-	0.1	-	-	0.1
<i>Glyptocephalus cynoglossus</i>	-	4.9	-	-	-	-	0.7	-	0.8	0.6
<i>Hippoglossoides platessoides</i>	-	-	-	-	-	-	-	0.2	4.6	1.8
<i>Pleuronectes ferruginus</i>	0.4	-	-	-	-	-	1.1	-	-	0.2
<i>Pleuronectes americanus</i>	-	1.7	-	0.4	-	-	-	-	1.3	0.5
Pleuronectiformes	-	0.5	-	5.1	8.0	-	-	10.8	-	2.2
Osteichthyes eggs	-	-	-	-	-	-	-	-	<0.1	<0.1
Osteichthyes unid.	58.6	42.0	83.2	47.2	17.5	27.8	37.3	32.9	24.1	30.8
ANIMAL REMAINS AND MISC.	[1.5]	[0.5]	[1.6]	[0.1]	[1.7]	[1.1]	[0.3]	[3.9]	[1.5]	[1.2]
Number sampled	51	78	102	107	104	122	119	86	103	872
Number empty	23	37	50	73	59	78	53	42	52	467
Mean stomach content (g)	3.530	14.086	13.209	19.862	32.999	60.421	92.943	90.873	209.566	66.524
Mean fish length (cm)	15	25	35	45	55	65	75	85	98	59

Table B-29b. Diet composition and sampling data for goosefish by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area					
	Middle Atlantic	Southern New England	Georges Bank	Gulf of Maine	Scotian Shelf	Inshore North of Cape Hatteras
CEPHALOPODA	-	[22.7]	[49.6]	[14.6]	[3.5]	[53.3]
<i>Illex</i> sp.	-	3.9	40.8	8.0	-	46.0
<i>Loligo</i> sp.	-	0.9	3.3	-	-	7.3
Cephalopoda unid.	-	17.9	5.5	6.6	3.5	<0.1
CHONDRICHTHYES	[3.0]	[12.9]	[21.2]	[1.9]	[5.3]	-
Rajiformes	-	10.2	21.2	1.9	5.3	-
<i>Squalus acanthias</i>	3.0	2.7	-	-	-	-
OSTEICHTHYES	[96.0]	[63.2]	[28.5]	[81.1]	[91.2]	[46.6]
<i>Alosa pseudoharengus</i>	-	-	-	1.8	-	-
<i>Clupea harengus</i>	-	1.3	-	-	-	-
Clupeidae	-	0.5	-	13.0	-	3.6
<i>Enchelyopus cimbrius</i>	-	-	-	0.9	-	-
<i>Melanogrammus aeglefinus</i>	-	-	1.0	0.4	5.9	-
<i>Merluccius bilinearis</i>	-	14.4	0.5	4.9	-	-
<i>Pollachius virens</i>	-	-	1.0	-	-	-
<i>Urophycis chesteri</i>	-	1.4	-	-	-	-
<i>Urophycis chuss</i>	-	-	-	4.5	-	0.2
<i>Urophycis tenuis</i>	-	<0.1	-	-	-	-
Gadidae	-	0.4	5.0	2.8	42.7	7.3
Macrouridae	-	0.3	-	-	-	-
Lophiidae	-	-	-	-	18.7	-
<i>Ammodytes dubius</i>	-	0.9	0.2	-	-	-
<i>Peprilus triacanthus</i>	-	2.2	-	0.7	-	-
<i>Sebastes fasciatus</i>	-	<0.1	-	0.9	-	-
<i>Helicolenus dactylopterus</i>	-	0.6	-	-	-	-
<i>Lopholatilus chamaeleonticeps</i>	-	1.3	-	-	-	-
<i>Hemitripterus americanus</i>	-	0.5	-	-	-	-
<i>Myoxocephalus octodecemspinosus</i>	-	1.0	3.8	-	5.7	-
<i>Lumpenus lumpretaeformis</i>	-	-	-	0.1	-	-
Triglidae	-	3.1	-	-	-	-
<i>Etropus microstomus</i>	-	1.6	-	-	-	-
<i>Paralichthys oblongus</i>	-	-	0.8	0.3	-	-
<i>Scophthalmus aquosus</i>	-	1.1	-	-	-	-
Bothidae	2.4	<0.1	-	-	-	0.6
<i>Glyptocephalus cynoglossus</i>	-	1.9	-	0.3	-	-
<i>Hippoglossoides platessoides</i>	-	-	-	4.3	-	-
<i>Pleuronectes ferruginus</i>	-	-	<0.1	0.5	-	-
<i>Pleuronectes americanus</i>	-	-	-	1.2	0.6	-
Pleuronectiformes	-	8.4	-	0.3	2.3	-
Osteichthyes eggs	-	<0.1	-	-	-	-
Osteichthyes unid.	93.6	22.3	16.2	44.2	15.3	34.9
ANIMAL REMAINS AND MISC.	[1.0]	[1.2]	[0.7]	[2.4]	[<0.1]	[0.1]
Number sampled	26	362	91	316	51	25
Number empty	13	208	52	164	22	7
Mean stomach content (g)	18.339	34.587	133.825	74.414	91.418	106.507
Mean fish length (cm)	43	52	69	63	63	68

Table B-30. Diet composition and sampling data for northern pipefish by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)			Total
	11-15	16-20	21-25	
CRUSTACEA	[100.0]	[100.0]	[100.0]	[100.0]
Amphipoda	-	-	(27.3)	(19.6)
<i>Gammarus annulatus</i>	-	-	12.1	8.7
Gammaridea	-	-	15.2	10.9
Mysidacea	(100.0)	(100.0)	(72.7)	(80.4)
<i>Neomysis americana</i>	100.0	100.0	72.7	80.4
Number sampled	8	17	13	38
Number empty	7	12	6	25
Mean stomach content (g)	<0.001	0.001	0.003	0.001
Mean fish length (cm)	14	18	22	19

Table B-31a. Diet composition and sampling data for blackbelly rosefish by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)					Total
	6-10	11-15	16-20	21-25	26-30	
NEMATODA	-	-	[<0.1]	[0.8]	-	[0.1]
MOLLUSCA	-	[1.4]	[5.4]	-	-	[3.3]
Bivalvia	-	1.4	-	-	-	0.3
Cephalopoda	-	-	5.4	-	-	3.0
POLYCHAETA	-	[1.8]	[3.1]	[8.7]	-	[3.3]
Maldanidae	-	-	1.1	-	-	0.6
<i>Eunice</i> sp.	-	-	-	4.3	-	0.6
<i>Onuphis</i> sp.	-	1.0	-	-	-	0.2
<i>Ampharete arctica</i>	-	0.2	-	-	-	0.1
Terebellidae	-	-	1.8	-	-	1.0
Polychaeta unid.	-	0.6	0.2	4.4	-	0.8
CRUSTACEA	[28.9]	[87.2]	[48.8]	[23.7]	-	[52.1]
Cumacea	-	(<0.1)	(0.1)	-	-	(<0.1)
Amphipoda	(6.5)	(5.2)	(0.3)	(<0.1)	-	(1.6)
<i>Unciola inermis</i>	-	0.8	-	-	-	0.2
<i>Unciola irrorata</i>	5.0	0.6	0.3	-	-	0.4
<i>Unciola dissimilis</i>	-	1.6	<0.1	-	-	0.4
<i>Unciola</i> sp.	-	2.2	<0.1	-	-	0.6
Amphipoda unid.	1.5	<0.1	-	<0.1	-	<0.1
Mysidacea	-	-	(<0.1)	(<0.1)	-	(0.1)
Euphausiacea	-	(2.3)	(3.0)	(0.9)	-	(2.3)
<i>Meganyctiphanes norvegica</i>	-	2.3	0.3	0.9	-	0.8
Euphausiacea unid.	-	-	2.7	-	-	1.5
Decapoda	(7.5)	(76.2)	(44.7)	(22.8)	-	(46.7)
<i>Spirontocaris</i> sp.	-	-	0.3	-	-	0.2
<i>Eualus pusiolus</i>	7.5	-	-	-	-	0.1
<i>Dichelopandalus leptocerus</i>	-	38.5	28.8	-	-	25.5
<i>Pagurus</i> sp.	-	0.9	-	-	-	0.2
<i>Munida</i> sp.	-	-	1.4	-	-	0.8
<i>Caridion gordonii</i>	-	0.4	0.7	-	-	0.5
<i>Cancer irroratus</i>	-	-	4.4	-	-	2.5
<i>Cancer</i> sp.	-	1.1	8.8	-	-	5.2
Crab unid.	-	12.0	0.3	-	-	3.1
Shrimp unid.	-	23.3	-	22.8	-	8.6
Crustacea unid.	(14.9)	(3.5)	(0.7)	-	-	(1.4)
ECHINODERMATA	-	-	[1.3]	-	[13.7]	[1.5]
Holothuroidea	-	-	-	-	13.7	0.8
Ophiuroidea	-	-	1.3	-	-	0.7
SALPIDAE	-	[0.8]	[30.1]	[66.6]	[86.3]	[30.7]
<i>Salpa fusiformis</i>	-	-	2.8	57.0	86.3	13.9
Salpidae unid.	-	0.8	27.3	9.6	-	16.8
OSTEICHTHYES	[71.1]	[5.6]	[<0.1]	[0.2]	-	[2.1]
ANIMAL REMAINS AND MISC.	-	[3.2]	[11.3]	-	-	[6.9]
Number sampled	8	26	33	10	3	80
Number empty	4	10	6	4	1	25
Mean stomach content (g)	0.025	0.181	0.333	0.251	0.375	0.244
Mean fish length (cm)	8	13	17	22	28	16

Table B-31b. Diet composition and sampling data for blackbelly rosefish by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area			
	Middle Atlantic	Southern New England	Georges Bank	Gulf of Maine
NEMATODA	-	-	[0.2]	-
MOLLUSCA	-	[2.7]	[4.5]	-
Bivalvia	-	2.7	-	-
Cephalopoda	-	-	4.5	-
POLYCHAETA	-	[11.2]	[1.8]	[15.8]
Maldanidae	-	-	0.9	-
<i>Eunice</i> sp.	-	-	-	15.8
<i>Onuphis</i> sp.	-	1.9	-	-
Terebellidae	-	8.1	-	-
Polychaeta unid.	-	1.2	0.9	-
CRUSTACEA	[82.8]	[53.0]	[41.7]	[84.2]
Cumacea	(0.1)	-	(<0.1)	-
Amphipoda	(6.7)	(0.3)	(0.4)	-
<i>Unciola inermis</i>	1.1	-	-	-
<i>Unciola irrorata</i>	0.4	-	0.4	-
<i>Unciola dissimilis</i>	2.2	0.2	-	-
<i>Unciola</i> sp.	3.0	-	<0.1	-
Amphipoda unid.	<0.1	0.1	<0.1	-
Mysidacea	-	(0.1)	(<0.1)	-
Euphausiacea	(2.8)	(9.4)	(1.0)	-
<i>Meganyctiphanes norvegica</i>	2.8	-	0.5	-
Euphausiacea unid.	-	9.4	0.5	-
Decapoda	(72.3)	(39.1)	(39.2)	(84.2)
<i>Spirontocaris</i> sp.	-	-	0.3	-
<i>Eualus pusiolus</i>	-	-	0.1	-
<i>Dichelopandalus leptocerus</i>	-	-	38.1	-
<i>Pagurus</i> sp.	-	1.8	-	-
<i>Munida</i> sp.	4.5	-	-	-
<i>Caridion gordonii</i>	-	-	0.7	-
<i>Cancer irroratus</i>	5.9	11.7	-	-
<i>Cancer</i> sp.	28.5	2.1	-	-
Crab unid.	0.9	23.5	-	-
Shrimp unid.	32.5	-	-	84.2
Crustacea unid.	(0.9)	(4.1)	(1.1)	-
ECHINODERMATA	[4.6]	-	[1.1]	-
Holothuroidea	4.6	-	-	-
Ophiuroidea	-	-	1.1	-
SALPIDAE	-	-	[45.7]	-
<i>Salpa fusiformis</i>	-	-	20.7	-
Salpidae unid.	-	-	25.0	-
OSTEICHTHYES	[10.1]	[2.9]	[0.6]	-
ANIMAL REMAINS AND MISC.	[2.5]	[30.2]	[4.4]	-
Number sampled	28	16	36	1
Number empty	12	4	10	0
Mean stomach content (g)	0.121	0.150	0.363	0.679
Mean fish length (cm)	15	15	17	21

Table B-32a. Diet composition and sampling data for Acadian redfish by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)							Total
	11-15	16-20	21-25	26-30	31-35	36-40	41-45	
SIPHONOPHORA	-	-	-	-	-	[0.3]	-	[0.1]
NEMATODA	-	-	[<0.1]	-	-	[<0.1]	-	[<0.1]
CHAETOGNATHA	-	-	[<0.1]	-	-	[<0.1]	-	[<0.1]
MOLLUSCA	-	-	-	[6.2]	[<0.1]	-	-	[0.7]
POLYCHAETA	-	-	[0.5]	-	-	-	-	[0.1]
CRUSTACEA	[100.0]	[100.0]	[98.7]	[92.4]	[80.0]	[99.5]	[100.0]	[91.3]
Copepoda	-	(62.7)	(29.3)	(10.0)	(0.3)	(1.0)	-	(5.9)
<i>Calanus</i> sp.	-	62.7	29.3	10.0	0.3	1.0	-	5.9
Cumacea	-	-	-	-	-	(<0.1)	-	(<0.1)
<i>Diastylis</i> sp.	-	-	-	-	-	<0.1	-	<0.1
Amphipoda	-	(0.4)	(0.8)	(0.1)	(1.4)	(0.5)	(42.9)	(1.0)
<i>Parathemisto gaudichaudii</i>	-	0.4	0.7	-	1.3	0.2	-	0.6
<i>Parathemisto</i> sp.	-	-	0.1	<0.1	<0.1	0.2	38.9	0.2
<i>Vibilia</i> sp.	-	-	-	-	-	0.1	-	0.1
Hyperiididae	-	<0.1	<0.1	<0.1	0.1	<0.1	-	0.1
Oedicerotidae	-	-	-	-	-	<0.1	4.0	<0.1
Amphipoda unid.	-	-	-	0.1	-	-	-	<0.1
Euphausiacea	-	(32.3)	(65.4)	(81.0)	(77.5)	(90.8)	(57.1)	(80.7)
<i>Meganyctiphanes norvegica</i>	-	32.3	64.0	78.3	76.9	90.3	57.1	79.9
Euphausiacea unid.	-	-	1.4	2.7	0.6	0.5	-	0.8
Decapoda	-	(4.1)	(3.0)	-	(0.3)	(6.6)	-	(3.1)
<i>Spirontocaris liljeborgii</i>	-	4.1	-	-	-	-	-	0.1
<i>Dichelopandalus leptocerus</i>	-	-	3.0	-	-	0.5	-	0.5
Pandalidae	-	-	-	-	-	0.8	-	0.3
<i>Crangon septemspinosa</i>	-	-	-	-	-	4.8	-	1.9
Shrimp unid.	-	-	-	-	-	0.2	-	0.1
Decapoda larvae	-	-	<0.1	<0.1	-	-	-	<0.1
Decapoda unid.	-	-	-	-	0.3	0.3	-	0.2
Crustacea unid.	(100.0)	(0.5)	(0.2)	(1.3)	(0.5)	(0.6)	-	(0.6)
OSTEICHTHYES	-	-	-	[1.3]	[19.5]	[0.2]	-	[7.5]
<i>Merluccius bilinearis</i>	-	-	-	-	19.5	-	-	7.3
<i>Cryptacanthodes maculatus</i>	-	-	-	-	-	0.2	-	0.1
<i>Sebastes fasciatus</i>	-	-	-	1.3	-	-	-	0.1
Osteichthyes larvae	-	-	-	-	-	<0.1	-	<0.1
ANIMAL REMAINS	-	-	[0.8]	[0.1]	[0.5]	[<0.1]	-	[0.3]
Number sampled	4	14	45	55	77	63	8	266
Number empty	1	8	29	35	45	29	5	152
Mean stomach content (g)	0.038	0.306	0.439	0.374	0.939	1.216	0.062	0.730
Mean fish length (cm)	14	19	23	28	32	37	41	30

Table B-32b. Diet composition and sampling data for Acadian redfish by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area		
	Georges Bank	Gulf of Maine	Scotian Shelf
SIPHONOPHORA	-	[0.2]	-
NEMATODA	-	-	[<0.1]
CHAETOGNATHA	-	[<0.1]	[<0.1]
MOLLUSCA	-	[1.4]	[<0.1]
POLYCHAETA	-	-	[<0.1]
CRUSTACEA	[100.0]	[82.6]	[99.4]
Copepoda	(63.5)	(0.8)	(10.6)
<i>Calanus</i> sp.	63.5	0.8	10.6
Cumacea	-	-	(<0.1)
<i>Diastylis</i> sp.	-	-	<0.1
Amphipoda	(18.6)	(0.1)	(1.6)
<i>Parathemisto gaudichaudii</i>	18.6	0.1	1.1
<i>Parathemisto</i> sp.	-	-	0.4
<i>Vibilia</i> sp.	-	-	<0.1
Hyperiididae	-	<0.1	0.1
Oedicerotidae	-	-	<0.1
Amphipoda unid.	-	<0.1	-
Euphausiacea	(12.8)	(81.0)	(80.6)
<i>Meganyctiphanes norvegica</i>	12.8	80.7	79.2
Euphausiacea unid.	-	0.3	1.4
Decapoda	-	(0.5)	(5.6)
<i>Spirontocaris liljeborgii</i>	-	-	0.2
<i>Dichelopandalus leptocerus</i>	-	-	1.0
Pandalidae	-	-	0.6
<i>Crangon septemspinosa</i>	-	-	3.6
Shrimp unid.	-	-	0.2
Decapoda larvae	-	-	<0.1
Decapoda unid.	-	0.5	-
Crustacea unid.	(5.1)	(0.2)	(1.0)
OSTEICHTHYES	-	[15.6]	[<0.1]
<i>Merluccius bilinearis</i>	-	15.1	-
<i>Cryptacanthodes maculatus</i>	-	0.2	-
<i>Sebastes fasciatus</i>	-	0.3	-
Osteichthyes larvae	-	<0.1	<0.1
ANIMAL REMAINS	-	[0.2]	[0.6]
Number sampled	3	86	177
Number empty	1	42	109
Mean stomach content (g)	0.052	1.088	0.567
Mean fish length (cm)	22	31	30

Table B-33. Diet composition and sampling data for northern searobin by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)				Total
	11-15	16-20	21-25	26-30	
MOLLUSCA	-	[1.9]	[2.5]	[10.4]	[3.9]
Bivalvia	-	(1.9)	(2.5)	(8.4)	(3.4)
Solenidae	-	-	-	6.0	1.2
<i>Tellina agilis</i>	-	1.8	2.0	2.4	1.9
Bivalvia unid.	-	0.1	0.5	-	0.3
Mollusca unid.	-	-	(<0.1)	(2.0)	(0.5)
POLYCHAETA	-	[1.5]	[26.7]	[1.2]	[15.2]
Nephtyidae	-	0.6	0.3	0.4	0.4
Spionidae	-	-	22.1	-	12.1
Polychaeta unid.	-	0.9	4.3	0.8	2.7
CRUSTACEA	[87.8]	[90.2]	[45.8]	[20.1]	[51.5]
Cumacea	-	(10.8)	(1.1)	(0.2)	(3.0)
<i>Pseudoleptocuma minor</i>	-	0.5	-	-	0.1
<i>Oxyurostylis smithi</i>	-	10.3	0.9	-	2.6
Cumacea unid.	-	-	0.2	0.2	0.3
Isopoda	-	(1.0)	(<0.1)	-	(0.3)
<i>Edotea</i> sp.	-	1.0	<0.1	-	0.3
Amphipoda	(3.7)	(2.9)	(8.3)	(2.5)	(5.9)
<i>Ampelisca agassizi</i>	-	-	0.2	-	0.1
Ampeliscidae	3.7	-	0.3	-	0.3
<i>Erichthonius rubricornis</i>	-	-	0.9	-	0.5
<i>Unciola irrorata</i>	-	1.1	4.9	0.4	3.0
<i>Protohaustorius wigleyi</i>	-	-	0.2	0.6	0.2
<i>Leptocheirus pinguis</i>	-	-	0.7	-	0.4
<i>Rhepoxynius epistomus</i>	-	-	-	1.3	0.3
Caprellidae	-	0.5	0.9	-	0.6
Gammaridea	-	1.3	0.2	0.2	0.5
Decapoda	(16.9)	(71.0)	(33.8)	(17.4)	(37.3)
<i>Dichelopandalus leptocerus</i>	-	-	4.6	-	2.5
<i>Crangon septemspinosa</i>	5.8	38.6	8.7	-	12.9
<i>Cancer borealis</i>	-	-	0.4	-	0.2
<i>Cancer irroratus</i>	7.8	27.9	16.1	17.4	18.5
Cancridae	-	1.0	-	-	0.2
Crab unid.	3.3	-	1.7	-	1.0
Decapoda larvae	-	1.0	2.0	-	1.3
Decapoda unid.	-	2.5	0.3	-	0.7
Crustacea unid.	(67.2)	(4.5)	(2.6)	-	(5.0)
OSTEICHTHYES	-	[0.9]	[2.1]	[64.3]	[14.7]
<i>Paralichthys dentatus</i>	-	-	0.8	-	0.4
Pleuronectiformes	-	0.9	-	-	0.2
Osteichthyes unid.	-	-	1.3	64.3	14.1
ANIMAL REMAINS	-	[5.0]	[9.5]	[2.3]	[6.4]
SAND AND ROCK	[12.2]	[0.5]	[13.4]	[1.7]	[8.3]
Number sampled	7	11	19	4	41
Number empty	1	2	4	1	8
Mean stomach content (g)	0.057	0.192	0.299	0.537	0.252
Mean fish length (cm)	14	18	22	28	20

Table B-34a. Diet composition and sampling data for sea raven by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)									Total
	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	>45	
RHYNCHOCOELA	-	-	-	-	-	-	-	[0.1]	-	[<0.1]
MOLLUSCA	[0.3]	-	-	-	[2.6]	[9.2]	-	[<0.1]	[<0.1]	[1.6]
Bivalvia	-	-	-	-	(2.6)	(0.3)	-	-	(<0.1)	(0.2)
<i>Anadara transversa</i>	-	-	-	-	-	<0.1	-	-	-	<0.1
<i>Clinocardium ciliatum</i>	-	-	-	-	-	0.3	-	-	-	0.1
Bivalvia unid.	-	-	-	-	2.6	-	-	-	<0.1	0.1
Cephalopoda	-	-	-	-	-	(8.9)	-	(<0.1)	-	(1.4)
<i>Illex</i> sp.	-	-	-	-	-	-	-	<0.1	-	<0.1
Cephalopoda unid.	-	-	-	-	-	8.9	-	-	-	1.4
Mollusca unid.	(0.3)	-	-	-	-	-	-	-	-	(<0.1)
CRUSTACEA	[99.7]	[100.0]	[11.7]	[24.5]	[28.5]	[22.7]	[23.6]	[30.5]	[22.9]	[24.0]
Amphipoda	(3.1)	-	(<0.1)	-	-	-	-	-	-	(<0.1)
Euphausiacea	-	(43.2)	-	-	-	-	-	-	-	(<0.1)
<i>Euphausia krohnii</i>	-	22.9	-	-	-	-	-	-	-	<0.1
<i>Meganctiphanes norvegica</i>	-	20.3	-	-	-	-	-	-	-	<0.1
Decapoda	(96.6)	(45.0)	(10.3)	(24.5)	(28.5)	(22.7)	(23.6)	(30.5)	(22.9)	(24.0)
Hippolytidae	-	-	0.7	-	-	-	-	-	-	<0.1
<i>Dichelopandalus leptocerus</i>	-	-	4.7	1.2	7.2	<0.1	0.6	-	-	0.4
<i>Pandalus borealis</i>	-	-	-	-	-	-	-	-	<0.1	0.1
<i>Pandalus montagui</i>	-	-	-	2.1	-	-	-	-	-	0.1
Pandalidae	-	-	-	-	1.0	-	-	-	-	<0.1
<i>Crangon septemspinosa</i>	63.0	45.0	-	0.2	-	-	-	-	-	<0.1
<i>Pagurus</i> sp.	-	-	-	-	-	-	-	-	0.1	<0.1
<i>Hyas coarctatus</i>	-	-	-	-	-	-	-	-	0.4	0.2
<i>Cancer borealis</i>	-	-	-	17.2	-	-	8.8	30.5	22.4	17.4
<i>Cancer irroratus</i>	-	-	-	3.8	20.3	22.7	14.2	-	-	5.8
Shrimp unid.	33.6	-	-	-	-	<0.1	-	-	-	<0.1
Decapoda unid.	-	-	4.9	-	-	<0.1	-	-	-	<0.1
Crustacea unid.	-	(11.8)	(1.4)	-	-	(<0.1)	(<0.1)	-	-	(<0.1)
OSTEICHTHYES	-	-	[87.4]	[75.5]	[56.9]	[67.4]	[76.4]	[69.4]	[77.0]	[73.8]
<i>Merluccius bilinearis</i>	-	-	-	-	-	4.4	-	-	-	0.7
Gadidae	-	-	-	11.4	-	-	-	-	-	0.4
Anarhichadidae	-	-	-	-	-	-	-	-	71.7	38.6
<i>Liparis atlanticus</i>	-	-	4.8	-	-	0.6	-	-	-	0.1
<i>Liparis liparis</i>	-	-	-	-	0.6	-	-	-	-	<0.1
Ophiidiidae	-	-	-	-	-	7.5	13.6	-	-	2.6
<i>Pholis gunnellus</i>	-	-	18.8	-	-	-	-	-	-	0.2
<i>Lumpenus lumpretaeformis</i>	-	-	-	33.0	-	-	-	-	-	1.1
<i>Macrozoarces americanus</i>	-	-	-	3.3	-	17.1	-	-	-	2.8
Osteichthyes unid.	-	-	63.8	27.8	56.3	37.8	62.8	69.4	5.3	27.3
ANIMAL REMAINS	-	-	[0.7]	-	[0.1]	[<0.1]	-	[<0.1]	[<0.1]	[0.1]
ROCK AND SAND	-	-	[0.2]	[<0.1]	[11.9]	[0.7]	[<0.1]	-	[0.1]	[0.5]
Number sampled	4	7	18	22	17	34	20	8	16	146
Number empty	0	3	7	10	9	16	11	3	7	66
Mean stomach content (g)	0.080	0.077	0.867	2.899	3.433	9.030	10.564	31.104	65.994	13.436
Mean fish length (cm)	9	13	18	22	28	33	37	42	51	30

