FOOD HABITS OF MARINE FISHES OF THE NORTHWEST ATLANTIC--DATA REPORT

by

R. O. Maurer, Jr. and R. E. Bowman

Northeast Fisheries Center
National Marine Fisheries Service
National Oceanic and Atmospheric Administration
Woods Hole, Massachusetts 02543

WHLRD 75-03
[redacted]
9/8/75

LIST OF FIGURES

Page

Figure 1. Areas sampled from 1969 to 1972 by the Resource Surveys Investigation, NEFC, Woods Hole, Massachusetts. 2

CONTENTS

Page

ABSTRACT. 1

INTRODUCTION. 1

METHODS 1

DATA PRESENTATION 3

SOURCES OF ERROR. 4

RESULTS 6-89

FIGURE

1. Areas sampled from 1969 to 1972 by the Resource Surveys Investigation, NEFC, Woods Hole 2

TABLES

LIST OF TABLES BY PHYLETIC SEQUENCE

CLASS AGNATHA

ORDER MYXINIFORMES

Myxinidae - hagfishes

Myxine glutinosa - Atlantic hagfish. 6

CLASS CHONDRICHTHYES

ORDER SQUALIFORMES

Scyliorhinidae - cat sharks

Scyliorhinus retifer- chain dogfish. 7

Carharhinidae - requiem sharks

Carcharhinus obscurus - dusky shark. 8

Hypoprion signatus - night shark 9

Mustelus canis - smooth dogfish 10

Page

Sphyrnidae - hammerhead sharks

Sphyrna zygaena - common hammerhead. 11

Squalidae - dogfish sharks

Squalus acanthias - spiny dogfish. 12

Squatinidae - angel sharks

Squatina dumerili - Atlantic angel shark 13

ORDER RAJIFORMES

Rajidae - skates

Raja eglanteria - clearnose skate. 14

Raja erinacea - little skate 15

Raja garmani - rosette skate 16

Raja laevis - barn door skate. 17

Raja ocellata - winter skate 18

Raja radiata - thorny skate. 19

Raja senta - smooth skate. 20

Dasyatidae - stingrays

Dasyatis centroura - roughtail stingray. 21

Myliobatidae - eagle rays 22

CLASS OSTEICHTHYES

ORDER ANGUILLIFORMES

Congridae - conger eels

Conger oceanicus - conger eel. 23

Ophichthidae - snake eels 24

ORDER CLUPEIFORMES

Clupeidae - herrings

Alosa pseudoharengus - alewife 25

Alosa sapidissima - American shad. 26

Clupea harengus harengus - Atlantic herring. 27

Etrumeus teres - round herring 28

Page

ORDER SALMONIFORMES

Argentinidae - argentines

Argentina silus - Atlantic argentine. 29

ORDER MYCTPHIFORMES

Chlorophthalmidae - greeneyes

Chlorophthalmus agassizi - shortnose greeneye 30

Myctophidae - lanternfishes. 31

Maurolicidae - pearlsides. . . . . .

Maurolicus pennanti - pearlsides. 32

ORDER LOPHIFORMES

Lophiidae - goosefishes

Lophius americanus - goosefish. 33

Ogcocephalidae - batfishes 34

ORDER GADIFORMES

Gadidae - codfishes

Brosme brosme - cusk. 35

Enchelyopus cimbrius - fourbeard rockling 36

Gadus morhua - Atlantic cod 37

Melanogrammus aeglefinus - haddock. 38

Merluccius bilinearis - silver hake 40

Merluccius albidus - offshore hake. 41

Phycis chesteri - longfin hake. 42

Pollachius virens - pollock 43

Urophycis chuss - red hake. 44

Urophycis regius - spotted hake 46

Urophycis tenuis - white hake 47

Page

Ophidiidae - cusk-eels and brotulas

Lepophidium cervinum - fawn cusk-eel. 48

Zoarcidae - eelpouts

Macrozoarces americanus - ocean pout. 49

Macrouridae - grenadiers

Coelorhynchus carminatus - long-nosed grenadier 50

ORDER ATHERINIFORMES

Belonidae - needlefishes

Strongylura marine - Atlantic needlefish. 51

Atherinidae - silversides

Menidia beryllina - tidewater silverside. 52

ORDER BERYCIFORMES

Polymixiidae - beardfishes 53

ORDER ZEIFORMES

Zeidae - dories

Zenopsis ocellata - American john dory. 54

ORDER GASTEROSTEIFORMES

Centriscidae - snipefishes

Macrorhamphosus scolopax - longspine snipefish. 55

ORDER PERCIFORMES

Serranidae - sea basses

Centropristis striata - black sea bass. 56

Epinephelus morio - red grouper 57

Branchiostegidae - tilefishes

Lopholatilus chamaeleonticeps - tilefish. 58

Pomatomidae - bluefishes

Pomatomus saltatrix - bluefish. 59

Page

Sparidae - porgies

Stenotomus chrysops - scup. 60

Sciaenidae - drums

Cynoscion regalis - weakfish. 62

Micropogon undulatus - Atlantic croaker 63

ORDER PERCIFORMES

Anarhichadidae - wolffishes

Anarhichas lupus - Atlantic wolffish. 64

Cryptacanthodidae - wrymouths

Cryptacanthodes maculatus - wrymouth. 66

Ammodytidae - sand lances

Ammodytes americanus - American sand lance. 67

Gempylidae - snake mackerels 68

Scombridae - mackerels and tunas

Scomber scombrus - Atlantic mackerel. 69

Stromateidae - butterfishes

Peprilus triacanthus - butterfish 70

Scorpaenidae - scorpionfishes

Helicolenus dactylopterus - blackbelly rosefish . . 71

Sebastes marinus - redfish. 72

Triglidae - searobins

Peristedion miniatum - armored searobin 73

Prionotus carolinus - northern searobin 74

Page

Cottidae - sculpins

Hemitripterus americanus - sea raven. 75

Myoxocephalus octodecemspinosus - longhorn sculpin. . 76

Myoxocephalus scorpius - shorthorn sculpin. 77

Triglops nybelini - mailed sculpin. 78

Agonidae - poachers

Aspidophoroides monopterygius - alligatorfish 79

Cyclopteridae - lumpfishes and snailfishes

Liparis atlanticus - seasnail 80

ORDER PLEURONECTIFORMES

Bothidae - lefteye flounders

Citharichthys arctifrons - Gulf Stream flounder . . . 81

Paralichthys dentatus - summer flounder 82

Paralichthys oblongus - fourspot flounder 83

Scophthalmus aquosus - windowpane 84

Pleuronectidae - righteye flounders

Glyptocephalus cynoglossus - witch flounder 85

Hippoglossoides platessoides - American plaice. . . . 86

Hippoglossoides hippoglossus - Atlantic halibut . . . 87

Limanda ferruginea - yellowtail flounder. 88

Pseudopleuronectes americanus - winter flounder . . . 89

LIST OF TABLES BY COMMON NAMES - ALPHABETICAL SEQUENCE

Table		Page
20	Alewife	25
70	Alligatorfish	79
47	American john dory	54
77	American plaice	86
58	American sand lance	67
21	American shad	26
64	Armored searobin	73
8	Atlantic angel shark	13
24	Atlantic argentine	29
32	Atlantic cod	37
55	Atlantic croaker	63
1	Atlantic hagfish	6
78	Atlantic halibut	87
22	Atlantic herring	27
60	Atlantic mackerel	69
44	Atlantic needlefish	51
56	Atlantic wolffish	64
12	Barndoor skate	17
29	Batfishes	34
46	Beardfishes	53
49	Black sea bass	56
62	Blackbelly rosefish	71
52	Bluefish	59
61	Butterfish	70