Table B-34b. Diet composition and sampling data for sea raven by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area				
	Southern New England	Georges Bank	Gulf of Maine	Scotian Shelf	Inshore North of Cape Hatteras
RHYNCHOCOELA	-	[<0.1]	-	-	-
MOLLUSCA	-	[3.6]	[0.8]	-	[<0.1]
Bivalvia	-	-	(0.8)	-	(<0.1)
<i>Anadara transversa</i>	-	-	<0.1	-	-
<i>Clinocardium ciliatum</i>	-	-	0.3	-	-
Bivalvia unid.	-	-	0.5	-	<0.1
Cephalopoda	-	(3.6)	-	-	(<0.1)
<i>Illex</i> sp.	-	-	-	-	<0.1
Cephalopoda unid.	-	3.6	-	-	-
Mollusca unid.	-	(<0.1)	-	-	-
CRUSTACEA	[64.8]	[51.5]	[1.5]	[63.5]	[8.4]
Amphipoda	-	(<0.1)	-	-	(<0.1)
Euphausiacea	-	(<0.1)	-	-	-
<i>Euphausia krohnii</i>	-	<0.1	-	-	-
<i>Meganctiphanes norvegica</i>	-	<0.1	-	-	-
Decapoda	(64.8)	(51.5)	(1.5)	(63.5)	(8.4)
Hippolytidae	-	-	-	-	<0.1
<i>Dichelopandalus leptocerus</i>	-	0.4	1.1	63.5	-
<i>Pandalus borealis</i>	-	-	-	-	0.1
<i>Pandalus montagui</i>	-	-	-	-	0.1
Pandalidae	-	-	0.2	-	-
<i>Crangon septemspinosa</i>	-	<0.1	-	-	-
<i>Pagurus</i> sp.	-	-	-	-	<0.1
<i>Hyas coarctatus</i>	-	-	-	-	0.5
<i>Cancer borealis</i>	-	45.2	-	-	-
<i>Cancer irroratus</i>	-	5.9	-	-	7.7
Shrimp unid.	64.8	-	<0.1	-	-
Decapoda unid.	-	-	0.2	-	<0.1
Crustacea unid.	-	(<0.1)	-	-	-
OSTEICHTHYES	-	[44.2]	[97.6]	[36.5]	[90.6]
<i>Merluccius bilinearis</i>	-	-	4.4	-	-
Gadidae	-	1.0	-	-	-
Anarhichadidae	-	-	-	-	84.5
<i>Liparis atlanticus</i>	-	0.3	-	-	-
<i>Liparis liparis</i>	-	-	-	36.5	-
Ophidiidae	-	6.9	-	-	-
<i>Pholis gunnellus</i>	-	-	-	-	0.3
<i>Lumpenus lumpretaeformis</i>	-	-	6.8	-	-
<i>Macrozoarces americanus</i>	-	0.3	17.0	-	-
Osteichthyes unid.	-	35.7	69.4	-	5.8
ANIMAL REMAINS	[19.4]	[0.3]	[0.1]	-	[0.2]
ROCK AND SAND	[15.8]	[0.4]	[<0.1]	-	[0.8]
Number sampled	14	73	31	6	22
Number empty	12	27	13	4	10
Mean stomach content (g)	0.012	10.337	10.007	0.161	40.712
Mean fish length (cm)	26	29	33	25	34

Table B-35a. Diet composition and sampling data for longhorn sculpin by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)							Total
	6-10	11-15	16-20	21-25	26-30	31-35	36-40	
MOLLUSCA	-	-	-	[1.6]	[0.4]	[<0.1]	-	[0.5]
Gastropoda	-	-	-	0.7	0.1	-	-	0.2
Mollusca unid.	-	-	-	0.9	0.3	<0.1	-	0.3
POLYCHAETA	[11.7]	[23.4]	[1.5]	[1.0]	[1.8]	[3.3]	-	[2.1]
Aphroditidae	-	-	-	-	0.5	3.3	-	1.0
Polychaeta unid.	11.7	23.4	1.5	1.0	1.3	-	-	1.1
CRUSTACEA	[81.6]	[68.8]	[96.2]	[93.2]	[85.2]	[63.9]	[89.5]	[82.4]
Isopoda	-	-	-	(0.3)	(0.3)	-	-	(0.2)
<i>Cirolana polita</i>	-	-	-	0.3	0.3	-	-	0.2
Amphipoda	(53.3)	(18.8)	-	(1.1)	(2.0)	(0.6)	-	(1.9)
<i>Calliopius laeviusculus</i>	-	-	-	-	1.1	-	-	0.7
<i>Erichthonius rubricornis</i>	3.3	-	-	<0.1	<0.1	-	-	<0.1
<i>Unciola irrorata</i>	8.3	-	-	0.4	0.5	0.4	-	0.5
Lysianassidae	-	-	-	-	-	0.2	-	0.1
Oedicerotidae	-	-	-	0.1	<0.1	-	-	<0.1
<i>Leptocheirus pinguis</i>	-	17.2	-	0.2	<0.1	<0.1	-	0.1
Podoceridae	16.7	-	-	-	-	-	-	<0.1
<i>Aeginina longicornis</i>	-	-	-	-	0.3	-	-	0.2
Caprellidae	-	-	-	<0.1	0.1	-	-	0.1
Amphipoda unid.	25.0	1.6	-	0.4	<0.1	<0.1	-	0.2
Decapoda	-	(14.1)	(96.2)	(84.5)	(80.2)	(62.3)	(89.5)	(77.2)
<i>Dichelopandalus leptocerus</i>	-	-	54.9	29.6	3.5	26.8	89.5	12.2
<i>Crangon septemspinosa</i>	-	-	11.0	5.3	3.6	6.5	-	4.5
<i>Axius serratus</i>	-	-	-	5.5	-	1.2	-	0.9
<i>Pagurus acadianus</i>	-	-	6.1	1.6	10.9	1.3	-	7.7
<i>Pagurus annulipes</i>	-	-	-	-	<0.1	3.0	-	0.7
Paguridae	-	-	-	-	4.0	-	-	2.6
<i>Hyas coarctatus</i>	-	-	-	0.4	1.9	5.5	-	2.4
<i>Hyas</i> sp.	-	-	-	-	1.1	0.3	-	0.8
<i>Cancer irroratus</i>	-	-	16.5	36.6	53.2	2.6	-	40.2
Cancridae	-	-	-	-	0.2	-	-	0.2
<i>Ovalipes ocellatus</i>	-	-	-	0.2	-	-	-	<0.1
Crab unid.	-	-	7.7	1.4	0.2	4.0	-	1.2
Shrimp unid.	-	14.1	-	3.9	1.6	10.2	-	3.6
Decapoda unid.	-	-	-	<0.1	<0.1	0.9	-	0.2
Crustacea unid.	(28.3)	(35.9)	-	(7.3)	(2.7)	(1.0)	-	(3.1)
OSTEICHTHYES	-	-	-	-	[7.3]	[27.6]	-	[10.5]
Gadidae	-	-	-	-	0.2	-	-	0.1
<i>Ammodytes dubius</i>	-	-	-	-	-	19.5	-	4.0
<i>Myoxocephalus octodecemspinus</i>	-	-	-	-	0.2	-	-	0.2
Osteichthyes unid.	-	-	-	-	6.9	8.1	-	6.2
ANIMAL REMAINS AND MISC.	[5.0]	[7.8]	[2.3]	[4.2]	[3.9]	[1.1]	-	[2.7]
SAND AND ROCK	[1.7]	-	-	[<0.1]	[1.4]	[4.1]	[10.5]	[1.8]
Number sampled	11	2	6	32	75	22	1	149
Number empty	3	0	2	3	13	4	0	25
Mean stomach content (g)	0.005	0.032	0.560	1.008	2.234	2.362	0.086	1.714
Mean fish length (cm)	8	11	20	24	28	32	37	26

Table B-35b. Diet composition and sampling data for longhorn sculpin by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area			
	Southern New England	Georges Bank	Gulf of Maine	Scotian Shelf
MOLLUSCA	[<0.1]	[0.4]	-	[2.2]
Gastropoda	-	0.1	-	2.2
Mollusca unid.	<0.1	0.3	-	-
POLYCHAETA	[5.0]	[1.1]	[17.9]	[2.5]
Aphroditidae	4.2	-	17.9	1.9
Polychaeta unid.	0.8	1.1	-	0.6
CRUSTACEA	[91.4]	[79.2]	[79.4]	[94.2]
Isopoda	(0.1)	(0.2)	-	-
<i>Cirolana polita</i>	0.1	0.2	-	-
Amphipoda	(1.9)	(1.4)	-	-
<i>Calliopius laeviusculus</i>	-	0.9	-	-
<i>Erichthonius rubricornis</i>	<0.1	<0.1	-	-
<i>Unciola irrorata</i>	0.7	0.4	-	-
Lysianassidae	0.1	<0.1	-	-
<i>Leptocheirus pinguis</i>	<0.1	<0.1	-	-
Podoceridae	-	<0.1	-	-
<i>Aeginina longicornis</i>	1.1	-	-	-
Caprellidae	<0.1	<0.1	-	-
Amphipoda unid.	<0.1	0.1	-	-
Decapoda	(85.5)	(74.9)	(72.4)	(94.2)
<i>Dichelopandalus leptocerus</i>	41.3	5.9	-	28.0
<i>Crangon septemspinosa</i>	10.2	3.3	-	6.3
<i>Axius serratus</i>	-	0.3	-	18.4
<i>Pagurus acadianus</i>	1.8	9.4	-	0.2
<i>Pagurus annulipes</i>	-	0.8	-	-
Paguridae	2.5	2.8	-	-
<i>Hyas coarctatus</i>	4.0	2.3	-	-
<i>Hyas</i> sp.	0.4	-	47.3	-
<i>Cancer irroratus</i>	5.9	47.9	-	39.8
Cancridae	1.0	-	-	-
<i>Ovalipes ocellatus</i>	-	<0.1	-	-
Crab unid.	1.2	1.3	-	1.5
Shrimp unid.	17.2	0.7	25.1	-
Decapoda unid.	<0.1	0.2	-	-
Crustacea unid.	(3.9)	(2.7)	(7.0)	(<0.1)
OSTEICHTHYES	[1.0]	[12.9]	-	-
Gadidae	-	0.1	-	-
<i>Ammodytes dubius</i>	-	5.0	-	-
<i>Myoxocephalus octodecemspinus</i>	1.0	-	-	-
Osteichthyes unid.	-	7.8	-	-
ANIMAL REMAINS AND MISC.	[2.1]	[4.4]	[2.7]	[0.3]
SAND AND ROCK	[0.5]	[2.0]	-	[0.8]
Number sampled	33	99	10	7
Number empty	7	11	5	2
Mean stomach content (g)	1.224	2.035	0.383	1.373
Mean fish length (cm)	28	25	28	22

Table B-36. Diet composition and sampling data for moustache sculpin by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)		
	6-10	11-15	Total
POLYCHAETA	[31.9]	[5.2]	[16.1]
<i>Rhodine</i> sp.	1.5	-	0.6
<i>Nothria conchylega</i>	-	1.2	0.7
Polychaeta unid.	30.4	4.0	14.8
CRUSTACEA	[68.1]	[93.8]	[83.5]
Copepoda	(0.1)	-	(0.1)
<i>Calanus</i> sp.	0.1	-	0.1
Cumacea	(5.5)	-	(2.3)
<i>Diastylis quadrispinosa</i>	5.5	-	2.3
Amphipoda	(14.7)	(5.1)	(9.1)
<i>Haploops</i> sp.	5.1	-	2.1
Ampeliscidae	2.4	-	1.0
Caprellidae	-	0.3	0.2
<i>Erichthonius</i> sp.	0.9	0.7	0.8
<i>Unciola irrorata</i>	1.2	-	0.5
Corophiidae	0.5	-	0.2
<i>Leptocheirus pinguis</i>	1.8	3.4	2.7
<i>Podoceroopsis nitida</i>	-	0.4	0.2
<i>Dulichia</i> sp.	0.1	-	0.1
Tironidae	1.9	-	0.8
Gammaridea	0.8	0.3	0.5
Decapoda	(41.5)	(86.1)	(67.9)
<i>Eualus pusiolus</i>	4.9	-	2.0
<i>Dichelopandalus leptocerus</i>	24.0	-	9.9
<i>Pandalus borealis</i>	12.6	-	5.2
Pandalidae	-	57.5	33.9
<i>Crangon septemspinosa</i>	-	1.2	0.7
Crangonidae	-	2.8	1.7
Shrimp unid.	-	24.6	14.5
Crustacea unid.	(6.3)	(2.6)	(4.1)
ROCK	-	[1.0]	[0.4]
Number sampled	12	16	28
Number empty	1	1	2
Mean stomach content (g)	0.071	0.076	0.074
Mean fish length (cm)	8	12	10

Table B-37a. Diet composition and sampling data for black sea bass by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)									Total
	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	>40	
MOLLUSCA	-	[0.5]	[2.4]	[6.7]	[20.4]	[9.2]	[2.5]	[10.5]	[6.7]	[10.2]
Bivalvia	-	(0.5)	(1.8)	(4.2)	(7.4)	(8.0)	(1.1)	(6.9)	(1.3)	(5.2)
<i>Laevicardium</i> sp.	-	-	-	1.7	2.2	6.6	-	-	-	2.6
<i>Ensis directus</i>	-	-	-	-	0.3	-	-	6.9	1.3	0.5
Bivalvia unid.	-	0.5	1.8	2.5	4.9	1.4	1.1	-	-	2.1
Cephalopoda	-	-	-	(1.0)	(12.1)	(0.6)	(0.5)	(3.3)	(2.3)	(3.8)
<i>Loligo</i> sp.	-	-	-	-	4.1	-	-	-	2.2	1.3
Cephalopoda unid.	-	-	-	1.0	8.0	0.6	0.5	3.3	0.1	2.5
Mollusca unid.	-	-	(0.6)	(1.5)	(0.9)	(0.6)	(0.9)	(0.3)	(3.1)	(1.2)
POLYCHAETA	-	[5.8]	[8.3]	[0.2]	[0.7]	[0.2]	[0.4]	[<0.1]	[9.6]	[1.9]
CRUSTACEA	[85.5]	[91.5]	[82.4]	[76.3]	[45.7]	[57.8]	[78.8]	[45.7]	[17.3]	[54.5]
Amphipoda	(43.6)	(19.9)	(0.3)	(<0.1)	(<0.1)	(<0.1)	(7.5)	-	-	(1.2)
Mysidacea	(3.2)	(4.2)	-	(1.1)	(<0.1)	(2.5)	(<0.1)	-	-	(0.9)
Euphausiacea	-	-	(33.8)	(34.2)	(7.3)	-	-	-	-	(6.3)
<i>Meganctiphanes norvegica</i>	-	-	33.8	34.2	7.3	-	-	-	-	6.3
Decapoda	(35.5)	(44.2)	(46.9)	(40.3)	(38.2)	(54.9)	(70.2)	(45.7)	(17.3)	(45.6)
<i>Dichelopandalus leptocerus</i>	-	7.2	-	<0.1	-	-	-	-	-	<0.1
<i>Crangon septemspinosa</i>	14.5	19.4	0.1	<0.1	0.3	0.3	<0.1	-	0.1	0.2
Paguridae	-	1.9	6.4	2.4	5.8	3.8	0.9	-	2.0	3.4
<i>Munida</i> sp.	-	1.7	-	2.3	0.4	4.5	1.7	-	-	1.9
<i>Cancer borealis</i>	-	-	1.8	-	-	<0.1	7.6	-	-	1.2
<i>Cancer irroratus</i>	-	10.2	23.8	19.6	17.5	40.4	37.2	45.7	7.6	27.0
<i>Ovalipes</i> sp.	-	-	-	-	-	-	15.2	-	4.8	3.0
Decapoda unid.	21.0	3.8	14.8	16.0	14.2	5.9	7.6	-	2.8	8.9
Crustacea unid.	(3.2)	(23.2)	(1.4)	(0.7)	(0.2)	(0.4)	(1.1)	-	-	(0.5)
OSTEICHTHYES	-	[1.8]	[2.6]	[8.4]	[27.8]	[25.0]	[14.7]	[43.5]	[62.9]	[28.5]
<i>Ophichthus cruentifer</i>	-	-	-	-	-	-	-	-	0.3	0.1
Alepocephalidae	-	-	-	-	-	2.0	-	-	-	0.6
<i>Clupea harengus</i>	-	-	-	-	2.3	-	-	-	-	0.6
<i>Anchoa hepsetus</i>	-	-	-	6.8	17.2	-	-	-	9.5	6.4
<i>Anchoa mitchilli</i>	-	-	-	-	-	-	9.6	-	-	1.5
Engraulidae	-	-	-	-	3.7	-	-	-	-	0.9
<i>Cyprinodon variegatus</i>	-	-	-	-	-	-	-	30.4	-	1.3
<i>Hippocampus</i> sp.	-	-	-	-	-	-	1.9	-	-	0.3
<i>Syngnathus fuscus</i>	-	-	-	-	-	-	3.0	-	-	0.5
Myctophidae	-	-	-	-	-	12.8	-	-	-	3.6
Ophidiidae	-	-	-	-	-	2.1	-	-	-	0.6
<i>Ammodytes dubius</i>	-	-	-	-	-	-	-	-	20.6	3.0
<i>Stenotomus chrysops</i>	-	-	-	-	-	3.7	-	-	25.3	4.8
<i>Scophthalmus aquosus</i>	-	-	-	-	-	-	-	-	4.4	0.7
Osteichthyes larvae	-	-	-	-	<0.1	<0.1	-	-	-	<0.1
Osteichthyes unid.	-	1.8	2.6	1.6	4.6	4.4	0.2	13.1	2.8	3.6
ANIMAL REMAINS AND MISC.	[14.5]	[0.4]	[4.3]	[8.4]	[5.4]	[7.8]	[3.6]	[0.3]	[3.5]	[4.9]
Number sampled	9	82	69	142	188	103	49	16	22	680
Number empty	1	11	19	36	64	30	18	11	5	195
Mean stomach content (g)	0.007	0.023	0.223	0.581	0.975	2.033	2.314	1.912	4.983	1.097
Mean fish length (cm)	5	7	13	18	22	27	32	38	45	21

Table B-37b. Diet composition and sampling data for black sea bass by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area					
	Middle Atlantic	Southern New England	Georges Bank	Offshore South of Cape Hatteras	Inshore South of Cape Hatteras	Inshore North of Cape Hatteras
MOLLUSCA	[5.4]	-	-	[12.0]	[19.6]	[7.5]
Bivalvia	(1.8)	-	-	(10.8)	(12.6)	(2.2)
<i>Laevicardium</i> sp.	-	-	-	-	9.0	-
Bivalvia unid.	1.8	-	-	10.8	3.6	2.2
Cephalopoda	(1.6)	-	-	-	(5.9)	(5.3)
<i>Loligo</i> sp.	0.4	-	-	-	-	4.2
Cephalopoda unid.	1.2	-	-	-	5.9	1.1
Mollusca unid.	(2.0)	-	-	(1.2)	(1.1)	(<0.1)
POLYCHAETA	[3.7]	[0.3]	-	[3.4]	[<0.1]	[0.9]
CRUSTACEA	[63.1]	[96.7]	[97.4]	[22.8]	[33.5]	[64.1]
Amphipoda	(<0.1)	(17.2)	-	-	(<0.1)	(4.2)
Mysidacea	(<0.1)	(3.4)	(18.4)	-	-	(3.2)
Euphausiacea	(14.8)	-	-	-	-	-
<i>Meganyctiphanes norvegica</i>	14.8	-	-	-	-	-
Decapoda	(48.1)	(52.4)	(21.1)	(22.7)	(33.0)	(55.9)
<i>Dichelopandalus leptocerus</i>	<0.1	11.9	-	-	-	-
<i>Crangon septemspinosa</i>	<0.1	31.8	-	-	-	0.6
Paguridae	1.3	3.2	-	0.1	3.9	6.1
<i>Munida</i> sp.	4.5	-	-	-	-	-
<i>Cancer borealis</i>	2.9	-	-	-	-	-
<i>Cancer irroratus</i>	34.6	1.9	-	-	2.2	43.0
<i>Ovalipes</i> sp.	1.7	-	-	-	5.5	2.7
Decapoda unid.	3.1	3.6	21.1	22.6	21.4	3.5
Crustacea unid.	(0.2)	(23.7)	(57.9)	(0.1)	(0.5)	(0.8)
OSTEICHTHYES	[23.6]	[3.0]	-	[61.1]	[43.7]	[18.4]
<i>Ophichthus cruentifer</i>	0.1	-	-	-	-	-
Alepocephalidae	-	-	-	-	1.9	-
<i>Clupea harengus</i>	-	-	-	-	2.0	-
<i>Anchoa hepsetus</i>	-	-	-	-	22.3	-
<i>Anchoa mitchilli</i>	-	-	-	-	-	5.4
Engraulidae	-	-	-	-	3.2	-
<i>Cyprinodon variegatus</i>	-	-	-	-	4.4	-
<i>Hippocampus</i> sp.	-	-	-	15.7	-	-
<i>Syngnathus fuscus</i>	-	-	-	-	-	1.7
Myctophidae	8.5	-	-	-	-	-
Ophidiidae	1.4	-	-	-	-	-
<i>Ammodytes dubius</i>	0.2	-	-	-	-	10.8
<i>Stenotomus chrysops</i>	8.8	-	-	-	3.7	-
<i>Scophthalmus aquosus</i>	1.5	-	-	-	-	-
Osteichthyes larvae	-	-	-	-	<0.1	<0.1
Osteichthyes unid.	3.1	3.0	-	45.4	6.2	0.5
ANIMAL REMAINS AND MISC.	[4.2]	-	[2.6]	[0.7]	[3.2]	[9.1]
Number sampled	288	39	9	28	185	131
Number empty	105	4	4	6	52	24
Mean stomach content (g)	1.096	0.029	0.004	0.493	1.150	1.546
Mean fish length (cm)	23	7	7	20	22	20

Table B-38a. Diet composition and sampling data for bluefish by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)									Total
	1-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	>80	
MOLLUSCA	-	[6.3]	[7.4]	[8.5]	[19.3]	[15.0]	[57.7]	[61.7]	[21.2]	[40.1]
Cephalopoda	-	(6.3)	(7.4)	(8.5)	(19.3)	(15.0)	(57.7)	(61.4)	(21.2)	(40.0)
<i>Illex</i> sp.	-	-	1.7	-	-	-	17.5	46.8	0.7	22.8
<i>Loligo pealeii</i>	-	-	-	-	-	2.8	1.4	7.1	-	3.9
<i>Loligo</i> sp.	-	<0.1	1.6	1.5	18.4	10.5	28.4	6.9	20.5	10.6
Cephalopoda unid.	-	6.3	4.1	7.0	0.9	1.7	10.4	0.6	-	2.7
Mollusca unid.	-	-	(<0.1)	-	-	-	-	(0.3)	-	(0.1)
POLYCHAETA	-	[2.2]	[3.7]	[<0.1]	-	[0.7]	-	-	-	[0.4]
Glyceridae	-	-	<0.1	-	-	0.7	-	-	-	0.1
<i>Ophioglycera gigantea</i>	-	-	3.7	-	-	-	-	-	-	0.3
Polychaeta unid.	-	2.2	<0.1	<0.1	-	-	-	-	-	<0.1
CRUSTACEA	-	[0.4]	[1.8]	[1.6]	-	[0.8]	[0.7]	[<0.1]	-	[0.6]
Amphipoda	-	(0.1)	(1.3)	(1.3)	-	-	-	-	-	(0.2)
Decapoda	-	-	(0.4)	(0.3)	-	(0.8)	(0.7)	(<0.1)	-	(0.4)
<i>Palaemonetes pugio</i>	-	-	-	0.3	-	-	-	-	-	<0.1
<i>Ovalipes ocellatus</i>	-	-	-	-	-	0.8	-	-	-	0.2
Decapoda unid.	-	-	0.4	<0.1	-	<0.1	0.7	<0.1	-	0.2
Crustacea unid.	-	(0.3)	(0.1)	(<0.1)	-	-	-	-	-	(<0.1)
OSTEICHTHYES	[100.0]	[90.6]	[86.7]	[89.9]	[80.7]	[83.3]	[39.9]	[38.2]	[78.8]	[58.8]
Batrachoidiformes	-	-	0.6	13.7	2.9	-	-	-	-	1.0
<i>Brevoortia tyrannus</i>	-	-	-	-	-	11.1	-	-	-	2.3
<i>Clupea harengus</i>	-	-	-	2.3	-	-	-	-	-	0.1
<i>Etrumeus teres</i>	-	-	15.9	11.7	14.8	34.4	0.9	2.0	-	11.3
Clupeidae	-	<0.1	2.7	-	-	-	-	-	-	0.2
<i>Anchoa hepsetus</i>	-	23.1	10.3	1.1	4.3	2.5	-	-	-	2.0
<i>Anchoa mitchilli</i>	-	-	2.0	1.8	-	0.2	-	-	-	0.3
Engraulidae	-	11.3	11.0	4.3	0.2	1.7	-	0.3	-	1.7
Myctophidae	-	-	3.5	-	-	-	-	-	-	0.3
<i>Merluccius bilinearis</i>	-	-	-	4.0	5.7	-	-	-	-	0.7
Gadidae	-	-	-	0.6	-	-	-	0.7	-	0.3
<i>Stenotomus chrysops</i>	-	-	1.3	-	3.4	-	2.3	-	-	0.7
<i>Ammodytes dubius</i>	-	-	<0.1	-	-	0.4	5.8	<0.1	-	0.8
<i>Scomber scombrus</i>	-	-	-	-	-	0.4	-	-	-	0.1
<i>Thunnus thynnus</i>	-	-	-	1.8	-	-	-	-	-	0.1
<i>Peprilus triacanthus</i>	-	-	15.6	14.2	6.8	6.2	9.3	3.1	22.5	6.5
<i>Sebastes fasciatus</i>	-	-	-	4.7	-	-	-	-	-	0.2
<i>Myoxocephalus octodecemsp.</i>	-	-	-	-	-	-	-	3.7	-	1.6
<i>Cynoscion regalis</i>	-	-	-	-	-	-	-	0.2	-	0.1
<i>Leiostomus xanthurus</i>	-	-	-	0.7	-	-	-	-	-	<0.1
<i>Prionotus</i> sp.	-	-	-	-	-	1.7	-	-	-	0.4
Pleuronectiformes	-	-	-	-	6.6	-	17.2	-	-	2.7
Osteichthyes unid.	100.0	56.2	23.8	29.0	36.0	24.7	4.4	28.2	56.3	25.4
ANIMAL REMAINS AND MISC.	-	[0.5]	[0.4]	-	[<0.1]	[0.2]	[1.7]	[0.1]	-	[0.1]
Number sampled	9	81	239	71	26	49	39	50	4	568
Number empty	7	28	76	22	1	5	9	6	1	155
Mean stomach content (g)	0.144	0.824	3.572	7.025	35.455	42.650	31.381	89.488	13.811	17.933
Mean fish length (cm)	10	16	25	34	45	54	65	74	84	35

Table B-38b. Diet composition and sampling data for bluefish by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area					
	Middle Atlantic	Southern New England	Georges Bank	Offshore South of Cape Hatteras	Inshore South of Cape Hatteras	Inshore North of Cape Hatteras
MOLLUSCA	[1.3]	[95.3]	[66.1]	-	[4.5]	[22.2]
Cephalopoda	(1.3)	(95.3)	(65.8)	-	(4.5)	(22.2)
<i>Illex</i> sp.	-	72.9	54.8	-	-	0.3
<i>Loligo pealeii</i>	-	-	-	-	-	7.0
<i>Loligo</i> sp.	-	11.2	8.1	-	3.3	12.9
Cephalopoda unid.	1.3	11.2	2.9	-	1.2	2.0
Mollusca unid.	-	-	(0.3)	-	(<0.1)	(<0.1)
POLYCHAETA	-	-	-	-	[0.5]	[0.8]
<i>Ophioglycera gigantea</i>	-	-	-	-	-	0.6
Polychaeta unid.	-	-	-	-	0.5	0.2
CRUSTACEA	-	-	[<0.1]	-	[1.8]	[0.7]
Amphipoda	-	-	-	-	-	(0.3)
Decapoda	-	-	(<0.1)	-	(1.6)	(0.4)
<i>Palaemonetes pugio</i>	-	-	-	-	0.4	-
<i>Ovalipes ocellatus</i>	-	-	-	-	-	0.3
Decapoda unid.	-	-	<0.1	-	1.2	0.1
Crustacea unid.	-	-	-	-	(0.2)	(<0.1)
OSTEICHTHYES	[98.1]	[4.6]	[33.9]	[100.0]	[92.3]	[75.5]
Batrachoidiformes	-	-	-	-	1.2	1.7
<i>Brevoortia tyrannus</i>	-	-	-	-	-	4.1
<i>Clupea harengus</i>	-	-	-	-	-	0.2
<i>Etrumeus teres</i>	89.9	-	0.9	-	-	19.3
Clupeidae	3.8	-	-	-	3.0	0.1
<i>Anchoa hepsetus</i>	-	-	-	-	19.5	2.2
<i>Anchoa mitchilli</i>	-	-	-	-	4.0	0.3
Engraulidae	-	-	-	-	11.6	2.2
Myctophidae	-	-	-	-	-	0.5
<i>Merluccius bilinearis</i>	-	-	-	-	-	1.3
Gadidae	-	-	0.9	-	-	<0.1
<i>Stenotomus chrysops</i>	-	-	-	-	-	1.3
<i>Ammodytes dubius</i>	-	-	2.1	-	0.2	0.1
<i>Scomber scombrus</i>	-	-	-	-	-	0.2
<i>Thunnus thynnus</i>	-	-	-	-	-	0.2
<i>Peprilus triacanthus</i>	-	-	-	-	5.8	11.4
<i>Sebastes fasciatus</i>	-	-	-	-	-	0.4
<i>Myoxocephalus octodecemspinosus</i>	-	-	4.7	-	-	-
<i>Cynoscion regalis</i>	-	-	-	-	-	0.2
<i>Leiostomus xanthurus</i>	-	-	-	-	-	<0.1
<i>Prionotus</i> sp.	-	-	-	-	-	0.7
Pleuronectiformes	-	-	0.4	-	-	4.6
Osteichthyes unid.	4.4	4.6	24.9	100.0	47.0	24.5
ANIMAL REMAINS AND MISC.	[0.6]	[0.1]	[<0.1]	-	[0.9]	[0.8]
Number sampled	3	5	58	1	136	365
Number empty	0	0	9	0	49	97
Mean stomach content (g)	12.782	103.849	60.804	117.095	2.853	15.333
Mean fish length (cm)	40	60	70	77	26	33

Table B-39. Diet composition and sampling data for longspine porgy by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)			Total
	6-10	11-15	16-20	
HYDROZOA	-	[0.7]	-	[0.4]
PLATYHELMINTHES	-	-	[0.4]	[0.1]
NEMATODA	[0.1]	[0.2]	-	[0.1]
CHAETOGNATHA	-	[0.4]	-	[0.3]
MOLLUSCA	-	-	[5.7]	[1.0]
Bivalvia	-	-	1.3	0.2
Cephalopoda	-	-	4.4	0.8
POLYCHAETA	[3.0]	[10.5]	[25.9]	[11.3]
Maldanidae	-	1.6	6.3	2.0
<i>Lumbrineris tenuis</i>	-	-	0.9	0.2
<i>Glycera capitata</i>	-	-	0.7	0.1
Glyceridae	-	2.4	0.1	1.4
Nephtyidae	2.6	0.4	-	0.9
Nereidae	0.2	0.3	-	0.2
<i>Sthenelais</i> sp.	-	0.5	-	0.3
Polychaeta unid.	0.2	5.3	17.9	6.2
CRUSTACEA	[42.1]	[30.8]	[1.9]	[28.8]
Copepoda	-	(5.8)	(0.1)	(3.4)
Amphipoda	-	(1.4)	(0.5)	(1.0)
<i>Ampelisca</i> sp.	-	0.6	-	0.3
<i>Unciola</i> sp.	-	<0.1	-	0.1
<i>Melita dentata</i>	-	-	0.1	<0.1
Gammaridea	-	-	0.4	0.1
Amphipoda unid.	-	0.8	-	0.5
Mysidacea	(0.2)	(0.1)	(1.2)	(0.5)
<i>Heteromysis formosa</i>	-	0.1	1.2	0.3
<i>Mysis mixta</i>	0.2	-	-	0.1
Mysidacea unid.	-	<0.1	-	0.1
Euphausiacea	-	(3.7)	-	(2.2)
Decapoda	(41.9)	(19.7)	(0.1)	(21.6)
<i>Lucifer faxoni</i>	8.1	3.0	-	3.7
Sergestidae	-	1.3	-	0.7
<i>Pagurus</i> sp.	-	1.5	-	0.9
Shrimp unid.	2.6	1.3	-	1.4
Decapoda larvae	10.8	2.9	0.1	4.3
Decapoda unid.	20.4	9.7	-	10.6
Crustacea unid.	-	(0.1)	-	(0.1)
OSTEICHTHYES	[8.2]	[0.8]	[2.2]	[2.9]
ANIMAL REMAINS	[45.4]	[55.7]	[47.9]	[51.5]
SAND	[1.2]	[0.9]	[16.0]	[3.6]
Number sampled	5	46	21	72
Number empty	0	25	8	33
Mean stomach content (g)	0.194	0.050	0.033	0.055
Mean fish length (cm)	10	13	16	14

Table B-40a. Diet composition and sampling data for scup by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)						Total
	6-10	11-15	16-20	21-25	26-30	31-35	
CNIDARIA	[<0.1]	-	[24.9]	[11.0]	[3.5]	-	[8.2]
Anthozoa	<0.1	-	-	0.9	3.5	-	1.2
Ceriantharia	-	-	24.9	10.1	-	-	7.0
RHYNCHOCOELA	-	-	-	[4.8]	[2.8]	-	[2.0]
CEPHALOPODA	-	-	[0.2]	[6.6]	[25.6]	[16.9]	[11.8]
<i>Illex</i> sp.	-	-	-	-	25.3	13.2	9.3
<i>Loligo pealeii</i>	-	-	-	-	-	3.7	0.7
Cephalopoda unid.	-	-	0.2	6.6	0.3	-	1.8
POLYCHAETA	[40.9]	[61.3]	[26.5]	[26.9]	[9.3]	[4.4]	[21.0]
<i>Lumbrineris fragilis</i>	-	3.9	0.6	-	1.4	-	0.7
Lumbrineridae	16.6	8.7	0.9	1.4	0.3	<0.1	2.0
<i>Pherusa affinis</i>	-	5.9	0.3	0.2	-	-	0.5
<i>Pherusa</i> sp.	-	-	1.4	2.7	0.2	-	1.0
Flabelligeridae	1.0	-	1.8	1.8	0.3	-	0.9
<i>Ophioglycera gigantea</i>	-	-	2.8	4.6	-	-	1.7
Nephtyidae	2.5	0.1	7.3	8.3	1.0	-	3.8
Sabellidae	1.6	0.2	1.3	0.8	<0.1	-	0.6
Ampharetidae	3.8	0.3	0.6	1.8	1.1	-	1.1
Terebellidae	3.2	10.6	<0.1	0.2	<0.1	-	0.5
Polychaeta unid.	12.2	31.6	9.5	5.1	5.0	4.4	8.2
CRUSTACEA	[41.7]	[13.4]	[20.3]	[30.4]	[19.0]	[2.7]	[20.4]
Amphipoda	(8.5)	(1.9)	(5.5)	(21.3)	(2.6)	(1.2)	(8.2)
<i>Gammarus annulatus</i>	-	0.2	-	16.3	-	-	4.3
<i>Leptocheirus pinguis</i>	3.4	0.1	1.9	0.8	0.3	-	0.8
<i>Aeginina longicornis</i>	1.7	-	1.3	0.4	-	-	0.4
Amphipoda unid.	3.4	1.6	2.3	3.8	2.3	1.2	2.7
Mysidacea	(29.4)	(5.7)	(<0.1)	-	-	-	(1.8)
<i>Neomysis americana</i>	29.4	5.7	<0.1	-	-	-	1.8
Decapoda	(1.9)	(4.4)	(13.1)	(6.9)	(9.2)	(1.5)	(7.3)
<i>Crangon septemspinosa</i>	1.9	-	1.0	0.1	-	-	0.3
<i>Munida</i> sp.	-	-	-	-	2.1	1.5	0.9
Paguridae	-	2.1	0.2	0.4	-	-	0.2
<i>Cancer irroratus</i>	-	-	10.2	6.2	5.6	-	4.9
Cancridae	-	-	1.6	0.1	-	-	0.3
Decapoda unid.	<0.1	2.3	0.1	0.1	1.5	<0.1	0.7
Crustacea unid.	(1.9)	(1.4)	(1.7)	(2.2)	(7.2)	(<0.1)	(3.1)
UROCHORDATA	-	-	[6.7]	[0.6]	-	-	[1.3]
<i>Oikopleura</i> sp.	-	-	6.7	0.6	-	-	1.3
OSTEICHTHYES	[0.3]	[0.3]	[8.6]	[<0.1]	[30.4]	[74.3]	[23.5]
<i>Ammodytes dubius</i>	-	-	3.1	-	29.9	68.4	21.2
<i>Peprilus triacanthus</i>	-	-	-	-	-	5.8	1.1
Osteichthyes larvae	-	-	4.9	<0.1	-	<0.1	0.9
Osteichthyes unid.	0.3	0.3	0.6	-	0.5	0.1	0.3
ANIMAL REMAINS AND MISC.	[17.1]	[25.0]	[12.8]	[19.7]	[9.4]	[1.7]	[11.8]
Number sampled	114	91	122	63	40	8	438
Number empty	36	19	53	26	16	2	152
Mean stomach content (g)	0.056	0.083	0.185	0.531	0.881	2.930	0.294
Mean fish length (cm)	8	12	17	22	27	32	16

Table B-40b. Diet composition and sampling data for scup by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area				
	Middle Atlantic	Southern New England	Offshore South of Cape Hatteras	Inshore South of Cape Hatteras	Inshore North of Cape Hatteras
CNIDARIA	-	[6.5]	-	-	[9.4]
Anthozoa	-	6.5	-	-	-
Ceriantharia	-	-	-	-	9.4
RHYNCHOCOELA	-	[10.8]	-	-	-
CEPHALOPODA	-	-	-	-	[15.8]
<i>Illex</i> sp.	-	-	-	-	12.5
<i>Loligo pealeii</i>	-	-	-	-	0.9
Cephalopoda unid.	-	-	-	-	2.4
POLYCHAETA	[52.5]	[34.0]	-	[18.5]	[14.8]
<i>Lumbrineris fragilis</i>	7.5	-	-	-	0.4
Lumbrineridae	1.5	6.9	-	2.6	0.7
<i>Pherusa affinis</i>	-	-	-	-	0.6
<i>Pherusa</i> sp.	-	3.9	-	-	0.3
Flabelligeridae	-	2.1	-	-	0.7
<i>Ophioglycera gigantea</i>	-	-	-	-	2.3
Nephtyidae	0.7	4.0	-	-	4.0
Sabellidae	0.3	2.7	-	1.9	-
Ampharetidae	0.3	5.6	-	-	<0.1
Terebellidae	4.9	0.3	-	-	<0.1
Polychaeta unid.	37.3	8.5	-	14.0	5.8
CRUSTACEA	[17.1]	[12.2]	-	[4.9]	[22.3]
Amphipoda	(0.1)	(7.0)	-	(2.0)	(8.8)
<i>Gammarus annulatus</i>	-	-	-	-	5.7
<i>Leptocheirus pinguis</i>	-	1.9	-	-	0.6
Amphipoda unid.	0.1	5.1	-	2.0	2.5
Mysidacea	-	(0.5)	-	-	(2.3)
<i>Neomysis americana</i>	-	0.5	-	-	2.3
Decapoda	(17.0)	(2.7)	-	(2.0)	(7.7)
<i>Crangon septemspinosa</i>	-	<0.1	-	-	0.4
<i>Munida</i> sp.	17.0	-	-	-	-
Paguridae	-	0.3	-	2.0	0.2
<i>Cancer irroratus</i>	-	-	-	-	6.6
Decapoda unid.	-	2.4	-	-	0.5
Crustacea unid.	(<0.1)	(2.0)	-	(0.9)	(3.5)
UROCHORDATA	[26.1]	-	-	-	-
<i>Oikopleura</i> sp.	26.1	-	-	-	-
OSTEICHTHYES	-	[0.8]	-	[56.9]	[30.0]
<i>Ammodytes dubius</i>	-	-	-	-	28.4
<i>Peprilus triacanthus</i>	-	-	-	-	1.4
Osteichthyes larvae	-	-	-	56.9	<0.1
Osteichthyes unid.	-	0.8	-	-	0.2
ANIMAL REMAINS AND MISC.	[4.3]	[35.7]	[100.0]	[19.7]	[7.7]
Number sampled	55	111	5	29	238
Number empty	10	46	0	3	93
Mean stomach content (g)	0.119	0.217	0.008	0.066	0.403
Mean fish length (cm)	17	16	14	13	16

Table B-41a. Diet composition and sampling data for weakfish by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)								Total
	1-10	11-20	21-30	31-40	41-50	51-60	61-70	>70	
CEPHALOPODA	-	-	[16.2]	<0.1]	[0.7]	[0.7]	[0.4]	[25.3]	[7.8]
<i>Illex illecebrosus</i>	-	-	15.3	-	-	-	-	-	2.7
<i>Loligo</i> sp.	-	-	-	-	-	-	-	25.3	4.7
Cephalopoda unid.	-	-	0.9	<0.1	0.7	0.7	0.4	-	0.4
POLYCHAETA	-	[1.5]	[0.5]	-	<0.1]	[3.2]	-	-	[1.0]
CRUSTACEA	[95.8]	[74.3]	[12.3]	[5.9]	[18.0]	[17.4]	[13.4]	[13.9]	[14.9]
Copepoda	(1.7)	-	-	-	-	-	-	-	(<0.1)
Amphipoda	(<0.1)	(0.3)	(<0.1)	(0.6)	(1.6)	(2.6)	(<0.1)	-	(0.9)
Mysidacea	(61.7)	(63.2)	(6.5)	(3.2)	(15.6)	-	(0.5)	-	(3.3)
<i>Mysidopsis bigelowi</i>	9.0	6.8	3.7	<0.1	<0.1	-	-	-	0.8
<i>Neomysis americana</i>	40.2	46.8	2.8	3.2	15.6	-	0.5	-	2.4
Mysidacea unid.	12.5	9.6	<0.1	-	-	-	-	-	0.1
Decapoda	(24.5)	(10.5)	(5.5)	(2.1)	(0.8)	(14.8)	(12.9)	(13.2)	(10.4)
<i>Acetes</i> sp.	3.3	5.5	1.5	0.2	-	-	-	-	0.3
<i>Dichelopandalus leptocerus</i>	-	-	1.4	-	-	11.6	<0.1	0.6	3.4
<i>Crangon septemspinosa</i>	16.2	3.4	0.4	1.1	0.2	2.7	2.5	-	1.5
<i>Ovalipes ocellatus</i>	-	-	<0.1	-	-	0.5	9.8	12.0	4.4
Decapoda unid.	5.0	1.6	2.2	0.8	0.6	-	0.6	0.6	0.8
Crustacea unid.	(7.9)	(0.3)	(0.3)	(<0.1)	(<0.1)	(<0.1)	(<0.1)	(0.7)	(0.3)
OSTEICHTHYES	[3.4]	[23.5]	[70.4]	[94.1]	[81.3]	[78.2]	[85.0]	[60.8]	[76.0]
<i>Etrumeus teres</i>	-	-	2.6	-	-	-	4.9	-	1.5
Clupeidae	-	-	11.2	-	-	-	-	-	2.0
<i>Anchoa hepsetus</i>	-	-	13.6	1.5	-	-	5.1	-	3.6
<i>Anchoa mitchilli</i>	-	-	4.9	12.6	79.9	9.1	6.8	39.6	17.8
<i>Anchoa</i> sp.	-	8.4	2.8	-	-	-	-	-	0.6
Engraulidae	-	-	1.8	2.3	-	-	1.2	-	0.8
Myctophidae	-	-	-	-	-	-	-	3.1	0.6
<i>Gadus morhua</i>	-	-	0.1	-	-	-	-	-	<0.1
<i>Merluccius bilinearis</i>	-	-	<0.1	-	-	-	-	-	<0.1
Gadidae	-	-	-	-	-	-	5.6	-	1.1
<i>Ammodytes dubius</i>	-	-	-	-	-	13.4	0.1	-	3.6
<i>Caranx hippos</i>	-	-	-	20.8	-	-	-	-	2.1
Carangidae	-	-	5.9	-	-	-	-	-	1.0
<i>Cynoscion regalis</i>	-	-	-	9.8	-	-	-	-	1.0
<i>Peprilus triacanthus</i>	-	-	0.2	-	-	-	4.9	2.6	1.5
<i>Macrozoarces americanus</i>	-	-	-	1.1	-	-	-	-	0.1
<i>Citharichthys arctifrons</i>	-	-	-	-	-	2.0	46.5	-	10.0
<i>Scophthalmus aquosus</i>	-	1.0	-	-	-	-	-	-	<0.1
Bothidae	-	-	-	-	-	-	-	7.5	1.4
Pleuronectiformes	-	-	<0.1	-	-	-	-	-	<0.1
Osteichthyes larvae	3.4	4.2	0.3	-	-	-	-	-	0.1
Osteichthyes unid.	-	9.9	27.0	46.0	1.4	53.7	9.9	8.0	27.2
ANIMAL REMAINS AND MISC.	[0.8]	[0.7]	[0.6]	<0.1]	<0.1]	[0.5]	[1.2]	-	[0.3]
Number sampled	32	75	196	44	15	15	13	3	393
Number empty	4	9	54	9	0	0	2	0	78
Mean stomach content (g)	0.050	0.218	1.302	3.393	5.509	25.746	22.916	91.206	3.722
Mean fish length (cm)	9	15	25	33	45	54	66	73	26

Table B-41b. Diet composition and sampling data for weakfish by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area			
	Middle Atlantic	Southern New England	Inshore South of Cape Hatteras	Inshore North of Cape Hatteras
CEPHALOPODA	-	-	[19.0]	[5.9]
<i>Illex illecebrosus</i>	-	-	19.0	-
<i>Loligo</i> sp.	-	-	-	5.5
Cephalopoda unid.	-	-	<0.1	0.4
POLYCHAETA	-	-	[0.1]	[1.0]
CRUSTACEA	-	-	[6.2]	[16.0]
Amphipoda	-	-	(<0.1)	(1.0)
Mysidacea	-	-	(<0.1)	(3.7)
<i>Mysidopsis bigelowi</i>	-	-	<0.1	0.9
<i>Neomysis americana</i>	-	-	-	2.7
Mysidacea unid.	-	-	<0.1	0.1
Decapoda	-	-	(6.2)	(11.1)
<i>Acetes</i> sp.	-	-	2.3	<0.1
<i>Dichelopandalus leptocerus</i>	-	-	1.7	3.7
<i>Crangon septemspinosa</i>	-	-	-	1.7
<i>Ovalipes ocellatus</i>	-	-	0.1	5.1
Decapoda unid.	-	-	2.1	0.6
Crustacea unid.	-	-	(<0.1)	(0.2)
OSTEICHTHYES	-	[100.0]	[74.1]	[76.3]
<i>Etrumeus teres</i>	-	-	-	1.7
Clupeidae	-	-	4.6	1.5
<i>Anchoa hepsetus</i>	-	-	15.6	1.6
<i>Anchoa mitchilli</i>	-	-	4.6	20.0
<i>Anchoa</i> sp.	-	-	4.1	-
Engraulidae	-	-	0.2	0.9
Myctophidae	-	-	-	0.7
<i>Gadus morhua</i>	-	-	0.2	-
<i>Merluccius bilinearis</i>	-	-	0.1	-
Gadidae	-	-	-	1.3
<i>Ammodytes dubius</i>	-	-	-	4.1
<i>Caranx hippos</i>	-	-	-	2.5
Carangidae	-	-	7.3	-
<i>Cynoscion regalis</i>	-	-	-	1.2
<i>Peprilus triacanthus</i>	-	-	<0.1	1.8
<i>Macrozoarces americanus</i>	-	-	0.8	-
<i>Citharichthys arctifrons</i>	-	-	-	11.6
<i>Scophthalmus aquosus</i>	-	-	-	<0.1
Bothidae	-	-	-	1.6
Pleuronectiformes	-	-	-	<0.1
Osteichthyes larvae	-	-	0.4	<0.1
Osteichthyes unid.	-	100.0	36.2	25.8
ANIMAL REMAINS AND MISC.	[100.0]	-	[0.6]	[0.8]
Number sampled	1	1	111	280
Number empty	0	0	21	56
Mean stomach content (g)	0.072	0.017	1.855	4.489
Mean fish length (cm)	55	70	26	26

Table B-42a. Diet composition and sampling data for spot by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)					Total
	6-10	11-15	16-20	21-25	26-30	
MOLLUSCA	[59.9]	[13.9]	[10.3]	[15.4]	[12.4]	[11.6]
Bivalvia	(59.9)	(13.0)	(5.5)	(0.6)	-	(5.7)
<i>Tellina</i> sp.	-	-	4.5	-	-	3.4
Bivalvia unid.	59.9	13.0	1.0	0.6	-	2.3
Mollusca unid.	-	(0.9)	(4.8)	(14.8)	(12.4)	(5.9)
POLYCHAETA	[36.7]	[51.6]	[60.3]	[23.9]	-	[53.9]
Archannelida	-	0.4	13.3	-	-	10.1
Maldanidae	-	-	<0.1	1.7	-	0.2
<i>Onuphis</i> sp.	-	-	0.6	-	-	0.4
<i>Aglaophamus circinata</i>	-	-	0.3	1.1	-	0.4
Nephtyidae	-	-	2.0	-	-	1.5
Cirratulidae	-	<0.1	1.2	0.1	-	0.9
<i>Spio</i> sp.	-	-	-	16.5	-	2.2
Spionidae	-	7.7	1.7	<0.1	-	2.2
<i>Asabellides oculata</i>	-	14.8	17.6	-	-	14.5
Ampharetidae	-	3.5	<0.1	-	-	0.3
Polychaeta unid.	36.7	25.2	23.6	4.5	-	21.2
CRUSTACEA	[1.6]	[17.6]	[11.1]	[7.8]	[87.6]	[13.9]
Copepoda	-	(7.7)	(0.3)	(2.2)	-	(1.2)
Stomatopoda	-	-	-	-	(62.3)	(1.6)
Cumacea	-	(2.0)	(3.1)	(0.1)	(24.7)	(3.2)
<i>Oxyurostylis smithi</i>	-	1.9	0.7	-	24.7	1.3
Cumacea unid.	-	0.1	2.4	0.1	-	1.9
Isopoda	(1.6)	(0.4)	(<0.1)	-	-	(<0.1)
Amphipoda	-	(1.6)	(3.6)	(3.4)	-	(3.7)
<i>Ampelisca</i> spp.	-	1.4	1.6	0.1	-	1.5
<i>Unciola irrorata</i>	-	-	0.5	3.1	-	0.8
Amphipoda unid.	-	0.2	1.5	0.2	-	1.4
Mysidacea	-	(0.8)	(0.4)	(0.9)	-	(0.5)
<i>Neomysis americana</i>	-	0.8	0.4	0.9	-	0.5
Decapoda	-	(4.7)	(2.4)	(1.1)	(0.6)	(2.6)
<i>Acetes americanus</i>	-	0.7	0.6	-	-	0.5
<i>Crangon septemspinosa</i>	-	4.0	1.4	<0.1	-	1.4
Decapoda unid.	-	<0.1	0.4	1.1	0.6	0.7
Crustacea unid.	-	(0.4)	(1.3)	(0.1)	-	(1.1)
ECHINODERMATA	-	-	<0.1	[0.5]	-	[0.1]
OSTEICHTHYES	-	[1.3]	[3.1]	[2.7]	-	[2.9]
<i>Anchoa hepsetus</i>	-	-	1.5	-	-	1.1
Engraulidae	-	0.8	0.8	-	-	0.7
<i>Paralichthys dentatus</i>	-	-	<0.1	-	-	<0.1
Osteichthyes larvae	-	0.4	0.2	1.3	-	0.4
Osteichthyes unid.	-	0.1	0.6	1.4	-	0.7
ANIMAL REMAINS AND MISC.	[1.8]	[15.6]	[15.2]	[49.7]	-	[17.6]
Number sampled	9	101	290	39	3	442
Number empty	3	10	47	8	1	69
Mean stomach content (g)	0.049	0.044	0.149	0.190	0.496	0.129
Mean fish length (cm)	10	13	17	21	26	16

Table B-42b. Diet composition and sampling data for spot by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area		
	Middle Atlantic	Inshore South of Cape Hatteras	Inshore North of Cape Hatteras
MOLLUSCA	-	[21.1]	[7.9]
Bivalvia	-	(0.3)	(7.9)
<i>Tellina</i> sp.	-	-	4.8
Bivalvia unid.	-	0.3	3.1
Mollusca unid.	-	(20.8)	-
POLYCHAETA	[1.7]	[3.5]	[73.2]
Archannelida	-	<0.1	14.2
Maldanidae	-	<0.1	0.3
<i>Onuphis</i> sp.	-	0.4	0.4
<i>Aglaophamus circinata</i>	-	-	0.5
Nephtyidae	-	0.3	2.0
Cirratulidae	-	-	1.3
<i>Spio</i> sp.	-	-	3.0
Spionidae	-	<0.1	2.6
<i>Asabellides oculata</i>	-	-	20.3
Ampharetidae	-	-	0.4
Polychaeta unid.	1.7	2.8	28.2
CRUSTACEA	[6.0]	[22.7]	[9.1]
Copepoda	-	(3.1)	(0.3)
Stomatopoda	-	(5.7)	-
Cumacea	-	(10.1)	(0.5)
<i>Oxyurostylis smithi</i>	-	4.7	-
Cumacea unid.	-	5.4	0.5
Amphipoda	-	(1.1)	(4.1)
<i>Ampelisca</i> spp.	-	<0.1	2.0
<i>Unciola irrorata</i>	-	-	1.1
Amphipoda unid.	-	1.1	1.0
Mysidacea	-	-	(0.6)
<i>Neomysis americana</i>	-	-	0.6
Decapoda	(2.6)	(2.5)	(2.3)
<i>Acetes americanus</i>	-	1.7	<0.1
<i>Crangon septemspinosa</i>	-	-	2.0
Decapoda unid.	2.6	0.8	0.3
Crustacea unid.	(3.4)	(0.2)	(1.3)
ECHINODERMATA	-	[0.4]	-
OSTEICHTHYES	-	[9.9]	[0.1]
<i>Anchoa hepsetus</i>	-	4.0	-
Engraulidae	-	2.4	-
<i>Paralichthys dentatus</i>	-	-	<0.1
Osteichthyes larvae	-	1.3	-
Osteichthyes unid.	-	2.2	0.1
ANIMAL REMAINS AND MISC.	[92.3]	[42.4]	[9.7]
Number sampled	4	221	218
Number empty	0	48	21
Mean stomach content (g)	0.029	0.073	0.186
Mean fish length (cm)	16	18	16