Table (cont'd) Page

2 Chain dogfish. 7

9 Clearnose skate. 14

6 Common hammerhead. 11

18 Conger eel 23

30 Cusk 35

3 Dusky shark. 8

17 Eagle rays 22

41 Fawn cusk-eel. 48

31 Fourbeard rockling 36

74 Fourspot flounder. 83

28 Goosefish. 33

72 Gulf Stream flounder 81

33 Haddock. 38

26 Lanternfishes. 31

10 Little skate 15

36 Longfin hake 42

67 Longhorn sculpin 76

43 Long-nosed grenadier 50

48 Longspine snipefish. 55

69 Mailed sculpin 78

4 Night shark. 9

65 Northern searobin. 74

42 Ocean pout 49

35 Offshore hake. 41

Table (cont'd) Page

27 Pearlsides 32

37 Pollock 43

63 Redfish 72

50 Red grouper 57

38 Red hake 44

11 Rosette skate 16

16 Roughtail stingray 21

23 Round herring 28

53 Scup 60

66 Sea raven 75

71 Sea snail 80

68 Shorthorn sculpin 77

25 Shortnose greeneye 30

34 Silver hake 40

5 Smooth dogfish 10

15 Smooth skate 20

19 Snake eels 24

59 Snake mackerels 68

7 Spiny dogfish 12

39 Spotted hake 46

73 Summer flounder 82

14 Thorny skate 19

45 Tidewater silverside 52

51 Tilefish 58

Table (cont'd) Page

54 Weakfish. 62

40 White hake. 47

75 Windowpane. 84

80 Winter flounder 89

13 Winter skate. 18

76 Witch flounder. 85

57 Wrymouth. 66

77 Yellowtail flounder 86

APPENDIX TABLE

1. Distribution of stomach samples collected between 1969 and 1972. 90

ABSTRACT

The food habits of 80 species of Northwest Atlantic fish were investigated and the data for each species are presented in tabular form. The data are presented as both the actual weight and the percent weight of the total stomach contents weight for each food item or group. Sources of error and bias in the data are discussed.

INTRODUCTION

The interspecific relationships of the food habits of fish from the Northwest Atlantic are presently not well understood. This data report presents the quantitative analysis of the food habits of 80 species of fish collected from 1969 to 1972 in the Northwest Atlantic. It is realized that some of the dietary information is fragmentary, however, it is included here because little food habit information is available for many of ths species from the study area. Fundamental knowledge of the food habits of individual species, their rates of consumption, and how they partition resources is needed to develop a more accurate understanding of energy transfer and trophic organization in oceanic systems.

METHODS

A collection of 19,485 samples, representing 80 species of fish, was made during the years from 1969 through 1972. Figure 1 shows the geographical range (shelf waters from Cape Hatteras, southerly to Nova Scotia, northerly) covered in this report. All fish were collected using otter trawl gear operated from the *ALBATROSS IV* during spring and

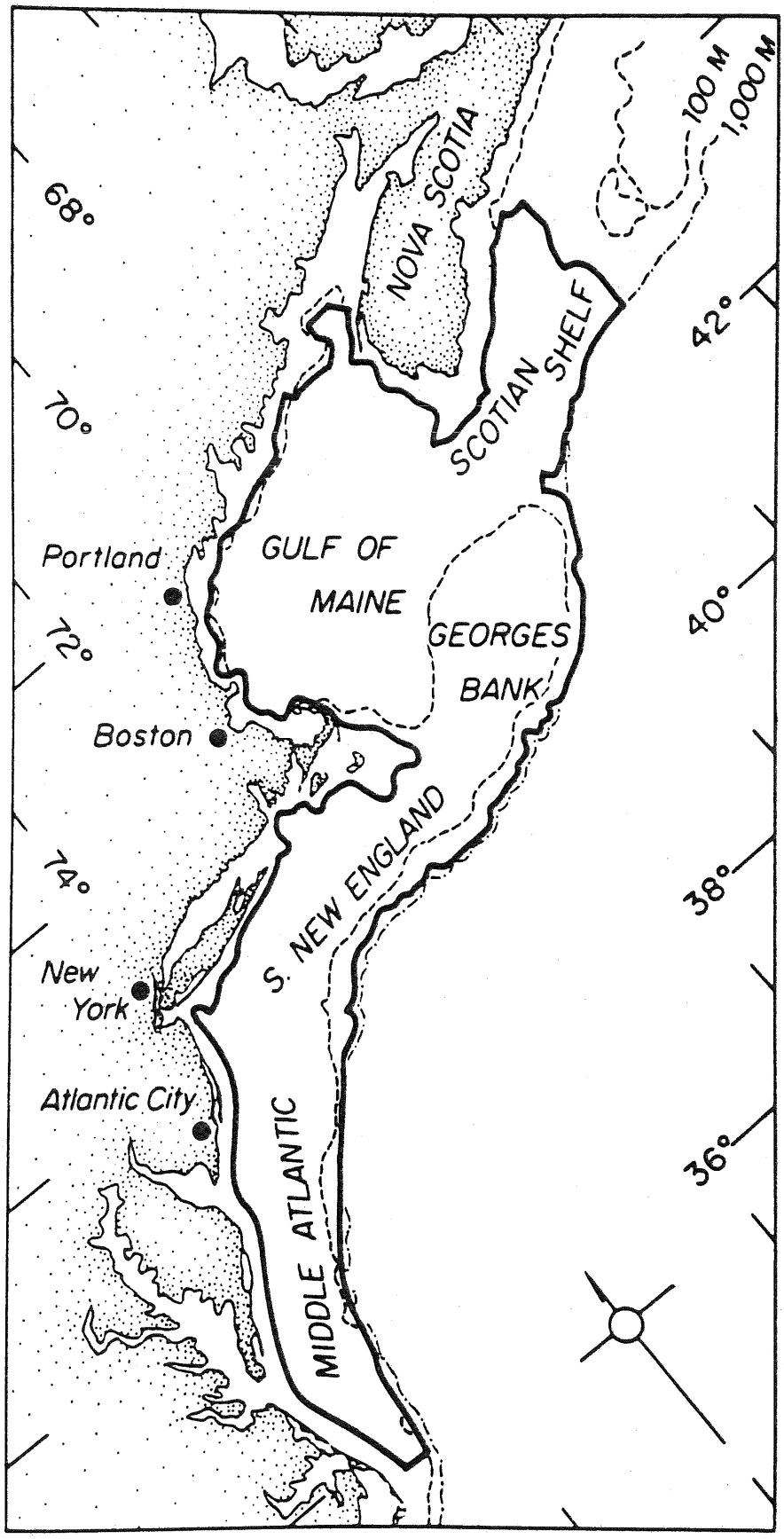

Figure 1. Areas sampled from 1969 to 1972 by the Resource Surveys Investigation, NEFC Woods Hole.

fall bottom trawl surveys. The yearly distribution of the samples is shown in Appendix Table 1. Tows were made in depths ranging from 27 m to 366 m for a period of 30 minutes. The fish stomachs were excised aboard the ship, labeled by station and species, pooled regardless of size, and preserved in 10% Formalin[1]. At the laboratory the preserved samples were individually opened and the contents identified to the lowest possible taxa. Each prey species was then damp dried (blotted dry), weighed, and the weight recorded. Reduction of the data was accomplished by the use of computer facilities at the laboratory.

Data Presentation

The food habit data are presented in tabular form, arranged in phyletic sequence, with the predator species of each family alphabetized to generic and specific names[2]. Included with each species are the number of stations where samples were collected, the total number of specimens examined, and the number of fish with empty stomachs. Major food categories appear in upper case type and the cumulative weight and percent weight for those categories are underlined. Subordinate and specific items appear in script or lower case, their weights and percent weights being offset. The totals, weight in grams, and percent weight are given at the bottom of the table.

---

[1]Reference to trade names does not imply endorsement by the National Marine Fisheries Service, NOAA.

[2]According to Bailey, R. M., Chairman. 1970. A List of Common and Scientific Names of Fishes from the United States and Canada, 3rd edition, American Fisheries Society; Special Publication No. 6, 150 pp.

The results of the analysis are given as the actual weights and the percent of the total stomach contents weight for each food item or group. Groupings designated as "other" (e.g. other euphausiids) are organisms which could only be identified to that taxonomic level because of the degree of digestion. When organisms could not be identified to any level they were designated as animal remains. Sand and rock are noted when they represented a significant part of the total stomach contents weight. Items of little dietary significance are listed as miscellaneous or under broad taxa.

SOURCES OF ERROR

1) Second-Order Foods - The stomachs of some large piscivorous fishes were found to contain small crustaceans (copepods, amphipods) that seem too small to be normal prey. Although some large fish occasionally eat surprisingly small organisms, their presence may be the result of the liberation of the contents from the alimentary tracts of their prey. These items may then be erroneously attributed to the large predator.

2) Differential Digestion - One source of error in studies of fishes which prey upon a variety of organisms (esp. pelagic feeders) is the result of the varying rate of digestion of different food organisms. Soft-bodied animals such as ctenophores, salps and worms are digested rapidly and may be difficult to identify to even a major group, after only a short period in the stomach. On the other hand, organisms with hard parts are digested slowly, permitting easy identification to species in many cases. The inevitable result is a bias in the data toward the

less digestible organisms. Such a bias is greater if the intestine contents are also considered, for this reason only stomach contents were included in this study.