Table B-43a. Diet composition and sampling data for southern kingfish by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)					Total
	11-15	16-20	21-25	26-30	31-35	
ANTHOZOA	-	-	[0.8]	-	-	[0.3]
RHYNCHOCOELA	-	[1.6]	[0.3]	-	-	[0.1]
BIVALVIA	-	-	[4.9]	[2.7]	-	[3.2]
Solenidae	-	-	-	0.7	-	0.4
Bivalvia unid.	-	-	4.9	2.0	-	2.8
POLYCHAETA	[26.1]	[33.6]	[13.0]	[9.4]	-	[10.3]
Arabellidae	-	-	1.3	-	-	0.5
<i>Diopatra cuprea</i>	-	-	0.6	-	-	0.2
<i>Glycera americana</i>	-	-	8.9	9.0	-	7.8
Glyceridae	-	-	1.3	-	-	0.6
Phyllodocidae	-	0.7	-	<0.1	-	<0.1
Polychaeta unid.	26.1	32.9	0.9	0.4	-	1.2
CRUSTACEA	[73.9]	[26.6]	[39.0]	[73.2]	[100.0]	[63.5]
Stomatopoda	-	-	(0.6)	(5.0)	-	(2.9)
<i>Squilla neglecta</i>	-	-	-	2.6	-	1.4
Stomatopoda unid.	-	-	0.6	2.4	-	1.5
Cumacea	-	(0.5)	-	-	-	(<0.1)
Amphipoda	-	(1.8)	(0.1)	(<0.1)	-	(0.1)
Decapoda	(69.6)	(18.9)	(10.9)	(63.0)	(100.0)	(48.2)
<i>Acetes americanus</i>	-	-	0.2	1.0	-	0.6
<i>Crangon septemspinosa</i>	-	-	2.7	0.2	-	1.0
<i>Pagurus</i> sp.	-	-	0.8	-	-	0.3
Paguridae	-	0.8	-	-	-	<0.1
<i>Ogyrides</i> sp.	-	5.0	-	-	-	0.1
<i>Parapenaeus</i> sp.	-	-	2.3	-	-	0.8
Pinnotheridae	-	1.5	0.2	-	-	0.1
<i>Ovalipes ocellatus</i>	-	1.5	-	-	-	<0.1
<i>Portunus gibbesii</i>	-	-	-	17.1	-	9.0
<i>Portunus</i> sp.	-	-	1.3	3.0	-	2.0
Portunidae	-	-	-	1.0	-	0.5
<i>Albunea paretii</i>	-	-	-	6.1	-	3.2
<i>Albunea</i> sp.	-	-	-	2.8	100.0	12.5
Crab unid.	69.6	1.4	1.2	-	-	0.5
Shrimp unid.	-	4.6	<0.1	-	-	0.1
Decapoda unid.	-	4.1	2.2	31.8	-	17.5
Crustacea unid.	(4.3)	(5.4)	(27.4)	(5.2)	-	(12.3)
OSTEICHTHYES	-	[25.4]	[27.7]	[10.8]	-	[15.9]
<i>Anchoa hepsetus</i>	-	-	17.1	-	-	5.9
Pleuronectiformes	-	-	-	1.8	-	1.0
Osteichthyes larvae	-	-	0.1	<0.1	-	0.1
Osteichthyes unid.	-	25.4	10.5	9.0	-	8.9
ANIMAL REMAINS AND MISC.	-	[12.8]	[14.3]	[1.8]	-	[5.6]
SAND	-	-	-	[2.1]	-	[1.1]
Number sampled	2	19	36	30	1	88
Number empty	0	4	9	5	0	18
Mean stomach content (g)	0.012	0.052	0.444	0.813	5.123	0.529
Mean fish length (cm)	15	18	23	27	32	23

Table B-43b. Diet composition and sampling data for southern kingfish by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area	
	Inshore South of Cape Hatteras	Inshore North of Cape Hatteras
ANTHOZOA	-	[0.8]
RHYNCHOCOELA	[0.2]	-
BIVALVIA	[1.0]	[6.8]
Solenidae	-	1.0
Bivalvia unid.	1.0	5.8
POLYCHAETA	[2.0]	[24.6]
Arabellidae	-	1.2
<i>Diopatra cuprea</i>	0.3	-
<i>Glycera americana</i>	-	21.5
Glyceridae	-	1.7
Phyllodocidae	-	<0.1
Polychaeta unid.	1.7	0.2
CRUSTACEA	[72.0]	[47.9]
Stomatopoda	(2.1)	(4.1)
<i>Squilla neglecta</i>	2.1	-
Stomatopoda unid.	-	4.1
Cumacea	(<0.1)	-
Amphipoda	(<0.1)	(<0.1)
Decapoda	(51.1)	(43.1)
<i>Acetes americanus</i>	0.6	0.6
<i>Crangon septemspinosa</i>	-	2.9
<i>Pagurus</i> sp.	-	0.8
Paguridae	<0.1	-
<i>Ogyrides</i> sp.	0.2	-
<i>Parapenaeus</i> sp.	1.2	-
Pinnotheridae	0.1	-
<i>Ovalipes ocellatus</i>	<0.1	-
<i>Portunus gibbesii</i>	14.1	-
<i>Portunus</i> sp.	0.7	4.3
<i>Albunea paretii</i>	0.4	0.7
<i>Albunea</i> sp.	18.9	10.0
Crab unid.	0.2	1.0
Shrimp unid.	0.2	<0.1
Decapoda unid.	14.5	22.8
Crustacea unid.	(18.8)	(0.7)
OSTEICHTHYES	[21.0]	[6.4]
<i>Anchoa hepsetus</i>	9.2	-
Pleuronectiformes	1.5	-
Osteichthyes larvae	0.1	-
Osteichthyes unid.	10.2	6.4
ANIMAL REMAINS AND MISC.	[2.1]	[13.5]
SAND	[1.7]	[<0.1]
Number sampled	49	39
Number empty	8	10
Mean stomach content (g)	0.605	0.431
Mean fish length (cm)	22	24

Table B-44a. Diet composition and sampling data for northern kingfish by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)						Total
	6-10	11-15	16-20	21-25	26-30	31-35	
MOLLUSCA	-	-	-	[1.2]	[0.1]	-	[0.3]
POLYCHAETA	-	[3.6]	[17.8]	[10.5]	[1.9]	-	[3.8]
<i>Lumbrineris fragilis</i>	-	-	-	-	0.7	-	0.5
Onuphidae	-	-	-	4.4	1.0	-	1.5
Glyceridae	-	2.4	6.6	-	-	-	0.2
<i>Nephtys bucera</i>	-	-	-	1.1	-	-	0.2
<i>Nephtys</i> sp.	-	-	0.3	2.0	0.2	-	0.5
Nephtyidae	-	1.2	-	0.7	-	-	0.1
Polychaeta unid.	-	-	10.9	2.3	<0.1	-	0.8
CRUSTACEA	[100.0]	[74.9]	[76.3]	[70.8]	[87.4]	[92.3]	[84.8]
Stomatopoda	-	-	-	(5.6)	-	-	(1.0)
<i>Squilla empusa</i>	-	-	-	5.6	-	-	1.0
Amphipoda	-	(0.6)	(10.2)	(3.1)	(<0.1)	-	(0.9)
<i>Ampelisca verrilli</i>	-	-	4.2	0.4	<0.1	-	0.2
<i>Gammarus annulatus</i>	-	-	5.4	2.3	-	-	0.6
Amphipoda unid.	-	0.6	0.6	0.4	-	-	0.1
Mysidacea	-	(1.8)	(0.3)	(<0.1)	-	-	(<0.1)
Decapoda	(100.0)	(72.5)	(62.0)	(61.7)	(87.4)	(92.3)	(82.7)
<i>Acetes americanus</i>	-	-	0.2	2.2	0.1	-	0.5
<i>Acetes</i> sp.	-	-	<0.1	0.7	-	-	0.1
Penaeidae	-	-	-	1.4	-	-	0.3
<i>Callinassa setimanus</i>	26.0	-	-	-	-	-	0.1
Hippolytidae	-	-	-	0.9	1.3	-	1.0
<i>Crangon septemspinosa</i>	24.1	-	27.0	1.8	<0.1	-	1.3
<i>Cancer irroratus</i>	-	-	-	1.9	-	-	0.3
<i>Ovalipes ocellatus</i>	-	-	-	-	16.8	-	10.9
<i>Portunus gibbesii</i>	-	-	-	6.2	-	-	1.1
<i>Portunus spinicarpus</i>	-	-	-	1.4	-	-	0.3
<i>Portunus</i> sp.	-	-	-	0.6	1.2	7.8	1.9
Portunidae	-	-	-	0.5	41.5	53.2	34.0
<i>Ogyrides</i> sp.	-	-	5.9	0.6	-	-	0.3
<i>Pinnixa chaetoptera</i>	49.9	65.9	10.8	-	-	-	0.7
<i>Albunea paretii</i>	-	-	-	18.4	13.4	18.3	14.5
Decapoda unid.	-	6.6	18.1	25.1	13.1	13.0	15.4
Crustacea unid.	-	-	(3.8)	(0.4)	-	-	(0.2)
OSTEICHTHYES	-	-	[1.5]	[16.0]	[8.1]	[7.7]	[9.4]
<i>Ophichthus cruentifer</i>	-	-	-	-	2.1	7.7	2.4
Engraulidae	-	-	-	10.9	5.6	-	5.7
Bothidae	-	-	0.8	<0.1	-	-	<0.1
Osteichthyes larvae	-	-	-	1.0	-	-	0.2
Osteichthyes unid.	-	-	0.7	4.1	0.4	-	1.1
ANIMAL REMAINS AND MISC.	-	[21.5]	[4.4]	[1.5]	[1.5]	-	[1.1]
SAND	-	-	-	-	[1.0]	-	[0.6]
Number sampled	1	2	14	32	27	2	78
Number empty	0	0	1	1	2	1	5
Mean stomach content (g)	0.361	0.083	0.189	0.498	2.104	5.699	1.119
Mean fish length (cm)	10	14	17	23	27	32	23

Table B-44b. Diet composition and sampling data for northern kingfish by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area		
	Offshore South of Cape Hatteras	Inshore South of Cape Hatteras	Inshore North of Cape Hatteras
MOLLUSCA	-	[0.4]	[<0.1]
POLYCHAETA	-	[1.3]	[14.4]
<i>Lumbrineris fragilis</i>	-	-	2.6
Onuphidae	-	1.0	3.7
Glyceridae	-	-	1.1
<i>Nephtys bucera</i>	-	-	1.1
<i>Nephtys</i> sp.	-	<0.1	2.8
Nephtyidae	-	-	0.7
Polychaeta unid.	-	0.3	2.4
CRUSTACEA	-	[92.1]	[51.7]
Stomatopoda	-	(1.3)	-
<i>Squilla empusa</i>	-	1.3	-
Amphipoda	-	(<0.1)	(4.6)
<i>Ampelisca verrilli</i>	-	<0.1	1.1
<i>Gammarus annulatus</i>	-	-	3.2
Amphipoda unid.	-	<0.1	0.3
Mysidacea	-	(<0.1)	(<0.1)
Decapoda	-	(90.8)	(46.2)
<i>Acetes</i> sp.	-	0.7	0.1
Penaeidae	-	0.3	-
<i>Callinassa setimanus</i>	-	-	0.6
Hippolytidae	-	1.3	-
<i>Crangon septemspinosa</i>	-	-	7.1
<i>Cancer irroratus</i>	-	-	1.9
<i>Ovalipes ocellatus</i>	-	13.3	-
<i>Portunus gibbesii</i>	-	1.4	-
<i>Portunus spinicarpus</i>	-	0.3	-
<i>Portunus</i> sp.	-	2.2	0.6
Portunidae	-	41.5	-
<i>Ogyrides</i> sp.	-	0.3	-
<i>Pinnixa chaetoptera</i>	-	-	3.7
<i>Albunea paretii</i>	-	17.7	-
Decapoda unid.	-	11.8	32.2
Crustacea unid.	-	(<0.1)	(0.9)
OSTEICHTHYES	[100.0]	[5.0]	[27.9]
<i>Ophichthus cruentifer</i>	-	2.9	-
Engraulidae	-	1.0	27.0
Bothidae	-	<0.1	<0.1
Osteichthyes larvae	-	0.2	-
Osteichthyes unid.	100.0	0.9	0.9
ANIMAL REMAINS AND MISC.	-	[0.4]	[6.0]
SAND	-	[0.8]	-
Number sampled	1	43	34
Number empty	0	3	2
Mean stomach content (g)	0.118	1.664	0.461
Mean fish length (cm)	29	24	22

Table B-45. Diet composition and sampling data for Atlantic croaker by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)							Total
	11-15	16-20	21-25	26-30	31-35	36-40	41-45	
CERIANTHARIA	-	-	-	[1.9]	[1.4]	-	-	[0.9]
MOLLUSCA	-	[58.6]	[11.2]	[12.6]	[16.3]	[10.9]	-	[15.1]
Bivalvia	-	(58.6)	(4.5)	(11.1)	(7.8)	(10.9)	-	(9.9)
Solenidae	-	-	-	4.1	4.9	-	-	2.6
Bivalvia unid.	-	58.6	4.5	7.0	2.9	10.9	-	7.3
Cephalopoda	-	-	(6.7)	(0.9)	-	-	-	(2.0)
Mollusca unid.	-	-	(<0.1)	(0.6)	(8.5)	(<0.1)	-	(3.2)
POLYCHAETA	-	[8.6]	[34.5]	[55.1]	[27.0]	[50.6]	[68.7]	[37.4]
Eunicidae	-	-	-	2.0	1.7	-	-	1.0
<i>Lumbrineris fragilis</i>	-	-	5.4	2.4	4.8	9.5	-	4.7
Lumbrineridae	-	-	0.1	4.2	1.1	-	-	1.3
<i>Diopatra cuprea</i>	-	-	1.8	2.5	0.5	-	16.5	1.4
<i>Pherusa affinis</i>	-	-	<0.1	0.2	2.7	0.8	-	1.1
<i>Glycera americana</i>	-	-	14.0	19.6	1.7	0.2	-	8.5
<i>Glycera dibranchiata</i>	-	-	-	0.3	1.7	-	-	0.7
<i>Glycera robusta</i>	-	-	-	-	-	8.5	-	0.9
<i>Spio</i> sp.	-	3.7	2.4	3.0	1.0	-	-	1.8
Spionidae	-	<0.1	4.2	3.5	2.7	22.5	-	5.3
Polychaeta unid.	-	4.9	6.6	17.4	9.1	9.1	52.2	10.7
CRUSTACEA	[32.4]	[9.3]	[23.9]	[10.5]	[35.0]	[16.6]	[9.8]	[23.7]
Stomatopoda	-	-	-	(0.6)	(29.0)	-	-	(10.3)
<i>Squilla empusa</i>	-	-	-	-	28.8	-	-	10.1
Stomatopoda unid.	-	-	-	0.6	0.2	-	-	0.2
Mysidacea	-	-	(<0.1)	(2.0)	(0.7)	(0.3)	-	(0.7)
<i>Neomysis americana</i>	-	-	<0.1	2.0	0.7	0.3	-	0.7
Decapoda	-	(8.4)	(23.4)	(7.3)	(4.3)	(2.5)	(3.7)	(10.3)
Hippolytidae	-	0.6	3.6	-	-	-	-	1.0
<i>Crangon septemspinosa</i>	-	<0.1	0.1	2.1	0.5	1.9	-	0.9
Cancridae	-	-	3.4	<0.1	0.2	0.3	-	1.1
<i>Pinnixa chaetoptera</i>	-	1.6	0.5	-	-	-	-	0.2
<i>Ovalipes ocellatus</i>	-	-	5.6	4.2	-	-	-	2.4
<i>Albunea paretii</i>	-	-	2.1	-	-	-	-	0.6
Decapoda unid.	-	6.2	8.1	1.0	3.6	0.3	3.7	4.1
Crustacea unid.	(32.4)	(0.9)	(0.5)	(0.6)	(1.0)	(13.8)	(6.1)	(2.4)
HEMICHORDATA	-	[22.1]	[13.7]	-	-	-	-	[4.7]
OSTEICHTHYES	-	[<0.1]	[6.9]	[15.0]	[16.5]	[14.7]	[0.2]	[12.5]
<i>Anchoa mitchilli</i>	-	-	-	1.3	6.6	12.2	-	3.9
Engraulidae	-	-	-	6.0	4.3	2.5	-	3.0
<i>Peprilus triacanthus</i>	-	-	-	-	0.2	-	-	0.1
Osteichthyes larvae	-	-	0.7	-	<0.1	-	-	0.2
Osteichthyes unid.	-	<0.1	6.2	7.7	5.4	<0.1	0.2	5.3
ANIMAL REMAINS AND MISC.	[43.3]	[1.4]	[9.6]	[4.7]	[3.0]	[5.5]	[21.3]	[5.1]
SAND AND ROCK	[24.3]	-	[0.2]	[0.2]	[0.8]	[1.7]	-	[0.6]
Number sampled	2	33	118	64	36	9	1	263
Number empty	0	5	33	12	5	1	0	56
Mean stomach content (g)	0.019	0.275	0.511	0.707	2.129	2.676	2.876	0.830
Mean fish length (cm)	13	18	23	27	32	37	45	25

Table B-46. Diet composition and sampling data for cunner by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)								Total
	<10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	
MOLLUSCA	-	[1.0]	[49.2]	[28.5]	-	[41.4]	-	-	[6.1]
Polyplacophora	-	-	-	(0.2)	-	-	-	-	(<0.1)
Gastropoda	-	(1.0)	-	-	-	-	-	-	(0.1)
Bivalvia	-	-	-	(<0.1)	-	-	-	-	(<0.1)
<i>Cerastoderma pinnulatum</i>	-	-	-	<0.1	-	-	-	-	<0.1
Mollusca unid.	-	-	(49.2)	(28.3)	-	(41.4)	-	-	(6.0)
ANNELIDA	-	[8.1]	-	[7.6]	-	-	-	-	[1.1]
<i>Lepidonotus squamatus</i>	-	-	-	0.3	-	-	-	-	<0.1
Polychaeta	-	2.6	-	7.3	-	-	-	-	0.8
Annelida unid.	-	5.5	-	-	-	-	-	-	0.3
SIPUNCULA	-	-	-	[0.1]	-	-	-	-	[<0.1]
<i>Phascolion strombi</i>	-	-	-	0.1	-	-	-	-	<0.1
CRUSTACEA	[100.0]	[33.5]	[1.8]	[4.8]	[64.0]	[58.3]	[79.4]	[99.3]	[74.9]
Cumacea	-	-	(0.1)	(0.1)	-	-	-	-	(<0.1)
<i>Diastylis quadrispinosa</i>	-	-	-	0.1	-	-	-	-	<0.1
<i>Diastylis</i> sp.	-	-	0.1	-	-	-	-	-	<0.1
Isopoda	-	-	(0.8)	(<0.1)	-	-	-	-	(<0.1)
Arcturidae	-	-	0.8	<0.1	-	-	-	-	<0.1
Amphipoda	(100.0)	(2.4)	(0.9)	(1.8)	(<0.1)	-	-	-	(0.3)
<i>Erichthonius rubricornis</i>	-	-	<0.1	0.1	-	-	-	-	<0.1
<i>Unciola irrorata</i>	-	-	0.3	-	-	-	-	-	<0.1
<i>Unciola</i> sp.	-	2.4	-	-	-	-	-	-	0.1
<i>Pleusymtes glaber</i>	10.0	-	-	-	-	-	-	-	<0.1
<i>Stenula</i> sp.	90.0	-	-	-	-	-	-	-	<0.1
<i>Aeginina longicornis</i>	-	-	-	0.5	-	-	-	-	0.1
Caprellidae	-	-	-	0.2	-	-	-	-	<0.1
Gammaridea	-	-	0.3	0.2	<0.1	-	-	-	<0.1
Amphipoda unid.	-	-	0.3	0.8	<0.1	-	-	-	0.1
Decapoda	-	(30.3)	-	(1.3)	(52.5)	(58.3)	(75.7)	(99.0)	(72.0)
<i>Pandalus montagui</i>	-	30.3	-	-	-	-	-	-	1.6
<i>Pagurus</i> sp.	-	-	-	-	-	21.3	-	16.7	9.3
<i>Cancer borealis</i>	-	-	-	-	5.5	-	-	-	0.8
<i>Cancer irroratus</i>	-	-	-	-	4.2	25.9	72.7	49.7	37.3
Crab unid.	-	-	-	-	-	-	3.0	-	0.5
Decapoda unid.	-	-	-	1.3	42.8	11.1	-	32.6	22.5
Crustacea unid.	-	(0.8)	-	(1.6)	(11.5)	-	(3.7)	(0.3)	(2.6)
ECHINODERMATA	-	-	-	-	[33.9]	-	-	-	[5.0]
Echinoidea	-	-	-	-	33.9	-	-	-	5.0
UROCHORDATA	-	-	-	[12.4]	-	-	-	-	[1.1]
OSTEICHTHYES	-	-	-	-	-	-	[11.5]	-	[1.8]
Pleuronectiformes	-	-	-	-	-	-	11.5	-	1.8
ANIMAL REMAINS AND MISC.	[<0.1]	[52.1]	[39.2]	[39.4]	-	[0.3]	-	[0.1]	[6.9]
SAND AND ROCK	-	[5.3]	[9.8]	[7.2]	[2.1]	-	[9.1]	[0.6]	[3.1]
Number sampled	8	9	2	5	10	6	10	4	54
Number empty	6	5	1	0	3	3	6	1	25
Mean stomach content (g)	0.001	0.489	0.723	1.469	1.217	0.875	1.324	9.810	1.539
Mean fish length (cm)	6	13	17	23	27	33	38	43	25

Table B-47a. Diet composition and sampling data for ocean pout by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)							Total
	1-10	11-20	21-30	31-40	41-50	51-60	>60	
MOLLUSCA	-	[8.6]	[3.1]	[14.5]	[20.7]	[1.7]	[37.2]	[19.3]
Bivalvia	-	(8.6)	(3.1)	(11.6)	(13.4)	(1.5)	(37.2)	(17.3)
<i>Pecten</i> sp.	-	-	-	-	-	1.1	-	0.4
<i>Placopecten magellanicus</i>	-	-	-	-	-	<0.1	37.2	12.4
Pectinidae	-	8.6	-	-	-	-	-	0.1
<i>Cerastoderma pinnulatum</i>	-	-	3.1	0.2	6.4	-	-	1.5
Bivalvia unid.	-	-	-	11.4	7.0	0.4	-	2.9
Mollusca unid.	-	-	-	(2.9)	(7.3)	(0.2)	-	(2.0)
POLYCHAETA	-	[65.6]	[10.9]	[3.9]	[3.0]	[0.7]	[<0.1]	[2.1]
Aphroditidae	-	-	-	2.4	2.4	-	-	0.8
Cirratulidae	-	56.9	-	-	-	-	-	0.5
Polychaeta unid.	-	8.7	10.9	1.5	0.6	0.7	<0.1	0.8
CRUSTACEA	[100.0]	[17.7]	[25.0]	[33.5]	[29.8]	[39.5]	[4.1]	[24.7]
Isopoda	-	-	(0.2)	(2.3)	(<0.1)	(0.2)	-	(0.4)
<i>Edotea triloba</i>	-	-	-	2.3	<0.1	-	-	0.3
Isopoda unid.	-	-	0.2	-	-	0.2	-	0.1
Amphipoda	(100.0)	(15.8)	(19.9)	(7.0)	(27.3)	(32.0)	(1.8)	(18.1)
<i>Parathemisto</i> sp.	100.0	-	-	-	-	-	-	<0.1
Ampeliscidae	-	-	-	0.1	0.6	0.4	0.2	0.4
<i>Erichthonius rubricornis</i>	-	0.6	1.8	-	-	<0.1	-	<0.1
<i>Unciola irrorata</i>	-	6.7	16.9	0.6	20.0	11.2	1.6	8.9
<i>Leptocheirus pinguis</i>	-	5.9	-	1.8	1.6	19.9	<0.1	6.9
<i>Aeginina longicornis</i>	-	-	-	0.7	-	-	-	0.1
Amphipoda unid.	-	2.6	1.2	3.8	5.1	0.5	<0.1	1.8
Decapoda	-	(1.4)	(3.7)	(22.8)	(2.5)	(5.6)	(2.3)	(5.4)
<i>Dichelopandalus leptocerus</i>	-	-	-	0.9	-	-	-	0.1
Paguridae	-	1.4	3.7	-	-	-	-	<0.1
<i>Hyas coarctatus</i>	-	-	-	-	0.2	5.2	-	1.7
<i>Cancer borealis</i>	-	-	-	21.9	2.3	-	-	2.8
Crab unid.	-	-	-	-	-	0.4	2.3	0.8
Crustacea unid.	-	(0.5)	(1.2)	(1.4)	(<0.1)	(1.7)	-	(0.8)
ECHINODERMATA	-	-	[29.8]	[44.7]	[40.6]	[49.7]	[54.9]	[48.3]
Echinoidea	-	-	-	-	(<0.1)	(8.2)	(52.0)	(20.0)
<i>Echinarachnius parma</i>	-	-	-	-	<0.1	7.3	36.7	14.6
Echinoidea unid.	-	-	-	-	-	0.9	15.3	5.4
Ophiuroidea	-	-	(29.8)	(44.7)	(40.6)	(39.7)	(2.9)	(27.7)
<i>Ophiopholis aculeata</i>	-	-	23.5	4.1	0.9	0.6	1.9	1.7
<i>Ophiura sarsi</i>	-	-	0.5	-	0.4	35.8	0.3	11.5
Ophiuroidea unid.	-	-	5.8	40.6	39.3	3.3	0.7	14.5
Echinodermata unid.	-	-	-	-	-	(1.8)	-	(0.6)
OSTEICHTHYES	-	-	-	[<0.1]	[<0.1]	-	-	[<0.1]
ANIMAL REMAINS AND MISC.	-	[8.1]	[16.4]	[3.3]	[3.4]	[8.4]	[3.1]	[4.6]
SAND AND ROCK	-	-	[14.8]	[0.1]	[2.5]	[<0.1]	[0.7]	[1.0]
Number sampled	1	13	10	20	18	19	13	94
Number empty	0	1	2	5	4	6	3	21
Mean stomach content (g)	0.004	0.105	0.184	0.802	1.979	2.598	4.018	1.665
Mean fish length (cm)	5	16	26	35	45	54	68	41