3) Regurgitation - Some fish, when they are caught at the deeper depths and then rapidly brought to the surface, have everted or severely hemorraghed stomachs (esp. silver hake, red hake, white hake, and goosefish). Fish which showed obvious signs of regurgitation were rejected when the stomachs were being collected at sea.

Myxine glutinosa (Linnaeus) Atlantic hagfish
3 stations; 10 specimens; 3 empty

Table 1. Stomach contents of Atlantic hagfish.

ITEMS	wt(g)		% wt	
CRUSTACEANS	0.91		31.9	
Meganyctiphanes norvegica		0.88		30.9
Other euphausiids		0.03		1.0
FISH	1.00		35.1	
ANIMAL REMAINS	0.94		33.0	
Total	2.85 g		100.0%	

Scyliorhinus retifer (Garman) chain dogfish
3 stations; 3 specimens; 1 empty

Table 2. Stomach contents of chain dogfish.

ITEMS	wt(g)	% wt
FISH	12.24	100.0
Total	12.24 g	100.0%

Carcharhinus obscurus (Lesueur) dusky shark
1 station; 4 specimens; 1 empty

Table 3. Stomach contents of dusky shark.

ITEMS	wt(g)	% wt
FISH	135.93	100.0
Gadidae	7.09	5.2
Stenotomus chrysops	40.25	29.6
Prionotus carolinus	88.59	65.2
Total	135.93 g	100.0%

Hypoprion signatus (Poey) night shark
1 station; 1 specimen; 0 empty

Table 4. Stomach contents of night shark.

ITEMS	wt(g)		% wt	
MOLLUSKS	365.00		100.0	
Squid		365.00		100.0
Total	365.00 g		100.0%	

Mustelus canis (Mitchill) smooth dogfish
3 stations; 20 specimens; 0 empty

Table 5. Stomach contents of smooth dogfish.

ITEMS	wt(g)		% wt	
POLYCHAETES	3.32		0.4	
Nereidiforms		3.32		0.4
CRUSTACEANS	781.13		83.2	
Cancer borealis		280.89		29.9
Cancer irroratus		226.48		24.1
Other Cancer		273.76		29.2
MOLLUSKS	10.06		1.1	
Pelecypods		1.01		0.1
Cephalopods		9.05		1.0
FISH	144.57		15.3	
Lophius americanus		105.96		11.3
Prionotus carolinus		16.14		1.7
Other fish		22.47		2.3
	939.08 g		100.0%	

Sphyrna zygaena (Linnaeus) common hammerhead shark
1 station; 5 specimens; 0 empty

Table 6. Stomach contents of common hammerhead shark.

ITEMS	wt(g)		% wt	
CRUSTACEANS	23.00		21.0	
Cancer		23.00		21.0
FISH	86.60		79.0	
Peprilus triacanthus		86.60		79.0
Total	109.60 g		100.0%	

Squalus acanthias (Linnaeus) spiny dogfish
7 stations; 382 specimens; 91 empty

Table 7. Stomach contents of spiny dogfish.

ITEMS	wt(g)		% wt	
SIPHONOPHORES	47.36		0.5	
SIPUNCULIDS	184.05		2.0	
CRUSTACEANS	155.70		1.7	
Decapod crabs		128.39		1.4
Other crustaceans		27.31		0.3
MOLLUSKS	1380.85		15.1	
Loligo pealei		1152.99		12.6
Other cephalopods		223.23		2.4
Other mollusks		4.63		0.1
FISH	7212.57		78.6	
Chondrichthyes		27.62		0.3
Clupeidae		869.69		9.5
Gadidae		330.00		3.6
Scombridae		2115.73		23.1
Stenotomus chrysops		131.19		1.4
Bothidae		121.23		1.3
Limanda ferruginea		242.49		2.6
Other flatfish		81.17		0.9
Other fish		3293.45		35.9
ANIMAL REMAINS	158.75		1.7	
MISCELLANEOUS	28.87		0.4	
Total	9168.15 g		100.0%	

Squatina dumerili (Lesueur) Atlantic angel shark
5 stations; 13 specimens; 1 empty

Table 8. Stomach contents of Atlantic angel shark.