Table B-47b. Diet composition and sampling data for ocean pout by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area				
	Southern New England	Georges Bank	Gulf of Maine	Scotian Shelf	Inshore North of Cape Hatteras
MOLLUSCA	[8.8]	[31.7]	[0.6]	-	[16.7]
Bivalvia	(3.2)	(30.5)	(0.6)	-	(16.6)
<i>Pecten</i> sp.	-	0.8	-	-	-
<i>Placopecten magellanicus</i>	-	27.6	-	-	-
Pectinidae	-	-	0.6	-	-
<i>Cerastoderma pinnulatum</i>	2.2	2.1	-	-	-
Bivalvia unid.	1.0	<0.1	-	-	16.6
Mollusca unid.	(5.6)	(1.2)	-	-	(0.1)
POLYCHAETA	[3.9]	[0.6]	[5.7]	-	[<0.1]
Aphroditidae	2.9	-	-	-	-
Cirratulidae	-	-	4.2	-	-
Polychaeta unid.	1.0	0.6	1.5	-	<0.1
CRUSTACEA	[71.2]	[11.1]	[0.8]	[100.0]	[<0.1]
Isopoda	(0.9)	(0.2)	-	-	(<0.1)
<i>Edotea triloba</i>	0.9	-	-	-	<0.1
Isopoda unid.	-	0.2	-	-	-
Amphipoda	(59.6)	(3.9)	(<0.1)	(100.0)	-
<i>Parathemisto</i> sp.	-	-	-	100.0	-
Ampeliscidae	0.3	0.6	-	-	-
<i>Unciola irrorata</i>	28.2	2.7	-	-	-
<i>Leptocheirus pinguis</i>	25.1	0.2	-	-	-
<i>Aeginina longicornis</i>	0.3	-	-	-	-
Amphipoda unid.	5.7	0.4	<0.1	-	-
Decapoda	(10.2)	(5.8)	(0.8)	-	-
<i>Dichelopandalus leptocerus</i>	-	-	0.8	-	-
Paguridae	<0.1	<0.1	-	-	-
<i>Hyas coarctatus</i>	-	3.8	-	-	-
<i>Cancer borealis</i>	10.2	-	-	-	-
Crab unid.	<0.1	2.0	-	-	-
Crustacea unid.	(0.5)	(1.2)	-	-	-
ECHINODERMATA	[12.8]	[46.2]	[92.9]	-	[81.1]
Echinoidea	(12.8)	(36.6)	-	-	-
<i>Echinarachnius parma</i>	8.5	27.2	-	-	-
Echinoidea unid.	4.3	9.4	-	-	-
Ophiuroidea	-	(8.3)	(92.9)	-	(81.1)
<i>Ophiopholis aculeata</i>	-	3.8	-	-	-
<i>Ophiura sarsi</i>	-	0.9	92.9	-	-
Ophiuroidea unid.	-	3.6	-	-	81.1
Echinodermata unid.	-	(1.3)	-	-	-
OSTEICHTHYES	[<0.1]	-	-	-	[<0.1]
ANIMAL REMAINS AND MISC.	[1.4]	[9.3]	[<0.1]	-	[2.2]
SAND AND ROCK	[1.9]	[1.1]	-	-	-
Number sampled	42	34	12	1	5
Number empty	12	4	5	0	0
Mean stomach content (g)	1.013	2.074	1.553	0.004	4.949
Mean fish length (cm)	39	50	28	5	40

Table B-48a. Diet composition and sampling data for Atlantic wolffish by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)									Total
	1-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	>80	
MOLLUSCA	[25.4]	[33.7]	[3.3]	[5.0]	[12.1]	[36.3]	[69.6]	[50.4]	[62.3]	[57.6]
Gastropoda	(24.9)	-	(1.1)	-	(3.7)	(0.5)	(17.6)	(1.1)	(12.6)	(10.8)
Bivalvia	-	(33.7)	(2.2)	(5.0)	(1.2)	(28.9)	(32.5)	(29.1)	(48.9)	(40.1)
<i>Pecten</i> sp.	-	-	-	-	-	-	-	-	18.2	10.6
<i>Placopecten</i> sp.	-	-	-	-	-	-	27.1	29.1	9.6	12.9
Pectinidae	-	-	-	-	-	-	-	-	21.1	12.2
Bivalvia unid.	-	33.7	2.2	5.0	1.2	28.9	5.4	-	-	4.4
Mollusca unid.	(0.5)	-	-	-	(7.2)	(6.9)	(19.5)	(20.2)	(0.8)	(6.7)
POLYCHAETA	-	-	[10.9]	-	[0.2]	[0.5]	-	-	-	[0.1]
<i>Aphrodita hastata</i>	-	-	10.9	-	-	-	-	-	-	<0.1
Polychaeta unid.	-	-	-	-	0.2	0.5	-	-	-	0.1
CRUSTACEA	[73.7]	[3.5]	[0.5]	[59.1]	[15.0]	[19.9]	[26.4]	[49.1]	[4.7]	[14.6]
Copepoda	(1.0)	-	-	-	-	-	-	-	-	(<0.1)
Tanaidacea	-	(0.4)	-	-	-	-	-	-	-	(<0.1)
Amphipoda	(28.7)	(3.1)	-	-	-	-	-	-	-	(<0.1)
<i>Parathemisto</i> sp.	28.7	-	-	-	-	-	-	-	-	<0.1
Amphipoda unid.	-	3.1	-	-	-	-	-	-	-	<0.1
Mysidacea	(0.5)	-	-	-	-	-	-	-	-	(<0.1)
Euphausiacea	(37.3)	-	-	-	-	(4.8)	-	(11.9)	-	(1.5)
<i>Meganyctiphanes norvegica</i>	-	-	-	-	-	4.8	-	11.9	-	1.5
Euphausiacea unid.	37.3	-	-	-	-	-	-	-	-	<0.1
Decapoda	(0.5)	-	(0.5)	(59.1)	(15.0)	(15.1)	(26.4)	(37.2)	(4.5)	(13.0)
<i>Dichelopandalus leptocerus</i>	-	-	-	-	-	-	0.6	-	-	0.1
<i>Pandalus borealis</i>	-	-	-	-	-	-	-	37.1	-	3.1
<i>Sclerocrangon boreas</i>	-	-	-	-	10.6	-	-	-	-	0.4
<i>Pagurus longicarpus</i>	-	-	-	-	-	-	-	-	3.1	1.8
<i>Pagurus arcuatus</i>	-	-	-	-	2.7	-	-	-	-	0.1
Paguridae	-	-	-	-	1.6	1.2	4.7	0.1	1.4	1.9
Majidae	-	-	-	59.1	-	-	0.9	-	-	0.3
<i>Cancer irroratus</i>	-	-	-	-	-	12.6	19.8	-	-	5.0
Decapoda unid.	0.5	-	0.5	-	0.1	1.3	0.4	-	<0.1	0.3
Crustacea unid.	(5.7)	-	-	-	-	-	-	-	(0.2)	(0.1)
ECHINODERMATA	-	[62.8]	[83.8]	[35.9]	[68.2]	[36.0]	[1.9]	-	[31.6]	[25.8]
Echinoidea	-	-	-	(35.9)	(52.7)	(0.8)	(1.9)	-	(11.7)	(9.3)
<i>Strongylocentrotus</i> sp.	-	-	-	35.9	52.7	-	1.9	-	7.5	6.7
<i>Echinarachnius parma</i>	-	-	-	-	-	-	-	-	0.1	0.1
Echinoidea unid.	-	-	-	-	-	0.8	-	-	4.1	2.5
Ophiuroidea	-	-	(76.0)	-	(7.3)	(35.2)	-	-	(18.7)	(15.3)
<i>Ophiura sarsi</i>	-	-	-	-	-	2.6	-	-	18.7	11.1
Ophiuroidea unid.	-	-	76.0	-	7.3	32.6	-	-	-	4.2
Echinodermata unid.	-	(62.8)	(7.8)	-	(8.2)	-	-	-	(1.2)	(1.2)
ANIMAL REMAINS AND MISC.	[0.9]	-	[1.5]	-	[2.2]	[6.4]	[1.9]	[0.5]	[0.2]	[1.0]
ROCK	-	-	-	-	[2.3]	[0.9]	[0.2]	-	[1.2]	[0.9]
Number sampled	23	4	7	5	5	8	9	4	10	75
Number empty	3	3	4	2	0	3	2	2	0	19
Mean stomach content (g)	0.009	0.419	0.274	0.339	4.864	9.595	13.583	14.107	39.532	9.074
Mean fish length (cm)	4	16	26	34	46	55	66	76	92	40

Table B-48b. Diet composition and sampling data for Atlantic wolffish by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area				
	Southern New England	Georges Bank	Gulf of Maine	Scotian Shelf	Inshore North of Cape Hatteras
MOLLUSCA	-	[88.8]	[47.0]	[32.4]	[38.9]
Gastropoda	-	(30.4)	(0.7)	(2.4)	(0.7)
Bivalvia	-	(56.6)	(38.7)	(8.5)	(35.7)
<i>Pecten</i> sp.	-	31.5	-	1.2	-
<i>Placopecten</i> sp.	-	14.8	6.6	-	33.1
Pectinidae	-	10.3	24.1	-	-
Bivalvia unid.	-	-	8.0	7.3	2.6
Mollusca unid.	-	(1.8)	(7.6)	(21.5)	(2.5)
POLYCHAETA	-	-	[0.2]	-	-
<i>Aphrodita hastata</i>	-	-	<0.1	-	-
Polychaeta unid.	-	-	0.2	-	-
CRUSTACEA	[33.3]	[8.0]	[18.8]	[22.5]	[12.2]
Copepoda	-	-	-	(<0.1)	-
Amphipoda	-	-	(<0.1)	(<0.1)	-
<i>Parathemisto</i> sp.	-	-	-	<0.1	-
Amphipoda unid.	-	-	<0.1	-	-
Mysidacea	(33.3)	-	-	-	-
Euphausiacea	-	-	(4.2)	(<0.1)	-
<i>Meganyctiphanes norvegica</i>	-	-	4.2	-	-
Euphausiacea unid.	-	-	-	<0.1	-
Decapoda	-	(7.9)	(14.6)	(22.0)	(12.2)
<i>Dichelopandalus leptocerus</i>	-	-	-	0.8	-
<i>Pandalus borealis</i>	-	-	8.4	-	-
<i>Sclerocrangon boreas</i>	-	-	1.0	-	-
<i>Pagurus longicarpus</i>	-	5.5	-	-	-
<i>Pagurus arcuatus</i>	-	-	0.3	-	-
Paguridae	-	2.4	0.6	1.4	4.1
Majidae	-	-	-	2.4	-
<i>Cancer irroratus</i>	-	-	3.9	16.4	8.1
Decapoda unid.	-	-	0.4	1.0	<0.1
Crustacea unid.	-	(0.1)	(<0.1)	(0.5)	-
ECHINODERMATA	-	[2.1]	[31.9]	[38.3]	[48.1]
Echinoidea	-	-	(0.2)	(37.2)	(24.6)
<i>Strongylocentrotus</i> sp.	-	-	-	36.6	10.5
<i>Echinarachnius parma</i>	-	-	-	0.6	-
Echinoidea unid.	-	-	0.2	-	14.1
Ophiuroidea	-	-	(30.4)	(1.1)	(23.5)
<i>Ophiura sarsi</i>	-	-	29.1	1.1	1.7
Ophiuroidea unid.	-	-	1.3	-	21.8
Echinodermata unid.	-	(2.1)	(1.3)	-	-
ANIMAL REMAINS AND MISC.	[66.7]	[1.0]	[1.8]	[1.4]	[0.4]
ROCK	-	[0.1]	[0.3]	[5.4]	[0.4]
Number sampled	1	8	28	33	5
Number empty	0	0	11	7	1
Mean stomach content (g)	0.003	28.046	8.943	2.760	22.939
Mean fish length (cm)	3	79	41	27	68

Table B-49a. Diet composition and sampling data for northern sand lance by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)						Total
	1-5	6-10	11-15	16-20	21-25	26-30	
CNIDARIA	-	-	[0.3]	[<0.1]	-	-	[0.1]
CHAETOGNATHA	-	[16.6]	[10.8]	[17.8]	[14.4]	[95.4]	[15.2]
<i>Sagitta elegans</i>	-	-	0.4	0.1	3.9	-	1.0
<i>Sagitta</i> sp.	-	14.9	1.6	9.0	<0.1	-	4.7
Chaetognatha unid.	-	1.7	8.8	8.7	10.5	95.4	9.5
OPISTHOBRANCHIA	-	-	[<0.1]	[0.1]	[2.9]	-	[0.6]
<i>Limacina</i> sp.	-	-	-	0.1	2.3	-	0.5
Opisthobranchia unid.	-	-	<0.1	<0.1	0.6	-	0.1
POLYCHAETA	-	-	[<0.1]	[<0.1]	[<0.1]	[0.2]	[<0.1]
CRUSTACEA	[42.9]	[79.9]	[83.6]	[72.8]	[63.1]	[4.4]	[74.8]
Ostracoda	-	(0.9)	(1.2)	(<0.1)	-	-	(0.4)
Copepoda	(33.8)	(40.5)	(79.7)	(64.4)	(56.0)	(1.2)	(67.3)
<i>Calanus</i> sp.	-	8.8	13.3	34.0	27.1	-	24.7
<i>Centropages</i> sp.	-	-	11.0	<0.1	-	-	3.9
Calanoida	31.2	13.8	37.0	18.7	26.9	1.2	26.5
Copepoda unid.	2.6	17.9	18.4	11.7	2.0	-	12.2
Cirripedia	-	(0.6)	(0.2)	(0.1)	-	-	(0.2)
Cumacea	-	-	(<0.1)	(<0.1)	(<0.1)	-	(<0.1)
Amphipoda	-	(0.1)	(0.7)	(3.9)	(5.9)	(2.7)	(3.2)
<i>Parathemisto gaudichaudii</i>	-	-	0.5	0.7	<0.1	-	0.5
<i>Parathemisto</i> sp.	-	-	<0.1	0.7	1.2	-	0.6
Hyperiididae	-	-	<0.1	0.2	0.2	-	0.1
<i>Monoculodes edwardsi</i>	-	-	-	-	0.7	-	0.1
<i>Calliopius laeviusculus</i>	-	-	0.2	0.2	0.1	2.7	<0.1
<i>Gammarus annulatus</i>	-	-	-	2.1	3.7	-	1.7
Amphipoda unid.	-	0.1	<0.1	<0.1	<0.1	-	0.2
Mysidacea	-	(36.4)	(0.3)	(2.4)	(0.4)	(0.5)	(2.0)
<i>Mysidopsis bigelowi</i>	-	-	<0.1	<0.1	0.3	-	0.1
<i>Mysidopsis</i> sp.	-	-	<0.1	<0.1	-	0.5	<0.1
<i>Neomysis americana</i>	-	36.4	0.3	2.4	0.1	-	1.9
Euphausiacea	-	-	(0.7)	(0.7)	(0.2)	-	(0.6)
<i>Meganctiphanes norvegica</i>	-	-	<0.1	0.1	0.2	-	0.1
Euphausiacea unid.	-	-	0.7	0.6	<0.1	-	0.5
Crustacea unid.	(9.1)	(1.4)	(0.8)	(1.3)	(0.6)	-	(1.1)
UROCHORDATA	[57.1]	[1.3]	[0.2]	[2.8]	[13.7]	-	[4.1]
Larvacea	57.1	1.3	0.1	<0.1	-	-	0.1
Urochordata unid.	-	-	0.1	2.8	13.7	-	4.0
OSTEICHTHYES	-	[0.1]	[0.2]	[1.7]	[<0.1]	-	[0.8]
<i>Ammodytes dubius</i>	-	-	-	<0.1	-	-	<0.1
<i>Pholis gunnellus</i>	-	-	-	<0.1	-	-	<0.1
Osteichthyes eggs	-	-	<0.1	0.1	-	-	0.1
Osteichthyes larvae	-	0.1	<0.1	0.3	-	-	0.1
Osteichthyes unid.	-	-	0.2	1.3	<0.1	-	0.6
ANIMAL REMAINS AND MISC.	-	[2.1]	[4.9]	[4.8]	[5.9]	-	[4.4]
Number sampled	11	93	811	383	54	1	1353
Number empty	1	27	227	130	8	0	393
Mean stomach content (g)	0.007	0.019	0.040	0.103	0.343	0.593	0.069
Mean fish length (cm)	4	9	13	17	21	27	14

Table B-49b. Diet composition and sampling data for northern sand lance by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area				
	Middle Atlantic	Southern New England	Georges Bank	Gulf of Maine	Inshore North of Cape Hatteras
CNIDARIA	[2.8]	[0.3]	[<0.1]	-	[0.1]
CHAETOGNATHA	[0.4]	[32.2]	[15.1]	[0.1]	[8.8]
<i>Sagitta elegans</i>	-	3.7	0.2	-	0.2
<i>Sagitta</i> sp.	-	21.1	<0.1	-	<0.1
Chaetognatha unid.	0.4	7.4	14.9	0.1	8.6
OPISTHOBRANCHIA	-	[<0.1]	[<0.1]	[3.7]	-
<i>Limacina</i> sp.	-	-	<0.1	3.0	-
Opisthobranchia unid.	-	<0.1	<0.1	0.7	-
POLYCHAETA	-	[<0.1]	[<0.1]	-	[<0.1]
CRUSTACEA	[61.6]	[57.5]	[79.8]	[70.7]	[87.8]
Ostracoda	-	(<0.1)	(0.2)	(2.1)	(<0.1)
Copepoda	(59.6)	(45.2)	(73.7)	(67.9)	(78.9)
<i>Calanus</i> sp.	-	7.3	52.3	-	2.3
<i>Centropages</i> sp.	-	5.0	-	-	16.8
Calanoida	35.7	28.0	9.4	56.8	37.4
Copepoda unid.	23.9	4.9	12.0	11.1	22.4
Cirripedia	-	(0.1)	(<0.1)	(0.3)	(0.4)
Cumacea	-	(<0.1)	-	-	(0.1)
Amphipoda	(0.8)	(9.9)	(1.9)	(0.4)	(<0.1)
<i>Parathemisto</i> sp.	0.8	2.0	1.3	-	-
Hyperiididae	<0.1	<0.1	0.1	0.4	-
<i>Monoculodes edwardsi</i>	-	0.6	-	-	-
<i>Calliopius laeviusculus</i>	-	-	0.4	-	-
<i>Gammarus annulatus</i>	-	7.3	0.1	-	-
Amphipoda unid.	-	<0.1	<0.1	-	<0.1
Mysidacea	-	(0.2)	(2.2)	-	(5.9)
<i>Mysidopsis bigelowi</i>	-	-	0.3	-	-
<i>Mysidopsis</i> sp.	-	-	<0.1	-	-
<i>Neomysis americana</i>	-	0.2	1.9	-	5.9
Euphausiacea	-	(0.2)	(0.6)	-	(1.9)
<i>Meganyctiphanes norvegica</i>	-	-	0.3	-	-
Euphausiacea unid.	-	0.2	0.3	-	1.9
Crustacea unid.	(1.2)	(1.9)	(1.2)	(<0.1)	(0.6)
UROCHORDATA	[6.5]	[0.3]	[0.7]	[21.5]	[0.1]
Larvacea	0.9	0.3	-	-	0.1
Urochordata unid.	5.6	<0.1	0.7	21.5	-
OSTEICHTHYES	[6.5]	[2.5]	[0.5]	-	[<0.1]
<i>Ammodytes dubius</i>	-	<0.1	-	-	-
<i>Pholis gunnellus</i>	-	<0.1	-	-	-
Osteichthyes eggs	-	-	0.2	-	-
Osteichthyes larvae	-	0.6	<0.1	-	-
Osteichthyes unid.	6.5	1.9	0.3	-	<0.1
ANIMAL REMAINS AND MISC.	[22.2]	[7.2]	[3.9]	[4.0]	[3.2]
Number sampled	148	319	429	61	396
Number empty	40	76	162	4	111
Mean stomach content (g)	0.008	0.064	0.094	0.260	0.039
Mean fish length (cm)	12	15	15	17	12

Table B-50a. Diet composition and sampling data for Atlantic mackerel by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)						Total
	16-20	21-25	26-30	31-35	36-40	41-45	
NEMATODA	[0.7]	[<0.1]	[0.1]	-	[<0.1]	[<0.1]	[0.1]
CHAETOGNATHA	[13.8]	-	[5.0]	[25.4]	[9.3]	[7.2]	[8.6]
<i>Sagitta elegans</i>	3.0	-	4.8	16.2	4.0	5.2	4.8
Chaetognatha unid.	10.8	-	0.2	9.2	5.3	2.0	3.8
MOLLUSCA	[<0.1]	-	-	[<0.1]	[0.5]	-	[0.3]
Bivalvia	-	-	-	-	0.1	-	0.1
Cephalopoda	<0.1	-	-	<0.1	0.4	-	0.2
POLYCHAETA	[<0.1]	-	-	[1.2]	-	-	[<0.1]
CRUSTACEA	[81.9]	[93.9]	[94.7]	[69.0]	[89.0]	[92.3]	[90.2]
Copepoda	(13.3)	(92.7)	(18.4)	-	(3.8)	(1.0)	(7.3)
Calanoida	8.0	-	7.3	-	0.9	<0.1	2.0
<i>Centropages</i> sp.	5.0	92.7	-	-	-	-	2.2
Copepoda unid.	0.3	-	11.1	-	2.9	1.0	3.1
Cumacea	-	-	-	-	(<0.1)	-	(<0.1)
Amphipoda	(0.9)	(1.2)	(13.8)	(21.9)	(83.4)	(90.4)	(66.2)
<i>Hyperia glabra</i>	-	-	0.4	-	-	-	0.1
<i>Parathemisto gaudichaudii</i>	<0.1	1.2	13.4	-	3.5	<0.1	3.3
<i>Parathemisto</i> sp.	0.2	-	-	12.1	2.5	<0.1	1.4
Hyperiididae	0.7	<0.1	-	-	-	-	0.1
<i>Aeginina longicornis</i>	-	-	<0.1	-	<0.1	-	<0.1
<i>Gammarus annulatus</i>	-	-	-	9.8	77.4	90.4	61.3
Amphipoda unid.	<0.1	-	-	-	<0.1	-	<0.1
Mysidacea	(67.6)	-	(38.3)	(<0.1)	(<0.1)	(0.8)	(10.8)
<i>Mysidopsis bigelowi</i>	6.1	-	-	-	-	-	0.4
<i>Neomysis americana</i>	61.5	-	38.3	<0.1	-	0.8	10.4
Mysidacea unid.	<0.1	-	-	<0.1	<0.1	-	<0.1
Euphausiacea	-	-	(20.1)	(45.3)	(0.6)	(<0.1)	(4.8)
<i>Euphausia krohnii</i>	-	-	-	38.0	-	-	1.3
<i>Meganyctiphanes norvegica</i>	-	-	20.1	3.3	0.6	<0.1	3.3
Euphausiacea unid.	-	-	<0.1	4.0	<0.1	<0.1	0.2
Decapoda	(0.1)	-	(1.7)	(0.4)	(1.0)	(0.1)	(0.7)
<i>Crangon septemspinosa</i>	0.1	-	<0.1	-	-	<0.1	<0.1
<i>Pagurus</i> sp.	-	-	<0.1	-	<0.1	<0.1	<0.1
Decapoda larvae	<0.1	-	1.7	0.4	1.0	0.1	0.7
Crustacea unid.	(<0.1)	-	(2.4)	(1.4)	(0.2)	-	(0.4)
UROCHORDATA	[1.5]	-	[0.2]	-	-	-	[0.1]
Ascidiacea	0.6	-	-	-	-	-	<0.1
Urochordata unid.	0.9	-	0.2	-	-	-	0.1
OSTEICHTHYES	[0.1]	-	[<0.1]	-	[0.2]	[<0.1]	[0.1]
Osteichthyes larvae	0.1	-	<0.1	-	<0.1	<0.1	<0.1
Osteichthyes unid.	<0.1	-	<0.1	-	0.2	-	0.1
ANIMAL REMAINS	[2.0]	[6.1]	[<0.1]	[0.6]	[0.9]	[0.5]	[0.4]
SAND	-	-	-	[3.8]	[0.1]	-	[0.2]
Number sampled	32	7	17	26	24	8	114
Number empty	1	1	5	8	5	1	21
Mean stomach content (g)	0.571	0.715	2.226	0.341	3.895	11.594	2.248
Mean fish length (cm)	17	22	28	33	38	41	29

Table B-50b. Diet composition and sampling data for Atlantic mackerel by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area				
	Southern New England	Georges Bank	Gulf of Maine	Scotian Shelf	Inshore North of Cape Hatteras
NEMATODA	-	[0.2]	[0.3]	[<0.1]	[<0.1]
CHAETOGNATHA	[3.3]	[21.0]	[1.8]	-	[0.2]
<i>Sagitta elegans</i>	2.2	11.2	-	-	0.2
Chaetognatha unid.	1.1	9.8	1.8	-	-
MOLLUSCA	[<0.1]	[0.5]	[2.0]	-	-
Bivalvia	-	-	(2.0)	-	-
Cephalopoda	(<0.1)	(0.5)	-	-	-
POLYCHAETA	-	[0.1]	-	-	-
CRUSTACEA	[96.2]	[77.0]	[85.2]	[95.9]	[98.4]
Copepoda	(<0.1)	(13.1)	(83.9)	(54.2)	-
Calanoida	-	6.2	2.1	-	-
<i>Centropages</i> sp.	-	-	81.8	11.5	-
Copepoda unid.	<0.1	6.9	-	42.7	-
Cumacea	-	(<0.1)	-	-	-
Amphipoda	(95.5)	(12.2)	(1.3)	(41.7)	(96.2)
<i>Hyperia glabra</i>	-	0.2	-	-	-
<i>Parathemisto gaudichaudii</i>	-	10.4	1.0	<0.1	-
<i>Parathemisto</i> sp.	-	1.4	0.2	41.7	-
Hyperiididae	<0.1	0.2	0.1	-	-
<i>Gammarus annulatus</i>	95.5	-	-	-	96.2
Amphipoda unid.	-	<0.1	-	-	-
Mysidacea	(0.5)	(33.5)	(<0.1)	-	-
<i>Mysidopsis bigelowi</i>	-	1.4	-	-	-
<i>Neomysis americana</i>	0.5	32.1	-	-	-
Mysidacea unid.	-	<0.1	<0.1	-	-
Euphausiacea	(0.2)	(14.7)	(<0.1)	-	(2.2)
<i>Euphausia krohnii</i>	-	4.2	-	-	-
<i>Meganyctiphanes norvegica</i>	0.2	10.0	-	-	2.2
Euphausiacea unid.	-	0.5	<0.1	-	-
Decapoda	-	(2.1)	(<0.1)	-	-
<i>Crangon septemspinosa</i>	-	<0.1	<0.1	-	-
<i>Pagurus</i> sp.	-	<0.1	-	-	-
Decapoda larvae	-	2.1	<0.1	-	-
Crustacea unid.	-	(1.4)	-	-	-
UROCHORDATA	[0.1]	[0.1]	-	-	-
Ascidiacea	-	(0.1)	-	-	-
Urochordata unid.	(0.1)	(<0.1)	-	-	-
OSTEICHTHYES	-	[<0.1]	[0.2]	[2.4]	-
Osteichthyes larvae	-	<0.1	-	-	-
Osteichthyes unid.	-	<0.1	0.2	2.4	-
ANIMAL REMAINS	[0.2]	[1.1]	[10.5]	[1.7]	[0.2]
SAND	[0.2]	-	-	-	[1.2]
Number sampled	24	74	11	4	1
Number empty	11	8	1	1	0
Mean stomach content (g)	6.450	1.083	0.544	1.410	9.628
Mean fish length (cm)	32	27	29	29	39

Table B-51a. Diet composition and sampling data for butterfish by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)					Total
	1-5	6-10	11-15	16-20	21-25	
CNIDARIA	-	[8.7]	[<0.1]	-	-	[1.4]
CTENOPHORA	-	[0.3]	-	-	-	[0.1]
RHYNCHOCOELA	-	-	[0.3]	-	-	[0.2]
CHAETOGNATHA	[0.5]	[0.8]	[<0.1]	[1.0]	-	[0.6]
<i>Sagitta elegans</i>	-	0.5	-	0.3	-	0.2
<i>Sagitta</i> sp.	-	-	<0.1	0.7	-	0.3
Chaetognatha unid.	0.5	0.3	-	-	-	0.1
MOLLUSCA	-	[8.1]	[29.5]	[9.0]	[0.3]	[18.7]
Thecosomata	-	(8.1)	(29.5)	(8.8)	-	(18.6)
<i>Clione</i> sp.	-	7.8	26.6	8.8	-	17.1
Thecosomata unid.	-	0.3	2.9	<0.1	-	1.5
Mollusca unid.	-	-	-	(0.2)	(0.3)	(0.1)
POLYCHAETA	-	[1.9]	[2.4]	[1.0]	[14.7]	[2.3]
Glyceridae	-	-	1.8	-	-	0.9
<i>Tomopteris helgolandica</i>	-	-	-	0.2	-	0.1
<i>Tomopteris</i> sp.	-	-	<0.1	0.7	14.7	0.6
Polychaeta unid.	-	1.9	0.6	0.1	-	0.7
CRUSTACEA	-	[2.3]	[1.1]	[1.9]	[5.1]	[1.8]
Copepoda	-	(1.7)	(<0.1)	(0.2)	(4.8)	(0.4)
<i>Centropages</i> sp.	-	0.1	<0.1	<0.1	-	<0.1
Copepoda unid.	-	1.6	<0.1	0.2	4.8	0.4
Stomatopoda	-	(0.2)	-	-	-	(<0.1)
Amphipoda	-	(<0.1)	(0.9)	(0.5)	(0.3)	(0.7)
<i>Hyperia glaba</i>	-	-	<0.1	0.2	<0.1	0.1
<i>Parathemisto</i> sp.	-	<0.1	0.4	0.3	0.3	0.3
<i>Ampelisca verrilli</i>	-	-	0.5	-	-	0.3
Mysidacea	-	(0.1)	(<0.1)	(<0.1)	-	(<0.1)
<i>Neomysis americana</i>	-	0.1	<0.1	<0.1	-	<0.1
Euphausiacea	-	(<0.1)	(<0.1)	(1.2)	-	(0.4)
<i>Meganyctiphanes norvegica</i>	-	<0.1	<0.1	1.2	-	0.4
Decapoda larvae	-	(<0.1)	(0.2)	(<0.1)	-	(0.1)
Crustacea unid.	-	(0.3)	(<0.1)	(<0.1)	-	(0.2)
UROCHORDATA	-	[17.7]	[38.7]	[20.7]	[20.6]	[29.0]
Ascidiacea	-	-	(11.0)	(11.6)	-	(9.2)
Thaliacea	-	(8.3)	(4.4)	(3.8)	(6.8)	(4.8)
Salpidae	-	8.3	3.1	3.5	6.8	4.1
Thaliacea unid.	-	-	1.3	0.3	-	0.7
Larvacea	-	(2.8)	(<0.1)	(0.7)	(13.8)	(1.0)
Urochordata unid.	-	(6.6)	(23.3)	(4.6)	-	(14.0)
OSTEICHTHYES	-	[0.2]	[<0.1]	-	-	[0.1]
ANIMAL REMAINS AND MISC.	[99.5]	[60.0]	[28.0]	[66.4]	[59.3]	[45.8]
Number sampled	39	327	282	194	10	852
Number empty	11	32	63	63	3	172
Mean stomach content (g)	0.010	0.067	0.241	0.234	0.301	0.163
Mean fish length (cm)	4	8	12	17	21	11

Table B-51b. Diet composition and sampling data for butterfish by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area					
	Middle Atlantic	Southern New England	Georges Bank	Offshore South of Cape Hatteras	Inshore South of Cape Hatteras	Inshore North of Cape Hatteras
CNIDARIA	-	-	-	-	-	[3.1]
CTENOPHORA	-	-	-	-	-	[0.1]
RHYNCHOCOELA	-	-	[14.4]	-	-	<[0.1]
CHAETOGNATHA	-	[2.1]	[13.5]	-	-	-
<i>Sagitta elegans</i>	-	0.6	8.8	-	-	-
<i>Sagitta</i> sp.	-	1.5	-	-	-	-
Chaetognatha unid.	-	-	4.7	-	-	-
MOLLUSCA	[0.7]	[0.5]	-	-	-	[42.1]
Thecosomata	(0.7)	(0.1)	-	-	-	(42.1)
<i>Clione</i> sp.	0.7	-	-	-	-	38.7
Thecosomata unid.	-	0.1	-	-	-	3.4
Mollusca unid.	-	(0.4)	-	-	-	-
POLYCHAETA	-	[3.7]	-	<[0.1]	<[0.1]	[3.3]
Glyceridae	-	-	-	-	-	2.0
<i>Tomopteris helgolandica</i>	-	0.3	-	-	-	-
<i>Tomopteris</i> sp.	-	3.2	-	-	-	<0.1
Polychaeta unid.	-	0.2	-	<0.1	<0.1	1.3
CRUSTACEA	[2.6]	[3.5]	[4.6]	[0.1]	<[0.1]	[1.5]
Copepoda	<(0.1)	(1.1)	(4.0)	-	<(0.1)	(0.5)
<i>Centropages</i> sp.	<0.1	<0.1	-	-	<0.1	<0.1
Copepoda unid.	<0.1	1.1	4.0	-	<0.1	0.5
Stomatopoda	-	-	-	-	-	<(0.1)
Amphipoda	<(0.1)	(2.0)	(0.3)	<(0.1)	<(0.1)	(0.6)
<i>Hyperia glaba</i>	<0.1	0.3	-	-	<0.1	<0.1
<i>Parathemisto</i> sp.	<0.1	1.7	0.3	<0.1	<0.1	-
<i>Ampelisca verrilli</i>	-	-	-	-	-	0.6
Mysidacea	-	-	-	-	-	(0.1)
<i>Neomysis americana</i>	-	-	-	-	-	<0.1
Euphausiacea	(2.6)	<(0.1)	-	(0.1)	-	<(0.1)
<i>Meganyctiphanes norvegica</i>	2.6	<0.1	-	0.1	-	<0.1
Decapoda larvae	-	(0.2)	(0.3)	-	-	(0.2)
Crustacea unid.	<(0.1)	(0.2)	-	<(0.1)	<(0.1)	(0.1)
UROCHORDATA	[20.5]	[46.0]	-	[80.8]	[59.8]	[3.8]
Asciacea	-	(30.8)	-	-	(32.1)	-
Thaliacea	(17.6)	(8.5)	-	(2.1)	(0.3)	(1.3)
Salpidae	13.1	8.0	-	2.1	0.3	1.3
Thaliacea unid.	4.5	0.5	-	-	-	-
Larvacea	-	(3.1)	-	-	-	(1.0)
Urochordata unid.	(2.9)	(3.6)	-	(78.7)	(27.4)	(1.5)
OSTEICHTHYES	<[0.1]	-	-	-	[0.3]	<[0.1]
ANIMAL REMAINS AND MISC.	[76.2]	[44.2]	[67.5]	[19.1]	[39.9]	[46.1]
Number sampled	91	174	56	20	85	426
Number empty	22	57	24	0	25	44
Mean stomach content (g)	0.217	0.137	0.025	0.793	0.197	0.144
Mean fish length (cm)	13	14	11	11	14	10

Table B-52a. Diet composition and sampling data for Gulf Stream flounder by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)				Total
	1-5	6-10	11-15	16-20	
POLYCHAETA	[35.3]	[36.7]	[54.9]	[31.6]	[47.2]
<i>Nicomache lumbricalis</i>	-	-	5.8	-	3.4
Maldanidae	-	5.7	-	-	2.3
Eunicidae	35.3	<0.1	-	-	0.2
<i>Lumbrineris</i> sp.	-	5.4	-	-	2.1
Lumbrineridae	-	8.0	1.1	-	3.8
<i>Ophelina</i> sp.	-	-	2.2	-	1.3
Nephtyidae	-	4.1	22.1	-	14.4
<i>Sthenelais limicola</i>	-	-	3.8	-	2.2
Sabellidae	-	-	1.7	-	1.0
Polychaeta unid.	-	13.5	18.2	31.6	16.5
CRUSTACEA	[64.7]	[55.4]	[31.5]	[35.5]	[41.3]
Stomatopoda	-	(5.5)	-	-	(2.2)
<i>Platysquilla enodis</i>	-	4.6	-	-	1.8
Stomatopoda unid.	-	0.9	-	-	0.4
Cumacea	-	(0.8)	(0.8)	(2.6)	(0.8)
Amphipoda	(64.7)	(36.7)	(13.7)	(14.5)	(23.1)
<i>Ampelisca agassizi</i>	-	3.5	0.3	-	1.6
<i>Ampelisca</i> sp.	-	1.1	1.0	-	1.0
<i>Byblis serrata</i>	-	2.8	0.2	-	1.2
Ampeliscidae	-	2.4	0.3	-	1.1
<i>Erichthonius</i> sp.	-	3.6	<0.1	-	1.5
<i>Unciola</i> sp.	17.6	9.2	6.0	1.3	7.2
<i>Casco bigelowi</i>	-	1.4	-	-	0.5
Oedicerotidae	-	1.2	0.1	-	1.3
<i>Leptocheirus pinguis</i>	-	2.8	3.7	13.2	3.5
Amphipoda unid.	47.1	8.7	2.1	-	4.2
Decapoda	-	(9.8)	(5.1)	(18.4)	(7.2)
<i>Crangon septemspinosa</i>	-	0.3	0.9	-	0.6
<i>Munida</i> sp.	-	2.1	0.5	-	1.1
Majidae	-	-	1.7	-	1.0
<i>Cancer irroratus</i>	-	3.5	0.7	11.8	2.0
Canceridae	-	2.5	0.4	-	1.2
Decapoda larvae	-	<0.1	0.6	6.6	0.5
Decapoda unid.	-	1.4	0.3	-	0.8
Crustacea unid.	-	(2.6)	(11.9)	-	(8.0)
ECHINODERMATA	-	[1.9]	[2.5]	[23.7]	[2.7]
<i>Ophiura</i> sp.	-	1.5	0.2	-	0.7
Ophiuroidea	-	0.4	2.3	23.7	2.0
OSTEICHTHYES	-	-	[7.8]	-	[4.6]
Gadidae	-	-	6.0	-	3.5
Osteichthyes larvae and eggs	-	-	1.8	-	1.1
ANIMAL REMAINS AND MISC.	-	[6.0]	[3.3]	[9.2]	[4.2]
Number sampled	4	124	77	19	224
Number empty	0	26	27	10	63
Mean stomach content (g)	0.004	0.013	0.030	0.004	0.018
Mean fish length (cm)	4	8	12	16	10

Table B-52b. Diet composition and sampling data for Gulf Stream flounder by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area		
	Middle Atlantic	Southern New England	Georges Bank
POLYCHAETA	[61.0]	[43.2]	[46.4]
<i>Nicomache lumbricalis</i>	16.7	-	-
Maldanidae	-	3.4	-
Eunicidae	0.9	-	-
<i>Lumbrineris</i> sp.	2.4	2.4	0.8
Lumbrineridae	0.5	5.6	-
<i>Ophelina</i> sp.	6.2	-	-
Nephtyidae	5.5	17.6	12.2
<i>Sthenelais limicola</i>	-	-	16.7
Polychaeta unid.	28.8	14.2	16.7
CRUSTACEA	[34.2]	[42.1]	[47.9]
Stomatopoda	(3.0)	(2.4)	-
<i>Platysquilla enodis</i>	3.0	1.8	-
Stomatopoda unid.	-	0.6	-
Cumacea	(1.5)	(0.2)	(2.6)
Amphipoda	(26.1)	(19.2)	(38.1)
<i>Ampelisca agassizi</i>	3.0	0.5	4.5
<i>Ampelisca</i> sp.	3.7	-	2.1
<i>Byblis serrata</i>	0.7	1.6	-
Ampeliscidae	-	0.7	5.1
<i>Erichthonius</i> sp.	0.5	0.8	6.2
<i>Unciola</i> sp.	7.5	7.6	4.6
<i>Casco bigelowi</i>	1.5	0.4	-
Oedicerotidae	6.3	-	-
<i>Leptocheirus pinguis</i>	-	5.3	-
Amphipoda unid.	2.9	2.3	15.6
Decapoda	(2.5)	(9.0)	(5.6)
<i>Crangon septemspinosa</i>	-	0.9	-
<i>Munida</i> sp.	-	1.7	-
Majidae	-	1.5	-
<i>Cancer irroratus</i>	-	3.1	-
Cancridae	1.3	1.0	1.7
Decapoda larvae	0.1	0.4	1.9
Decapoda unid.	1.1	0.4	2.0
Crustacea unid.	(1.1)	(11.3)	(1.6)
ECHINODERMATA	-	[4.1]	-
<i>Ophiura</i> sp.	-	1.1	-
Ophiuroidea	-	3.0	-
OSTEICHTHYES	-	[6.8]	-
Gadidae	-	5.2	-
Osteichthyes larvae and eggs	-	1.6	-
ANIMAL REMAINS AND MISC.	[4.8]	[3.8]	[5.7]
Number sampled	66	129	29
Number empty	20	37	6
Mean stomach content (g)	0.012	0.021	0.018
Mean fish length (cm)	8	11	10

Table B-53a. Diet composition and sampling data for summer flounder by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)									Total
	<21	21-25	26-30	31-35	36-40	41-45	51-55	56-60	>60	
CEPHALOPODA	-	-	[4.9]	[27.1]	[1.5]	[19.1]	[26.2]	[64.5]	[38.3]	[34.2]
<i>Illex</i> sp.	-	-	-	10.2	-	-	-	-	31.5	9.4
<i>Loligo pealeii</i>	-	-	-	3.8	-	12.2	12.7	51.1	-	16.3
<i>Loligo</i> sp.	-	-	-	-	-	2.3	-	3.4	-	1.2
<i>Lolliguncula brevis</i>	-	-	-	2.4	-	-	-	-	-	0.1
Cephalopoda unid.	-	-	4.9	10.7	1.5	4.6	13.5	10.0	6.8	7.2
CRUSTACEA	[43.3]	[41.8]	[18.6]	[22.4]	[6.5]	[8.8]	[1.1]	-	[0.9]	[4.4]
Stomatopoda	-	(5.5)	-	(0.3)	-	-	-	-	-	(<0.1)
Amphipoda	-	-	(1.6)	(0.7)	(1.0)	-	-	-	-	(0.2)
Mysidacea	(0.6)	(24.1)	(12.3)	(12.1)	(2.2)	(0.7)	(0.3)	-	(0.9)	(2.0)
<i>Neomysis americana</i>	0.6	24.1	12.3	12.1	2.2	0.7	0.3	-	0.9	2.0
Euphausiacea	-	-	-	(6.0)	-	-	-	-	-	(0.3)
<i>Meganyctiphanes norvegica</i>	-	-	-	6.0	-	-	-	-	-	0.3
Decapoda	(42.7)	(12.0)	(4.7)	(2.8)	(3.3)	(7.3)	(0.8)	-	-	(1.8)
<i>Dichelopandalus leptocerus</i>	-	-	-	-	-	1.9	-	-	-	0.2
<i>Crangon septemspinosa</i>	9.0	4.3	0.3	0.3	0.2	<0.1	-	-	-	0.1
<i>Cancer irroratus</i>	33.2	2.1	1.8	2.5	1.3	3.0	-	-	-	0.8
Canceridae	-	-	1.7	<0.1	-	-	0.8	-	-	0.1
<i>Ovalipes ocellatus</i>	-	-	-	-	1.8	2.4	-	-	-	0.5
Decapoda unid.	0.5	5.6	0.9	-	-	-	-	-	-	0.1
Crustacea unid.	(<0.1)	(0.2)	-	(0.5)	-	(0.8)	-	-	-	(0.1)
OSTEICHTHYES	[56.6]	[58.2]	[75.7]	[49.8]	[91.9]	[70.9]	[72.7]	[35.5]	[60.6]	[61.1]
Batrachoididae	-	-	-	-	-	-	-	-	5.5	1.6
<i>Etrumeus teres</i>	-	35.1	-	-	12.5	4.0	-	-	-	2.9
Clupeidae	-	-	-	-	-	5.5	-	13.4	-	4.2
<i>Anchoa hepsetus</i>	-	-	7.6	-	-	1.9	-	-	-	0.4
<i>Anchoa mitchilli</i>	-	-	-	-	-	-	-	-	1.3	0.4
<i>Anchoa</i> sp.	-	6.4	-	-	-	-	-	-	-	0.1
Engraulidae	-	-	-	-	-	-	0.3	2.1	-	0.6
<i>Cyprinodon variegatus</i>	-	-	-	-	-	-	2.2	-	-	0.2
<i>Merluccius bilinearis</i>	54.0	-	-	4.6	-	-	-	-	-	0.3
Gadidae	-	-	-	-	-	0.7	-	-	-	0.1
Ophidiidae	-	-	-	-	-	7.6	-	-	-	0.8
<i>Ammodytes dubius</i>	-	-	34.0	12.1	58.2	27.3	43.2	12.8	4.5	22.3
<i>Triglops murrayi</i>	-	-	-	-	1.9	-	-	-	-	0.3
<i>Cynoscion regalis</i>	-	-	-	6.0	-	2.4	-	-	-	0.6
<i>Ulvaria subbifurcata</i>	-	-	-	1.3	-	-	-	-	-	0.1
<i>Macrozoarces americanus</i>	-	2.9	-	-	-	-	-	-	-	<0.1
<i>Paralichthys</i> sp.	-	-	-	3.5	-	-	-	-	-	0.2
<i>Scophthalmus aquosus</i>	-	-	-	4.9	-	-	-	-	-	0.2
Bothidae	-	-	5.4	0.8	-	<0.1	-	-	-	0.2
Osteichthyes unid.	2.6	13.8	28.7	16.6	19.3	21.5	27.0	7.2	49.3	25.6
ANIMAL REMAINS AND MISC.	[0.1]	[<0.1]	[0.8]	[0.7]	[0.1]	[1.2]	-	-	[0.2]	[0.3]
Number sampled	22	76	135	113	111	80	52	44	22	655
Number empty	16	53	84	74	66	44	30	25	10	402
Mean stomach content (g)	0.167	0.363	0.427	0.881	2.828	2.659	3.503	12.155	25.717	3.050
Mean fish length (cm)	18	23	27	32	38	42	47	53	64	35

Table B-53b. Diet composition and sampling data for summer flounder by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area					
	Middle Atlantic	Southern New England	Georges Bank	Gulf of Maine	Inshore South of Cape Hatteras	Inshore North of Cape Hatteras
CEPHALOPODA	[1.3]	[55.6]	-	-	-	[31.1]
<i>Illex</i> sp.	-	23.7	-	-	-	1.2
<i>Loligo pealeii</i>	-	24.4	-	-	-	16.9
<i>Loligo</i> sp.	-	2.4	-	-	-	0.6
<i>Lolliguncula brevis</i>	0.8	-	-	-	-	-
Cephalopoda unid.	0.5	5.1	-	-	-	12.4
CRUSTACEA	[3.0]	[0.8]	-	[100.0]	[9.6]	[7.8]
Stomatopoda	-	-	-	-	(4.4)	(<0.1)
Amphipoda	-	-	-	-	-	(0.5)
Mysidacea	(0.6)	-	-	-	(<0.1)	(4.5)
<i>Neomysis americana</i>	0.6	-	-	-	<0.1	4.5
Euphausiacea	-	-	-	(100.0)	-	-
<i>Meganyctiphanes norvegica</i>	-	-	-	100.0	-	-
Decapoda	(2.4)	(0.6)	-	-	(5.2)	(2.8)
<i>Dichelopandalus leptocerus</i>	0.3	0.4	-	-	-	-
<i>Crangon septemspinosa</i>	0.2	<0.1	-	-	3.2	0.2
<i>Cancer irroratus</i>	1.7	-	-	-	0.9	1.2
<i>Ovalipes ocellatus</i>	-	-	-	-	-	1.3
Decapoda unid.	0.2	0.2	-	-	1.1	0.1
Crustacea unid.	-	(0.2)	-	-	(<0.1)	(<0.1)
OSTEICHTHYES	[95.7]	[43.2]	[100.0]	-	[90.2]	[60.3]
Batrachoididae	-	-	44.8	-	-	-
<i>Etrumeus teres</i>	-	-	-	-	-	6.8
Clupeidae	22.6	1.6	-	-	-	-
<i>Anchoa hepsetus</i>	-	-	-	-	24.5	0.7
<i>Anchoa mitchilli</i>	-	-	-	-	-	0.9
<i>Anchoa</i> sp.	-	-	-	-	-	0.2
Engraulidae	-	-	-	-	-	1.4
<i>Cyprinodon variegatus</i>	-	0.5	-	-	-	-
<i>Merluccius bilinearis</i>	-	-	-	-	-	0.8
Gadidae	0.5	-	-	-	-	-
Ophidiidae	-	2.1	-	-	-	-
<i>Ammodytes dubius</i>	60.2	7.6	54.6	-	-	18.9
<i>Triglops murrayi</i>	-	-	-	-	50.6	-
<i>Cynoscion regalis</i>	-	-	-	-	-	1.3
<i>Ulvaria subbifurcata</i>	0.4	-	-	-	-	-
<i>Macrozoarces americanus</i>	-	-	-	-	-	<0.1
<i>Paralichthys</i> sp.	-	-	-	-	-	0.4
<i>Scophthalmus aquosus</i>	-	-	-	-	-	0.6
Bothidae	-	-	-	-	-	0.5
Osteichthyes unid.	12.0	31.4	0.6	-	15.1	27.8
ANIMAL REMAINS AND MISC.	[<0.1]	[0.4]	-	-	[0.2]	[0.8]
Number sampled	139	88	9	1	74	350
Number empty	98	65	5	0	62	177
Mean stomach content (g)	2.274	8.534	7.776	5.995	0.161	2.409
Mean fish length (cm)	36	48	56	34	27	34

Table B-54a. Diet composition and sampling data for fourspot flounder by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)							Total
	11-15	16-20	21-25	26-30	31-35	36-40	41-45	
MOLLUSCA	-	-	-	<0.1]	[20.1]	[89.3]	[100.0]	[54.6]
Bivalvia	-	-	-	-	-	(0.6)	-	(0.3)
Cephalopoda	-	-	-	<0.1)	(20.1)	(88.7)	(100.0)	(54.3)
<i>Loligo</i> sp.	-	-	-	-	-	17.6	-	7.2
Sepiolidae	-	-	-	-	20.1	-	-	3.0
Octopoda	-	-	-	-	-	-	100.0	15.2
Cephalopoda unid.	-	-	-	<0.1	-	71.1	-	28.9
POLYCHAETA	-	[38.5]	-	[2.7]	[5.9]	-	-	[2.0]
Aphroditidae	-	-	-	1.0	-	-	-	0.2
Sabellidae	-	-	-	0.6	1.3	-	-	0.4
<i>Asabellides oculata</i>	-	38.5	-	-	-	-	-	0.4
Polychaeta unid.	-	-	-	1.1	4.6	-	-	1.0
SIPUNCULA	-	-	-	[1.1]	-	-	-	[0.3]
<i>Golfingia</i> sp.	-	-	-	1.1	-	-	-	0.3
CRUSTACEA	[62.1]	[35.3]	[41.5]	[68.4]	[44.7]	[10.7]	-	[29.8]
Amphipoda	-	-	(4.9)	(2.0)	(0.3)	-	-	(0.8)
Mysidacea	(30.9)	(0.9)	-	-	(1.4)	-	-	(0.3)
<i>Neomysis americana</i>	17.9	-	-	-	1.4	-	-	0.3
Mysidacea unid.	13.0	0.9	-	-	-	-	-	<0.1
Decapoda	(28.8)	(34.4)	(33.0)	(61.2)	(43.0)	(10.7)	-	(27.3)
Hippolytidae	-	-	1.3	-	-	-	-	0.1
<i>Dichelopandalus leptocerus</i>	-	-	19.1	10.4	5.3	1.2	-	4.6
Pandalidae	7.4	-	-	2.3	-	-	-	0.6
<i>Crangon septemspinosa</i>	9.1	12.6	2.2	5.8	9.0	<0.1	-	3.0
<i>Munida iris</i>	-	-	-	8.1	-	-	-	1.9
<i>Munida</i> sp.	-	0.5	1.1	-	-	3.3	-	1.4
<i>Cancer irroratus</i>	-	21.3	8.5	32.0	27.1	2.2	-	13.1
Cancridae	-	-	-	0.7	0.6	-	-	0.3
<i>Albunea</i> sp.	-	-	-	1.0	0.6	2.2	-	1.2
Decapoda unid.	12.3	-	0.8	0.9	0.4	1.8	-	1.1
Crustacea unid.	(2.4)	-	(3.6)	(5.2)	(<0.1)	-	-	(1.4)
OSTEICHTHYES	[37.9]	[26.2]	[55.1]	[21.4]	[26.6]	[<0.1]	-	[11.8]
<i>Gadus morhua</i>	-	26.2	-	10.8	-	-	-	2.8
<i>Merluccius bilinearis</i>	-	-	-	-	23.4	-	-	3.5
Ophidiidae	-	-	-	7.6	-	-	-	1.8
<i>Peprilus triacanthus</i>	-	-	-	-	1.0	-	-	0.1
Bothidae	-	-	43.7	-	-	-	-	1.9
<i>Pleuronectes ferruginus</i>	-	-	-	<0.1	-	-	-	<0.1
Pleuronectidae	-	-	-	0.2	-	-	-	0.1
Osteichthyes larvae	-	-	-	<0.1	-	-	-	<0.1
Osteichthyes unid.	37.9	-	11.4	2.8	2.2	<0.1	-	1.6
ANIMAL REMAINS AND MISC.	-	-	[3.4]	[6.4]	[2.7]	-	-	[1.5]
Number sampled	5	14	24	71	50	13	1	178
Number empty	0	6	8	26	23	5	0	68
Mean stomach content (g)	0.057	0.084	0.210	0.399	0.352	3.721	18.040	0.668
Mean fish length (cm)	14	17	23	28	32	37	42	28

Table B-54b. Diet composition and sampling data for fourspot flounder by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area		
	Middle Atlantic	Southern New England	Georges Bank
MOLLUSCA	[1.4]	[45.3]	[73.1]
Bivalvia	(1.4)	-	-
Cephalopoda	-	(45.3)	(73.1)
<i>Loligo</i> sp.	-	32.0	-
Sepiolidae	-	13.3	-
Octopoda	-	-	25.2
Cephalopoda unid.	-	-	47.9
POLYCHAETA	[6.0]	[4.1]	-
Aphroditidae	-	1.1	-
Sabellidae	-	1.6	-
<i>Asabellides oculata</i>	2.2	-	-
Polychaeta unid.	3.8	1.4	-
SIPUNCULA	-	[1.2]	-
<i>Golfingia</i> sp.	-	1.2	-
CRUSTACEA	[50.2]	[24.7]	[25.2]
Amphipoda	(<0.1)	(2.4)	(0.4)
Mysidacea	(1.4)	(0.2)	-
<i>Neomysis americana</i>	1.4	-	-
Mysidacea unid.	-	0.2	-
Decapoda	(48.8)	(20.9)	(22.9)
Hippolytidae	-	-	<0.1
<i>Dichelopandalus leptocerus</i>	-	4.9	5.7
Pandalidae	0.1	<0.1	0.9
<i>Crangon septemspinosa</i>	7.1	3.8	1.5
<i>Munida iris</i>	11.2	-	-
<i>Munida</i> sp.	7.9	-	<0.1
<i>Cancer irroratus</i>	20.2	11.8	11.5
Cancridae	0.9	0.4	-
<i>Albunea</i> sp.	-	-	2.0
Decapoda unid.	1.4	<0.1	1.3
Crustacea unid.	(<0.1)	(1.2)	(1.9)
OSTEICHTHYES	[41.6]	[19.5]	[0.3]
<i>Gadus morhua</i>	-	12.6	-
<i>Merluccius bilinearis</i>	16.7	2.6	-
Ophidiidae	10.5	-	-
<i>Peprilus triacanthus</i>	-	0.6	-
Bothidae	10.7	-	-
<i>Pleuronectes ferruginus</i>	-	<0.1	-
Pleuronectidae	0.3	-	-
Osteichthyes larvae	-	<0.1	-
Osteichthyes unid.	3.4	3.7	0.3
ANIMAL REMAINS AND MISC.	[0.8]	[5.2]	[1.4]
Number sampled	28	90	60
Number empty	4	44	20
Mean stomach content (g)	0.733	0.296	1.195
Mean fish length (cm)	26	28	28

Table B-55a. Diet composition and sampling data for windowpane by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)									Total
	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	
CHAETOGNATHA	-	-	-	-	[<0.1]	[0.1]	[0.3]	[3.5]	-	[0.2]
POLYCHAETA	-	-	[0.1]	[6.5]	[0.6]	[0.3]	[3.2]	[1.4]	-	[0.9]
<i>Diopatra cuprea</i>	-	-	-	-	-	-	2.0	-	-	0.2
Ampharetidae	-	-	-	1.2	-	0.2	-	-	-	0.1
Polychaeta unid.	-	-	0.1	5.3	0.6	0.1	1.2	1.4	-	0.6
CRUSTACEA	[100.0]	[100.0]	[99.1]	[82.2]	[69.0]	[63.5]	[63.1]	[35.6]	[9.0]	[65.9]
Cumacea	-	(<0.1)	-	(<0.1)	(0.2)	(<0.1)	(<0.1)	(<0.1)	(4.0)	(0.1)
Isopoda	-	-	(<0.1)	(<0.1)	-	-	(<0.1)	(0.2)	-	(<0.1)
Amphipoda	(8.8)	-	(2.5)	(1.4)	(8.4)	(7.4)	(10.7)	(6.3)	-	(7.8)
<i>Gammarus annulatus</i>	-	-	0.7	0.3	4.8	5.4	8.2	0.3	-	5.2
<i>Gammarus lawrencianus</i>	-	-	1.4	-	-	<0.1	-	-	-	<0.1
<i>Gammarus</i> sp.	-	-	-	<0.1	<0.1	0.6	1.2	-	-	0.5
Oedicerotidae	-	-	0.4	-	0.3	0.2	<0.1	0.2	-	0.2
<i>Leptocheirus pinguis</i>	-	-	-	1.1	3.0	0.7	-	-	-	1.2
Amphipoda unid.	8.8	-	-	<0.1	0.3	0.5	1.3	5.8	-	0.7
Mysidacea	(84.8)	(95.0)	(81.3)	(76.1)	(41.8)	(40.4)	(34.6)	(9.2)	-	(41.7)
<i>Mysidopsis bigelowi</i>	-	-	-	11.9	0.6	<0.1	<0.1	0.4	-	0.6
<i>Neomysis americana</i>	84.8	94.6	45.6	60.6	41.2	40.0	34.6	8.8	-	40.3
Mysidacea unid.	-	0.4	35.7	3.6	<0.1	0.4	<0.1	-	-	0.8
Euphausiacea	(4.0)	(0.3)	(5.2)	-	(0.6)	(1.5)	(0.8)	-	-	(1.1)
<i>Meganyctiphanes norvegica</i>	4.0	0.3	5.2	-	0.6	1.5	0.8	-	-	1.1
Decapoda	-	(0.8)	(9.3)	(4.7)	(15.5)	(13.6)	(15.9)	(19.6)	-	(14.3)
<i>Acetes americanus</i>	-	-	0.6	-	-	-	-	-	-	<0.1
<i>Dichelopandalus leptocerus</i>	-	-	-	-	0.4	0.2	1.8	4.3	-	0.5
Pandalidae	-	-	-	-	1.2	0.1	0.2	-	-	0.4
<i>Crangon septemspinosa</i>	-	0.8	1.6	4.7	10.4	11.8	13.6	13.8	-	11.3
Crangonidae	-	-	-	-	0.9	<0.1	<0.1	1.5	-	0.3
Decapoda larvae	-	-	7.1	<0.1	2.1	1.4	-	-	-	1.4
Decapoda unid.	-	-	<0.1	<0.1	0.5	0.1	0.3	-	-	0.4
Crustacea unid.	(2.4)	(3.9)	(0.8)	(<0.1)	(2.5)	(0.6)	(1.1)	(0.3)	(5.0)	(0.9)
SALPIDAE	-	-	-	[1.1]	-	-	-	-	-	[<0.1]
OSTEICHTHYES	-	-	[<0.1]	[9.3]	[28.0]	[34.6]	[31.0]	[59.2]	[31.0]	[31.4]
<i>Ophichthus cruentifer</i>	-	-	-	-	-	<0.1	-	-	-	0.1
Engraulidae	-	-	-	-	3.9	5.6	1.1	-	-	4.3
<i>Brosme brosme</i>	-	-	-	-	-	0.4	-	11.4	-	0.4
<i>Merluccius bilinearis</i>	-	-	-	-	6.6	1.2	0.7	-	-	2.4
Gadidae	-	-	-	-	<0.1	0.6	-	-	-	0.3
Syngnathidae	-	-	-	-	0.2	<0.1	-	-	-	<0.1
<i>Ammodytes dubius</i>	-	-	-	3.4	9.0	20.3	28.0	47.8	-	17.8
Pleuronectiformes	-	-	-	-	<0.1	-	-	-	-	<0.1
Osteichthyes larvae	-	-	-	1.7	0.4	1.9	<0.1	-	-	1.2
Osteichthyes unid.	-	-	<0.1	4.2	7.9	4.6	1.2	-	31.0	4.9
ANIMAL REMAINS AND MISC.	-	-	[0.8]	[0.9]	[2.4]	[1.5]	[2.4]	[0.3]	[60.0]	[1.6]
Number sampled	22	32	43	102	376	401	103	12	1	1092
Number empty	9	5	8	28	153	133	40	3	0	379
Mean stomach content (g)	0.006	0.074	0.187	0.264	0.478	1.007	0.785	0.946	0.100	0.653
Mean fish length (cm)	4	7	13	18	23	27	32	37	41	24

Table B-55b. Diet composition and sampling data for windowpane by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area				
	Middle Atlantic	Southern New England	Georges Bank	Inshore South of Cape Hatteras	Inshore North of Cape Hatteras
CHAETOGNATHA	[0.1]	[<0.1]	[2.5]	-	-
POLYCHAETA	[0.5]	[0.5]	[2.3]	-	[0.9]
<i>Diopatra cuprea</i>	-	-	-	-	0.4
Ampharetidae	-	0.5	-	-	<0.1
Polychaeta unid.	0.5	<0.1	2.3	-	0.5
CRUSTACEA	[42.5]	[73.7]	[18.5]	[100.0]	[75.3]
Cumacea	(<0.1)	(<0.1)	(<0.1)	-	(0.2)
Isopoda	-	(<0.1)	(<0.1)	-	(<0.1)
Amphipoda	(0.3)	(19.0)	(1.7)	-	(7.1)
<i>Gammarus annulatus</i>	-	16.9	-	-	3.6
<i>Gammarus</i> sp.	<0.1	<0.1	-	-	0.9
Oedicerotidae	<0.1	-	0.1	-	0.3
<i>Leptocheirus pinguis</i>	-	1.5	-	-	1.6
Amphipoda unid.	0.3	0.6	1.6	-	0.7
Mysidacea	(27.6)	(21.3)	(0.6)	-	(57.3)
<i>Mysidopsis bigelowi</i>	<0.1	<0.1	0.3	-	1.1
<i>Neomysis americana</i>	27.6	21.3	0.2	-	54.8
Mysidacea unid.	<0.1	<0.1	0.1	-	1.4
Euphausiacea	-	-	-	-	(2.0)
<i>Meganyctiphanes norvegica</i>	-	-	-	-	2.0
Decapoda	(14.6)	(32.7)	(15.3)	(100.0)	(7.5)
<i>Acetes americanus</i>	-	-	-	8.2	-
<i>Dichelopandalus leptocerus</i>	<0.1	2.6	-	-	-
Pandalidae	-	0.2	0.8	-	0.5
<i>Crangon septemspinosa</i>	6.8	29.3	14.3	-	6.5
Crangonidae	<0.1	0.1	0.2	-	0.4
Decapoda larvae	7.1	-	-	91.8	<0.1
Decapoda unid.	0.7	0.5	<0.1	-	0.1
Crustacea unid.	(<0.1)	(0.7)	(0.9)	-	(1.2)
SALPIDAE	-	-	-	-	[<0.1]
OSTEICHTHYES	[55.7]	[23.6]	[71.6]	-	[22.1]
<i>Ophichthus cruentifer</i>	0.3	-	-	-	-
Engraulidae	-	-	-	-	7.6
<i>Brosme brosme</i>	-	-	-	-	0.7
<i>Merluccius bilinearis</i>	0.7	-	-	-	4.0
Gadidae	-	<0.1	-	-	0.6
Syngnathidae	-	-	-	-	<0.1
<i>Ammodytes dubius</i>	45.0	20.2	70.1	-	2.8
Pleuronectiformes	0.1	-	-	-	-
Osteichthyes larvae	0.3	0.2	-	-	2.0
Osteichthyes unid.	9.3	3.2	1.5	-	4.4
ANIMAL REMAINS AND MISC.	[1.2]	[2.2]	[5.1]	-	[1.7]
Number sampled	224	132	88	12	637
Number empty	120	45	38	4	174
Mean stomach content (g)	0.590	1.013	0.473	0.052	0.636
Mean fish length (cm)	25	26	28	12	22

Table B-56a. Diet composition and sampling data for witch flounder by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)									Total
	<26	26-30	31-35	36-40	41-45	46-50	51-55	56-60	61-65	
MOLLUSCA	[0.1]	-	[0.3]	[12.6]	[2.9]	[0.6]	[2.7]	[0.1]	-	[2.3]
Gastropoda	-	-	-	(1.5)	(<0.1)	-	(<0.1)	(<0.1)	-	(0.1)
Bivalvia	(0.1)	-	(0.3)	(11.1)	(2.9)	(0.6)	(2.7)	(0.1)	-	(2.2)
<i>Yoldia limatula</i>	-	-	-	-	-	-	1.9	-	-	0.7
<i>Yoldia</i> sp.	-	-	-	11.1	-	0.6	<0.1	-	-	0.9
Bivalvia unid.	0.1	-	0.3	-	2.9	<0.1	0.8	0.1	-	0.6
POLYCHAETA	[81.3]	[96.0]	[92.2]	[81.1]	[87.5]	[84.7]	[82.3]	[86.3]	[99.9]	[85.7]
Capitellidae	-	2.6	-	-	0.8	10.3	4.2	0.8	-	3.9
Arabellidae	-	-	-	-	-	4.7	-	-	-	1.2
<i>Eunice pennata</i>	-	-	-	-	-	4.1	-	-	-	0.8
<i>Lumbrineris fragilis</i>	-	8.3	7.5	-	-	1.6	3.8	<0.1	-	2.3
<i>Lumbrineris</i> sp.	-	-	<0.1	-	3.7	-	-	-	-	0.3
<i>Ninoe brevipes</i>	-	-	-	-	-	-	-	11.7	-	1.9
Lumbrineridae	37.4	0.9	8.3	4.9	<0.1	0.7	1.1	<0.1	2.4	1.9
<i>Onuphis nebulosa</i>	-	-	-	-	-	1.3	-	-	-	0.3
<i>Ophelina</i> sp.	-	<0.1	-	-	-	-	-	1.4	-	0.2
<i>Glycera dibranchiata</i>	-	-	-	32.0	-	-	-	-	-	2.3
<i>Goniada maculata</i>	-	1.0	-	1.0	-	-	0.4	-	-	0.2
<i>Goniada norvegica</i>	-	-	-	-	-	-	-	9.5	-	1.6
<i>Goniada</i> sp.	-	-	-	-	5.8	0.3	<0.1	10.5	<0.1	2.3
<i>Ophioglycera gigantea</i>	-	-	-	-	-	18.9	-	-	-	3.8
Goniadidae	-	0.5	-	8.7	-	-	-	-	-	0.6
<i>Nephtys</i> sp.	-	-	42.9	0.9	2.8	-	0.7	0.1	-	2.8
Nephtyidae	-	-	1.4	3.8	1.1	0.8	0.1	0.2	-	0.7
Sabellidae	-	-	1.6	<0.1	-	<0.1	0.8	<0.1	-	0.4
<i>Spio</i> sp.	-	-	-	-	-	-	0.5	-	3.2	0.6
Spionidae	-	-	-	2.8	-	0.7	0.2	4.7	-	1.2
<i>Sternaspis scutata</i>	-	-	-	-	-	0.7	1.5	1.8	5.1	1.2
Sternaspidae	-	5.8	-	3.3	-	-	-	4.4	-	1.1
Terebellidae	-	-	-	-	5.3	-	-	-	-	0.4
Polychaeta unid.	43.9	76.9	30.5	23.7	68.0	40.6	69.0	41.2	89.2	53.7
CRUSTACEA	[6.3]	[0.6]	[2.1]	[4.1]	[1.2]	[2.7]	[4.6]	[1.4]	-	[3.4]
Isopoda	-	-	-	-	-	-	(1.5)	(0.5)	-	(0.6)
Amphipoda	(5.5)	(0.5)	(2.1)	(4.1)	(0.2)	(2.2)	(2.7)	(0.9)	-	(2.4)
<i>Byblis serrata</i>	3.4	-	0.5	-	-	-	1.8	-	-	0.7
<i>Casco bigelowi</i>	1.1	-	0.9	-	-	1.2	<0.1	0.2	-	0.4
Amphipoda unid.	1.0	0.5	0.7	4.1	0.2	1.0	0.9	0.7	-	1.3
Crustacea unid.	(0.8)	(0.1)	-	(<0.1)	(1.0)	(0.5)	(0.4)	-	-	(0.4)
ECHINODERMATA	-	-	-	-	[0.2]	[1.3]	[2.6]	[7.2]	-	[2.4]
Dendrochirotida	-	-	-	-	-	-	2.6	-	-	0.9
Holothuroidea	-	-	-	-	0.2	1.3	-	7.2	-	1.5
ASCIDIACEA	[12.3]	-	[0.3]	-	[<0.1]	[1.2]	[0.1]	-	-	[0.5]
ANIMAL REMAINS AND MISC.	-	[3.4]	[5.1]	[2.2]	[8.2]	[9.5]	[7.7]	[5.0]	[0.1]	[5.7]
Number sampled	6	10	10	9	13	28	39	13	2	130
Number empty	2	1	0	0	1	6	9	1	1	21
Mean stomach content (g)	0.143	0.194	0.463	0.717	0.534	0.641	0.841	1.131	1.817	0.692
Mean fish length (cm)	21	28	32	37	44	47	53	57	62	45

Table B-56b. Diet composition and sampling data for witch flounder by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area			
	Georges Bank	Gulf of Maine	Scotian Shelf	Inshore North of Cape Hatteras
MOLLUSCA	[2.1]	[2.2]	[25.2]	[2.1]
Gastropoda	-	(0.2)	-	-
Bivalvia	(2.1)	(2.0)	(25.2)	(2.1)
<i>Yoldia limatula</i>	-	-	-	1.9
<i>Yoldia</i> sp.	0.2	1.8	-	-
Bivalvia unid.	1.9	0.2	25.2	0.2
POLYCHAETA	[76.7]	[82.6]	[74.7]	[90.7]
Capitellidae	0.7	7.2	-	-
Arabellidae	-	1.8	-	-
<i>Eunice pennata</i>	-	1.6	-	-
<i>Lumbrineris fragilis</i>	11.4	1.3	-	1.4
<i>Lumbrineris</i> sp.	3.1	-	-	-
<i>Ninoe brevipes</i>	-	-	-	5.1
Lumbrineridae	0.1	2.7	1.5	1.2
<i>Onuphis nebulosa</i>	-	0.5	-	-
<i>Ophelina</i> sp.	-	<0.1	-	0.6
<i>Glycera dibranchiata</i>	24.1	-	-	-
<i>Goniada maculata</i>	-	0.2	-	0.4
<i>Goniada</i> sp.	22.8	0.1	-	4.2
<i>Ophioglycera gigantea</i>	-	7.2	-	-
Goniadidae	-	1.3	-	-
<i>Nephtys</i> sp.	-	4.5	-	1.0
Nephtyidae	0.5	<0.1	34.5	0.8
Sabellidae	-	0.8	-	-
<i>Spio</i> sp.	-	-	-	0.9
Spionidae	-	0.4	-	2.6
<i>Sternaspis scutata</i>	-	<0.1	-	3.0
Sternaspidae	7.5	0.2	29.8	<0.1
Terebellidae	-	0.8	-	-
Polychaeta unid.	6.5	52.0	8.9	69.5
CRUSTACEA	[11.2]	[1.9]	-	[2.4]
Isopoda	(0.9)	-	-	(1.4)
Amphipoda	(10.3)	(1.4)	-	(0.9)
<i>Byblis serrata</i>	6.6	0.1	-	<0.1
<i>Casco bigelowi</i>	0.4	0.1	-	0.7
Amphipoda unid.	3.3	1.2	-	0.2
Crustacea unid.	-	(0.5)	-	(0.1)
ECHINODERMATA	[6.3]	[3.4]	-	-
Dendrochirotida	-	1.8	-	-
Holothuroidea	6.3	1.6	-	-
ASCIDIACEA	-	[0.8]	-	-
ANIMAL REMAINS AND MISC.	[3.7]	[9.1]	[0.1]	[4.8]
Number sampled	6	87	2	36
Number empty	0	17	0	4
Mean stomach content (g)	1.427	0.541	0.359	0.933
Mean fish length (cm)	39	44	40	48

Table B-57a. Diet composition and sampling data for American plaice by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)									Total
	<16	16-20	21-25	26-30	31-35	36-40	41-45	46-50	>50	
ANTHOZOA	-	-	-	[1.8]	[4.3]	-	-	-	-	[0.7]
NEMATODA	[1.8]	[2.5]	[11.1]	[<0.1]	[<0.1]	[<0.1]	-	-	-	[0.5]
MOLLUSCA	-	-	[0.2]	[<0.1]	[34.6]	[24.3]	[12.2]	[29.8]	[16.8]	[20.3]
Bivalvia	-	-	(0.2)	(<0.1)	(34.6)	(24.3)	(12.2)	(24.4)	(11.9)	(17.7)
<i>Chlamys islandica</i>	-	-	-	-	-	-	-	-	7.6	2.5
<i>Arctica islandica</i>	-	-	-	-	0.4	-	-	-	4.3	1.4
<i>Cyclocardia borealis</i>	-	-	-	-	-	-	11.2	-	-	1.3
Bivalvia unid.	-	-	0.2	<0.1	34.2	24.3	1.0	24.4	<0.1	12.5
Mollusca unid.	-	-	-	-	-	-	-	(5.4)	(4.9)	(2.6)
POLYCHAETA	[5.2]	[8.1]	[2.5]	[5.0]	[1.4]	[4.3]	[3.3]	-	[5.8]	[2.2]
Lumbrineridae	<0.1	0.9	-	<0.1	-	-	-	-	-	<0.1
<i>Nephtys</i> sp.	-	-	-	0.7	0.4	-	-	-	-	0.1
Nephtyidae	3.4	-	2.4	-	-	-	-	-	-	0.2
Spionidae	0.4	0.8	<0.1	1.7	<0.1	0.9	0.4	-	0.3	0.4
Terebellidae	-	-	-	-	-	0.4	-	-	-	<0.1
Polychaeta unid.	1.4	6.4	0.1	2.6	1.0	3.0	2.9	-	5.5	1.5
CRUSTACEA	[0.4]	[2.1]	[14.7]	[8.3]	[17.1]	[13.0]	[3.0]	[0.7]	[0.2]	[5.2]
Isopoda	-	-	-	(0.1)	-	-	-	-	-	(<0.1)
<i>Chiridotea</i> sp.	-	-	-	0.1	-	-	-	-	-	<0.1
Amphipoda	(0.2)	(0.2)	-	(1.8)	(0.9)	(0.5)	-	(0.7)	-	(0.5)
<i>Unciola irrorata</i>	0.2	-	-	-	-	-	-	-	-	<0.1
<i>Monoculodes intermedius</i>	-	0.2	-	-	-	-	-	-	-	<0.1
<i>Leptocheirus pinguis</i>	-	-	-	1.8	0.9	-	-	0.7	-	0.4
Gammaridea	<0.1	-	-	-	<0.1	0.5	-	<0.1	-	0.1
Euphausiacea	-	-	-	-	-	(7.9)	-	-	-	(0.7)
Decapoda	(0.2)	-	(14.7)	(6.4)	(16.2)	(4.6)	(3.0)	-	(0.2)	(4.0)
<i>Dichelopandalus leptocerus</i>	-	-	-	2.8	-	-	3.0	-	-	0.6
Pandalidae	-	-	-	-	16.2	4.6	-	-	-	2.5
<i>Crangon septemspinosa</i>	-	-	13.6	3.6	-	-	-	-	-	0.8
Crangonidae	0.2	-	-	-	-	-	-	-	-	<0.1
Decapoda unid.	-	-	1.1	-	-	-	-	-	0.2	0.1
Crustacea unid.	-	(1.9)	-	-	(<0.1)	-	(<0.1)	-	-	(<0.1)
ECHINODERMATA	[4.1]	[3.2]	[0.7]	[26.4]	[26.3]	[41.8]	[64.9]	[68.3]	[62.0]	[49.8]
Echinoidea	-	-	-	(1.8)	(3.2)	(1.1)	(0.5)	(17.2)	(1.6)	(4.5)
<i>Echinarachnius parma</i>	-	-	-	-	-	-	-	16.5	-	3.1
Echinoidea unid.	-	-	-	1.8	3.2	1.1	0.5	0.7	1.6	1.4
Ophiuroidea	(4.1)	(2.4)	(0.7)	(24.6)	(23.1)	(40.7)	(64.4)	(20.3)	(60.4)	(39.5)
<i>Ophiura robusta</i>	-	-	-	-	3.8	-	-	-	-	0.5
<i>Ophiura sarsi</i>	-	1.9	-	18.3	3.4	8.7	56.7	17.4	6.4	14.5
Ophiuroidea unid.	4.1	0.5	0.7	6.3	15.9	32.0	7.7	2.9	54.0	24.5
Echinodermata unid.	-	(0.8)	-	-	-	-	-	(30.8)	-	(5.8)
ANIMAL REMAINS AND MISC.	[88.5]	[25.6]	[64.1]	[34.7]	[16.3]	[16.3]	[16.6]	[1.2]	[7.3]	[15.9]
SAND AND ROCK	-	[58.5]	[6.7]	[23.8]	-	[0.3]	-	-	[7.9]	[5.4]
Number sampled	30	22	35	51	53	34	33	19	23	300
Number empty	12	9	19	27	24	18	21	10	7	147
Mean stomach content (g)	0.153	0.077	0.157	0.250	0.366	0.418	0.530	1.546	2.187	0.518
Mean fish length (cm)	12	18	23	28	32	37	42	47	55	32

Table B-57b. Diet composition and sampling data for American plaice by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area			
	Georges Bank	Gulf of Maine	Scotian Shelf	Inshore North of Cape Hatteras
ANTHOZOA	[0.8]	-	-	[2.9]
NEMATODA	-	[0.1]	-	[2.3]
MOLLUSCA	[0.4]	[26.4]	[61.2]	[<0.1]
Bivalvia	(0.4)	(24.6)	(37.3)	(<0.1)
<i>Chlamys islandica</i>	-	-	37.3	-
<i>Arctica islandica</i>	0.3	2.5	-	-
<i>Cyclocardia borealis</i>	-	2.2	-	-
Bivalvia unid.	0.1	19.9	-	<0.1
Mollusca unid.	-	(1.8)	(23.9)	-
POLYCHAETA	[0.5]	[1.0]	-	[7.9]
Lumbrineridae	-	<0.1	-	<0.1
<i>Nephtys</i> sp.	-	<0.1	-	0.3
Nephtyidae	-	-	-	1.0
Spionidae	-	<0.1	-	1.9
Terebellidae	-	-	-	0.2
Polychaeta unid.	0.5	1.0	-	4.5
CRUSTACEA	[2.3]	[2.3]	-	[17.6]
Isopoda	<(0.1)	-	-	-
<i>Chiridotea</i> sp.	<0.1	-	-	-
Amphipoda	(2.2)	(<0.1)	-	(0.2)
<i>Unciola irrorata</i>	<0.1	-	-	-
<i>Monoculodes intermedius</i>	-	-	-	<0.1
<i>Leptocheirus pinguis</i>	2.2	-	-	-
Gammaridea	<0.1	<0.1	-	0.2
Euphausiacea	-	(1.3)	-	-
Decapoda	(0.1)	(1.0)	-	(17.4)
<i>Dichelopandalus leptocerus</i>	-	1.0	-	-
Pandalidae	-	-	-	13.2
<i>Crangon septemspinosa</i>	0.1	-	-	4.0
Decapoda unid.	-	<0.1	-	0.2
Crustacea unid.	-	(<0.1)	-	-
ECHINODERMATA	[92.3]	[42.4]	-	[47.5]
Echinoidea	(16.9)	(2.4)	-	-
<i>Echinarachnius parma</i>	16.9	-	-	-
Echinoidea unid.	-	2.4	-	-
Ophiuroidea	(75.4)	(40.0)	-	(16.0)
<i>Ophiura robusta</i>	-	-	-	2.5
<i>Ophiura sarsi</i>	-	24.2	-	4.6
Ophiuroidea unid.	75.4	15.8	-	8.9
Echinodermata unid.	-	(<0.1)	-	(31.5)
ANIMAL REMAINS AND MISC.	[3.6]	[25.3]	-	[14.3]
SAND AND ROCK	[0.1]	[2.5]	[38.8]	[7.5]
Number sampled	17	186	6	91
Number empty	4	92	5	46
Mean stomach content (g)	1.689	0.471	1.717	0.315
Mean fish length (cm)	27	33	40	30

Table B-58a. Diet composition and sampling data for Atlantic halibut by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)						Total
	<31	31-40	41-50	51-60	61-70	>70	
CEPHALOPODA	-	-	-	[0.6]	[42.7]	[14.8]	[18.5]
<i>Illex illecebrosus</i>	-	-	-	-	-	6.5	4.4
<i>Illex</i> sp.	-	-	-	-	19.5	7.7	9.0
Octopoda	-	-	-	-	4.2	-	0.9
Cephalopoda unid.	-	-	-	0.6	19.0	0.6	4.2
CRUSTACEA	[23.4]	[83.0]	[79.0]	[79.1]	[7.4]	[5.9]	[15.4]
Amphipoda	(0.1)	(<0.1)	-	-	(<0.1)	(<0.1)	(<0.1)
Mysidacea	-	-	(<0.1)	-	(<0.1)	-	(<0.1)
Euphausiacea	-	-	-	(<0.1)	-	-	(<0.1)
Decapoda	(21.6)	(83.0)	(79.0)	(79.1)	(7.4)	(5.9)	(15.4)
<i>Spirontocaris liljeborgii</i>	-	-	0.2	<0.1	-	-	<0.1
<i>Dichelopandalus leptocerus</i>	-	52.5	42.4	46.7	7.4	-	7.2
<i>Pandalus borealis</i>	-	-	3.4	-	-	0.1	0.2
<i>Pandalus montagui</i>	-	-	4.8	16.9	-	-	1.4
Pandalidae	-	1.1	11.2	4.1	-	-	0.7
<i>Crangon septemspinosa</i>	20.1	4.5	-	-	-	-	0.1
<i>Pagurus acadianus</i>	0.6	15.8	3.8	7.4	-	-	0.9
<i>Pagurus pollicaris</i>	-	0.6	-	-	-	-	<0.1
<i>Pagurus pubescens</i>	-	-	0.9	-	-	-	<0.1
<i>Pagurus arcuatus</i>	-	-	2.1	0.7	-	-	0.1
<i>Pagurus</i> sp.	0.4	-	0.9	-	<0.1	-	0.1
Paguridae	-	5.5	0.8	-	-	-	0.1
<i>Cancer borealis</i>	-	-	-	-	-	5.3	3.6
<i>Cancer irroratus</i>	-	1.2	3.3	3.3	-	-	0.4
Crab unid.	-	1.5	0.4	-	-	0.5	0.4
Shrimp unid.	0.5	0.3	4.8	-	-	<0.1	0.2
Crustacea unid.	(1.7)	-	-	-	-	-	(<0.1)
OSTEICHTHYES	[76.6]	[13.8]	[20.9]	[19.3]	[49.6]	[78.7]	[65.7]
<i>Alosa aestivalis</i>	-	-	-	-	-	1.0	0.7
Clupeidae	-	-	11.1	-	<0.1	0.2	0.6
<i>Gadus morhua</i>	-	-	-	-	-	2.5	1.7
<i>Merluccius bilinearis</i>	-	-	1.6	-	16.4	12.2	11.6
Gadidae	-	-	-	-	7.4	-	1.5
<i>Aspidophoroides monopterygius</i>	-	2.0	-	-	-	-	<0.1
<i>Ammodytes dubius</i>	-	-	0.4	-	8.5	0.4	2.0
<i>Myoxocephalus octodecemspinosus</i>	-	-	-	-	0.1	48.1	32.5
<i>Pholis gunnellus</i>	-	9.5	-	-	-	-	0.1
<i>Macrozoarces americanus</i>	-	-	-	-	8.2	9.5	8.0
<i>Hippoglossoides platessoides</i>	-	-	-	-	4.5	-	0.9
<i>Pleuronectes ferruginus</i>	-	-	-	6.2	-	-	0.5
Osteichthyes larvae	-	0.3	-	-	-	-	<0.1
Osteichthyes unid.	76.6	2.0	7.8	13.1	4.5	4.8	5.6
ANIMAL REMAINS AND MISC.	-	[3.2]	[0.1]	[1.0]	[0.3]	[0.6]	[0.4]
Number sampled	7	19	26	25	21	27	125
Number empty	3	4	4	9	5	9	34
Mean stomach content (g)	1.128	2.553	6.943	13.716	43.532	115.604	36.922
Mean fish length (cm)	22	35	45	55	66	99	59

Table B-58b. Diet composition and sampling data for Atlantic halibut by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area			
	Georges Bank	Gulf of Maine	Scotian Shelf	Inshore North of Cape Hatteras
CEPHALOPODA	[15.4]	[25.4]	[22.9]	[1.1]
<i>Illex illecebrosus</i>	8.2	-	-	-
<i>Illex</i> sp.	7.2	24.1	-	-
Octopoda	-	-	4.2	-
Cephalopoda unid.	-	1.3	18.7	1.1
CRUSTACEA	[0.1]	[22.0]	[49.6]	[1.5]
Amphipoda	(<0.1)	(<0.1)	-	(<0.1)
Mysidacea	(<0.1)	(<0.1)	-	-
Euphausiacea	-	-	(<0.1)	-
Decapoda	(0.1)	(22.0)	(49.6)	(1.5)
<i>Spirontocaris liljeborgii</i>	-	<0.1	<0.1	-
<i>Dichelopandalus leptocerus</i>	<0.1	1.8	32.5	-
<i>Pandalus borealis</i>	-	0.3	0.6	-
<i>Pandalus montagui</i>	-	-	7.0	-
Pandalidae	<0.1	1.9	1.6	-
<i>Crangon septemspinosa</i>	0.1	<0.1	<0.1	-
<i>Pagurus acadianus</i>	<0.1	-	3.9	1.2
<i>Pagurus pollicaris</i>	<0.1	-	-	-
<i>Pagurus pubescens</i>	-	-	0.2	-
<i>Pagurus arcuatus</i>	<0.1	-	0.4	-
Paguridae	<0.1	0.3	<0.1	0.3
<i>Cancer borealis</i>	-	16.8	-	-
<i>Cancer irroratus</i>	<0.1	<0.1	1.6	-
Crab unid.	<0.1	<0.1	1.8	-
Shrimp unid.	<0.1	0.9	<0.1	-
Crustacea unid.	-	(<0.1)	(<0.1)	-
OSTEICHTHYES	[84.0]	[51.8]	[25.7]	[97.3]
<i>Alosa aestivalis</i>	-	3.3	-	-
Clupeidae	-	0.8	-	10.8
<i>Gadus morhua</i>	3.1	-	-	-
<i>Merluccius bilinearis</i>	6.9	23.7	0.3	67.3
Gadidae	-	-	7.0	-
<i>Aspidophoroides monopterygius</i>	-	-	0.1	-
<i>Ammodytes dubius</i>	-	9.0	-	-
<i>Myoxocephalus octodecemspinus</i>	60.6	-	-	-
<i>Pholis gunnellus</i>	-	-	0.3	1.0
<i>Macrozoarces americanus</i>	11.9	7.4	-	-
<i>Hippoglossoides platessoides</i>	-	-	4.2	-
<i>Pleuronectes ferruginus</i>	-	-	2.2	-
Osteichthyes larvae	-	-	-	<0.1
Osteichthyes unid.	1.5	7.6	11.6	18.2
ANIMAL REMAINS AND MISC.	[0.5]	[0.8]	[1.8]	[0.1]
Number sampled	19	36	64	6
Number empty	6	11	17	0
Mean stomach content (g)	130.410	27.629	14.941	31.102
Mean fish length (cm)	64	64	55	45

Table B-59a. Diet composition and sampling data for winter flounder by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)									Total
	<16	16-20	21-25	26-30	31-35	36-40	41-45	46-50	>50	
CNIDARIA	[1.9]	[17.6]	[19.5]	[29.4]	[27.0]	[18.2]	[45.6]	[49.5]	[70.7]	[39.0]
Hydrozoa	(<0.1)	(2.4)	(2.4)	(3.7)	(2.0)	(3.3)	(8.6)	(9.7)	(6.7)	(5.6)
Anthozoa	(1.9)	(15.2)	(17.1)	(25.7)	(25.0)	(14.9)	(37.0)	(39.8)	(64.0)	(33.4)
Actiniaria	-	-	0.7	0.9	-	2.4	3.5	-	1.4	1.4
Ceriantharia	-	9.5	9.1	16.7	18.2	8.1	23.5	16.5	39.2	19.6
Anthozoa unid.	1.9	5.7	7.3	8.1	6.8	4.4	10.0	23.3	23.4	12.4
RHYNCHOCOELA	[0.1]	[0.2]	[0.6]	[0.7]	[0.9]	[1.2]	[2.9]	[1.9]	[2.2]	[1.8]
MOLLUSCA	[<0.1]	[0.6]	[1.2]	[0.7]	[1.5]	[0.6]	[5.1]	[5.4]	[0.6]	[2.5]
POLYCHAETA	[81.0]	[51.9]	[40.9]	[45.8]	[48.6]	[43.4]	[25.2]	[28.3]	[12.8]	[35.6]
Maldanidae	1.2	4.8	1.2	1.0	0.8	0.4	0.3	0.1	0.3	0.7
<i>Lumbrineris fragilis</i>	0.4	0.3	3.7	2.8	2.0	1.0	1.7	2.3	2.4	2.0
Lumbrineridae	0.5	1.5	2.4	1.8	4.4	0.4	0.7	0.5	0.6	1.5
<i>Diopatra</i> sp.	-	-	-	3.7	0.8	4.0	-	-	-	1.2
<i>Pherusa affinis</i>	<0.1	-	1.8	3.1	3.1	1.5	3.1	0.1	0.2	1.8
Flabelligeridae	0.4	15.4	7.0	1.9	1.9	0.4	<0.1	0.1	0.4	1.1
<i>Nephtys</i> spp.	-	2.1	0.4	2.6	0.5	0.7	0.6	<0.1	0.8	0.8
<i>Nereis</i> spp.	<0.1	3.6	<0.1	0.1	0.5	<0.1	0.4	0.3	<0.1	0.5
<i>Chone infundibuliformis</i>	-	-	4.7	3.1	2.9	0.9	2.0	<0.1	-	1.6
Sabellidae	2.8	<0.1	1.6	2.2	7.6	0.2	<0.1	<0.1	<0.1	1.6
<i>Spiophanes bombyx</i>	<0.1	0.3	<0.1	0.8	0.3	5.0	6.8	5.7	5.5	4.0
Spionidae	4.7	<0.1	<0.1	1.2	0.7	0.9	0.6	1.5	-	0.8
<i>Ampharete</i> spp.	9.2	2.8	2.9	4.6	2.0	1.1	0.2	0.4	<0.1	1.5
<i>Asabellides oculata</i>	46.2	0.1	<0.1	2.6	13.1	12.5	0.4	<0.1	-	5.0
Polychaeta unid.	15.6	21.0	15.2	14.3	8.0	14.4	8.4	17.3	2.6	11.5
CRUSTACEA	[11.3]	[19.2]	[23.0]	[10.7]	[11.4]	[7.5]	[6.5]	[2.3]	[0.7]	[7.9]
Amphipoda	(9.3)	(14.9)	(19.0)	(10.0)	(9.5)	(7.4)	(5.8)	(1.5)	(0.6)	(6.7)
<i>Unciola irrorata</i>	5.1	4.9	3.0	2.6	0.6	0.5	0.4	0.3	0.2	0.9
<i>Gammarus annulatus</i>	1.3	3.2	0.4	1.0	3.0	1.2	0.5	-	-	0.9
<i>Leptocheirus pinguis</i>	0.7	1.7	3.0	0.9	1.1	0.5	0.1	<0.1	<0.1	0.6
<i>Pontogeneia inermis</i>	0.2	0.2	1.0	1.3	1.0	3.4	1.8	0.3	0.1	1.3
Amphipoda unid.	2.0	4.9	11.6	4.2	3.8	1.8	3.0	0.9	0.3	3.0
Decapoda	(1.6)	(3.4)	(3.0)	(0.7)	(0.9)	(0.1)	(0.6)	(0.8)	(<0.1)	(0.8)
Crustacea unid.	(0.4)	(0.9)	(1.0)	(<0.1)	(1.0)	(<0.1)	(0.1)	(<0.1)	(0.1)	(0.4)
OSTEICHTHYES	[<0.1]	-	[2.3]	[0.1]	[0.3]	[19.6]	[<0.1]	[<0.1]	[<0.1]	[3.5]
Engraulidae	-	-	-	-	-	2.5	-	-	-	0.4
<i>Ammodytes dubius</i>	-	-	-	-	-	1.3	-	-	-	0.2
<i>Paralichthys dentatus</i>	-	-	-	-	-	-	-	<0.1	-	<0.1
Bothidae	-	-	-	-	-	15.8	-	-	-	2.7
Osteichthyes eggs and larvae	-	-	-	-	<0.1	-	-	-	-	<0.1
Osteichthyes unid.	<0.1	-	2.3	0.1	0.3	<0.1	<0.1	<0.1	<0.1	0.2
ANIMAL REMAINS AND MISC.	[5.3]	[8.1]	[12.2]	[10.7]	[8.0]	[7.6]	[10.8]	[7.1]	[10.7]	[6.8]
SAND AND ROCK	[0.4]	[2.4]	[0.3]	[1.9]	[2.3]	[1.9]	[3.9]	[5.5]	[2.3]	[2.9]
Number sampled	61	117	285	388	326	214	169	116	70	1746
Number empty	5	35	78	125	111	77	44	38	25	538
Mean stomach content (g)	0.369	0.291	0.426	0.907	1.495	2.410	3.161	4.380	6.446	1.733
Mean fish length (cm)	13	18	23	28	32	37	42	47	56	32

Table B-59b. Diet composition and sampling data for winter flounder by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area					
	Middle Atlantic	Southern New England	Georges Bank	Gulf of Maine	Scotian Shelf	Inshore North of Cape Hatteras
CNIDARIA	[8.2]	[32.7]	[48.5]	[35.6]	[90.4]	[22.3]
Hydrozoa	-	(4.4)	(7.1)	(0.2)	-	(3.4)
Anthozoa	(8.2)	(28.3)	(41.4)	(35.4)	(90.4)	(18.9)
Actiniaria	-	<0.1	2.3	0.2	-	0.6
Ceriantharia	8.2	22.2	21.4	33.0	90.4	13.7
Anthozoa unid.	-	6.1	17.7	2.2	-	4.6
RHYNCHOCOELA	[1.1]	[0.6]	[1.7]	[<0.1]	-	[1.9]
MOLLUSCA	-	[0.1]	[3.4]	[2.5]	[8.3]	[1.1]
POLYCHAETA	[74.2]	[43.8]	[24.2]	[37.1]	[<0.1]	[48.5]
Maldanidae	-	1.4	<0.1	0.1	-	0.6
<i>Lumbrineris fragilis</i>	15.6	<0.1	2.1	-	-	2.8
Lumbrineridae	1.0	1.0	0.7	0.7	-	2.9
<i>Diopatra</i> sp.	23.5	-	-	-	-	4.0
<i>Pherusa affinis</i>	-	3.4	1.4	-	-	1.8
Flabelligeridae	0.7	2.9	0.2	-	-	2.2
<i>Nephtys</i> spp.	-	0.6	<0.1	-	<0.1	2.3
<i>Chone infundibuliformis</i>	-	8.1	0.7	2.0	-	<0.1
Sabellidae	-	10.8	<0.1	8.9	<0.1	0.2
<i>Spiophanes bombyx</i>	-	0.1	7.1	-	-	<0.1
Spionidae	8.7	<0.1	0.8	-	-	1.1
<i>Ampharete</i> spp.	-	5.4	0.4	0.7	-	1.5
<i>Asabellides oculata</i>	-	<0.1	<0.1	-	-	17.4
Polychaeta unid.	24.7	10.1	10.8	24.7	-	11.7
CRUSTACEA	[3.8]	[11.5]	[3.2]	[3.6]	-	[12.2]
Amphipoda	(1.3)	(10.3)	(2.8)	(0.7)	-	(11.1)
<i>Unciola irrorata</i>	0.9	2.8	0.3	-	-	1.0
<i>Gammarus annulatus</i>	-	2.6	-	-	-	2.0
<i>Leptocheirus pinguis</i>	-	1.8	0.2	<0.1	-	0.6
<i>Pontogeneia inermis</i>	-	<0.1	1.6	-	-	1.5
<i>Aeginina longicornis</i>	-	1.2	<0.1	-	-	0.4
Amphipoda unid.	0.4	1.9	0.7	0.7	-	5.6
Decapoda	(2.5)	(1.2)	(0.4)	(2.8)	-	(0.4)
Crustacea unid.	(<0.1)	(<0.1)	(<0.1)	(0.1)	-	(0.7)
OSTEICHTHYES	-	[<0.1]	[5.2]	-	-	[2.1]
Engraulidae	-	-	-	-	-	1.5
<i>Ammodytes dubius</i>	-	-	0.4	-	-	-
<i>Paralichthys dentatus</i>	-	-	<0.1	-	-	-
Bothidae	-	-	4.8	-	-	-
Osteichthyes eggs and larvae	-	-	-	-	-	<0.1
Osteichthyes unid.	-	<0.1	<0.1	-	-	0.6
ANIMAL REMAINS AND MISC.	[6.5]	[10.5]	[9.6]	[18.7]	[1.3]	[10.5]
SAND AND ROCK	[6.2]	[0.8]	[4.2]	[2.5]	-	[1.4]
Number sampled	17	463	569	57	2	638
Number empty	7	172	170	31	0	158
Mean stomach content (g)	0.657	0.911	2.980	0.371	5.880	1.355
Mean fish length (cm)	29	28	39	31	34	27

Table B-60a. Diet composition and sampling data for yellowtail flounder by fish length category. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Length Category (cm)									Total
	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	
CNIDARIA	-	-	-	-	[4.9]	[1.0]	[8.3]	-	[0.5]	[4.8]
Ceriantharia	-	-	-	-	2.7	1.0	8.0	-	0.5	4.4
Anthozoa	-	-	-	-	2.2	<0.1	0.3	-	-	0.4
RHYNCHOCOELA	-	-	-	-	[5.4]	[0.8]	[0.2]	[0.3]	-	[0.9]
MOLLUSCA	[3.1]	-	-	[<0.1]	[2.4]	[4.0]	[0.6]	[3.1]	[<0.1]	[1.5]
POLYCHAETA	[14.8]	[18.1]	[49.1]	[40.7]	[31.9]	[53.3]	[22.4]	[71.6]	[76.1]	[38.5]
Maldanidae	6.2	-	-	<0.1	1.6	0.8	0.5	<0.1	<0.1	0.6
<i>Drilonereis</i> sp.	-	-	-	-	0.1	-	0.2	9.0	-	1.3
Lumbrineridae	-	-	-	2.5	2.7	<0.1	0.3	0.7	2.5	1.2
<i>Pherusa</i> sp.	-	-	-	2.1	0.3	-	1.0	-	-	0.7
<i>Ophelia</i> sp.	-	-	-	13.4	-	-	-	-	-	1.0
<i>Ophelina</i> sp.	-	-	-	1.2	2.0	2.1	2.3	-	-	1.9
Nephtyidae	-	-	-	1.2	6.8	<0.1	1.1	0.2	-	1.5
Sigalionidae	-	15.6	-	-	-	<0.1	0.2	-	-	0.2
<i>Chone infundibuliformis</i>	-	-	-	0.9	0.4	6.7	1.8	-	-	1.8
Sabellidae	-	-	-	-	2.0	<0.1	1.5	0.3	-	1.0
Cirratulidae	-	-	-	1.6	4.9	<0.1	1.3	-	<0.1	1.4
<i>Spiophanes bombyx</i>	-	-	-	<0.1	6.4	11.7	5.9	40.3	31.2	12.0
<i>Ampharete arctica</i>	-	-	29.8	0.2	0.1	-	-	-	-	0.2
Polychaeta unid.	8.6	2.5	19.3	17.6	4.6	32.0	6.3	21.1	42.4	13.7
CRUSTACEA	[77.4]	[79.0]	[49.2]	[56.4]	[43.2]	[34.3]	[63.2]	[13.4]	[23.0]	[48.9]
Cumacea	(0.6)	-	(0.5)	(2.0)	(0.7)	(0.1)	(<0.1)	(<0.1)	(0.1)	(0.4)
Isopoda	(1.9)	-	-	(0.3)	(0.3)	(0.2)	(<0.1)	(<0.1)	-	(0.2)
Amphipoda	(19.3)	(19.4)	(10.6)	(22.3)	(35.0)	(29.4)	(58.6)	(13.4)	(22.9)	(41.5)
<i>Ampelisca</i> sp.	-	-	2.1	3.9	1.8	3.3	3.0	<0.1	3.8	2.6
<i>Byblis serrata</i>	-	-	-	2.0	2.7	<0.1	1.1	0.1	<0.1	1.0
<i>Erichthonius rubricornis</i>	-	-	-	0.5	0.9	0.3	40.6	<0.1	<0.1	19.9
<i>Unciola irrorata</i>	9.3	-	0.2	9.1	11.2	3.0	1.7	0.2	2.3	3.4
<i>Gammarus annulatus</i>	-	-	-	-	3.6	3.8	5.2	-	-	3.4
<i>Gammarus</i> sp.	-	-	-	-	0.1	0.1	<0.1	12.5	0.4	1.7
Lysianassidae	1.9	5.9	-	<0.1	<0.1	<0.1	-	-	-	0.4
Oedicerotidae	6.2	13.5	2.8	<0.1	0.2	0.1	<0.1	<0.1	-	0.2
<i>Leptocheirus pinguis</i>	-	-	3.1	3.8	3.1	8.2	4.4	0.4	13.2	4.5
<i>Dulichia</i> sp.	-	-	-	-	8.7	2.5	1.0	<0.1	-	1.9
Amphipoda unid.	1.9	-	2.4	3.0	2.7	8.1	1.6	0.2	3.2	2.5
Mysidacea	-	(1.7)	-	-	(0.5)	-	(<0.1)	-	-	(0.1)
Decapoda	(46.3)	(57.9)	(35.8)	(31.0)	(6.5)	(3.6)	(4.5)	(<0.1)	-	(6.4)
<i>Crangon septemspinosa</i>	46.3	50.5	35.8	29.9	5.0	<0.1	4.4	-	-	5.5
Decapoda unid.	-	7.4	-	1.1	1.5	3.6	0.1	<0.1	-	0.9
Crustacea unid.	(9.3)	-	(2.3)	(0.8)	(0.2)	(1.0)	(0.1)	-	-	(0.3)
OSTEICHTHYES	-	-	-	-	[4.6]	-	[0.2]	-	-	[0.7]
<i>Ammodytes dubius</i>	-	-	-	-	4.6	-	0.2	-	-	0.7
ANIMAL REMAINS AND MISC.	[4.7]	[2.9]	[1.7]	[2.9]	[7.6]	[6.6]	[5.1]	[11.6]	[0.4]	[4.7]
Number sampled	8	10	2	38	54	47	52	10	4	225
Number empty	0	3	0	19	19	20	15	1	1	78
Mean stomach content (g)	0.020	0.114	0.548	0.400	0.474	0.522	1.902	2.718	2.406	0.904
Mean fish length (cm)	7	12	18	23	28	33	37	43	49	30

Table B-60b. Diet composition and sampling data for yellowtail flounder by geographic area. (Samples gathered during 1977-80. Data expressed as percentage of stomach content by weight. Squared brackets indicate major taxon subtotal; parentheses indicate minor taxon subtotal.)

Stomach Contents	Geographic Area		
	Southern New England	Georges Bank	Inshore North of Cape Hatteras
CNIDARIA	[6.2]	[1.6]	[3.2]
Ceriantharia	6.1	0.4	2.7
Anthozoa	0.1	1.2	0.5
RHYNCHOCOELA	[0.1]	[1.2]	[4.7]
MOLLUSCA	[0.8]	[4.0]	[0.2]
POLYCHAETA	[28.9]	[71.9]	[25.6]
Maldanidae	<0.1	2.0	0.5
<i>Drilonereis</i> sp.	2.1	-	-
Lumbrineridae	1.0	1.0	1.3
<i>Pherusa</i> sp.	0.7	-	2.0
<i>Ophelia</i> sp.	1.5	-	-
<i>Ophelina</i> sp.	2.8	-	-
Nephtyidae	0.1	2.2	7.3
Sigalionidae	0.1	1.3	<0.1
<i>Chone infundibuliformis</i>	2.8	-	-
Sabellidae	1.5	0.1	-
Cirratulidae	1.0	<0.1	5.9
<i>Spiophanes bombyx</i>	<0.1	53.7	-
Polychaeta unid.	15.3	11.6	8.6
CRUSTACEA	[56.4]	[15.2]	[62.5]
Cumacea	(0.3)	(<0.1)	(<0.1)
Isopoda	(<0.1)	(0.2)	(0.3)
Amphipoda	(54.1)	(14.4)	(22.1)
<i>Ampelisca</i> sp.	3.8	-	0.6
<i>Byblis serrata</i>	0.2	3.7	0.2
<i>Erichthonius rubricornis</i>	30.6	<0.1	<0.1
<i>Unciola irrorata</i>	2.2	7.6	2.0
<i>Gammarus annulatus</i>	1.8	-	17.8
<i>Gammarus</i> sp.	2.6	-	-
Lysianassidae	<0.1	1.5	<0.1
Oedicerotidae	<0.1	0.2	0.8
<i>Leptocheirus pinguis</i>	6.8	0.1	0.5
<i>Dulichia</i> sp.	2.9	-	-
Amphipoda unid.	3.2	1.3	0.2
Mysidacea	-	-	(0.6)
Decapoda	(1.6)	(0.6)	(39.5)
<i>Crangon septemspinosa</i>	0.8	<0.1	39.2
Decapoda unid.	0.8	0.6	0.3
Crustacea unid.	(0.4)	(<0.1)	(<0.1)
OSTEICHTHYES	[0.9]	-	[0.9]
<i>Ammodytes dubius</i>	0.9	-	0.9
ANIMAL REMAINS AND MISC.	[6.7]	[6.1]	[2.9]
Number sampled	129	51	46
Number empty	59	5	15
Mean stomach content (g)	1.026	0.890	0.558
Mean fish length (cm)	31	30	27