ITEMS	wt(g)		% wt	
POLYCHAETES	0.78		0.3	
CRUSTACEANS	1.21		0.4	
Decapod crabs		1.20		0.4
Other crustaceans		0.01		+
MOLLUSKS	38.03		13.2	
Loligo		19.00		6.6
Other cephalopods		19.03		6.6
FISH	246.71		85.5	
Gadidae		51.52		17.9
Other fish		195.19		67.6
ANIMAL REMAINS	1.20		0.4	
MISCELLANEOUS	0.67		0.2	
Total	288.60 g		100.0%	

Raja eglanteria (Bosc) clearnose skate
1 station; 1 specimen; 0 empty

Table 9. Stomach contents of clearnose skate.

ITEMS		
CRUSTACEANS	1.29	100.0
Cancer irroratus	0.89	69.0
Munida iris	0.40	31.0
Total	1.29 g	100.0%

Raja erinacea (Mitchill) little skate*
56 stations; 393 specimens; 39 empty

Table 10. Stomach contents of little skate.

ITEMS	wt(g)	% wt
POLYCHAETES	114.03	12.8
Aphroditidae	23.37	2.6
Nereidae	22.54	2.5
Other nereidiforms	23.61	2.7
Other polychaetes	44.51	5.0
CRUSTACEANS	568.97	64.0
Corophiidae	26.70	3.0
Photidae	32.64	3.7
Other gammarids	53.11	6.0
Other amphipods	2.89	0.3
Axiidae	21.87	2.5
Cancer	130.58	14.7
Majidae	8.80	1.0
Paguridae	99.95	11.2
Crangon	56.03	6.3
Pandalidae	13.78	1.5
Other decapods	14.80	1.7
Isopods	14.85	1.7
Other crustaceans	92.97	10.4
MOLLUSKS	26.43	3.0
Pelecypods	25.58	2.9
Other mollusks	0.85	0.1
FISH	58.79	6.6
Enchelyopus cimbrius	10.29	1.2
Other fish	48.50	5.4
ANIMAL REMAINS	119.85	13.4
MISCELLANEOUS	1.48	0.2
Total	889.55 g	100.0%

*Includes 48 samples from 1973.

Raja garmani (Whitley) rosette skate*
2 stations; 5 specimens; 0 empty

Table 11. Stomach contents of rosette skate.

ITEMS	wt(g)		% wt	
CRUSTACEANS	2.95		96.7	
Galatheidae		0.30		9.8
Majidae		0.06		2.0
Crangon septemspinosus		0.74		24.3
Pontophilus		0.07		2.3
Other decapod shrimp		0.13		4.2
Other crustaceans		1.65		54.1
NEMATODES	0.10		3.3	
Total	3.05 g		100.0%	

*Samples from the fall of 1974 only.

Raja laevis (Mitchill) barndoor skate
4 stations; 5 specimens; 0 empty

Table 12. Stomach contents of barndoor skate.

ITEMS	wt(g)		% wt	
CRUSTACEANS	12.05		25.4	
Dichelopandalus		6.31		13.3
Pandalus borealis		5.74		12.1
FISH	34.24		72.2	
Myoxocephalus octodecemspinosus		27.90		58.8
Other fish		6.34		13.4
TREMATODES	0.37		0.8	
ANIMAL REMAINS	0.78		1.6	
Total	47.44 g		100.0%	

Raja ocellata (Mitchill) winter skate
4 stations; 18 specimens; 4 empty

Table 13. Stomach contents of winter skate.

ITEMS	wt(g)		% wt	
POLYCHAETES	49.79		60.3	
Nephtys		31.05		37.6
Other polychaëtes		18.74		22.7
CRUSTACEANS	26.90		32.6	
Anonyx		0.36		0.4
Other gammarids		3.85		4.7
Cancer		0.13		0.2
Hyas		1.30		1.6
Pagurus		0.10		0.1
Crangon		7.44		9.0
Pandalidae		0.21		0.3
Cirolana		5.29		6.4
Euphausiids		0.23		0.3
Other crustaceans		7.99		9.6
MOLLUSKS	0.54		0.7	
ANIMAL REMAINS	5.41		6.4	
Total	82.64 g		100.0%	

Raja radiata (Donovan) thorny skate
3 stations; 11 specimens; 0 empty

Table 14. Stomach contents of thorny skate.

ITEMS	wt(g)	% wt
POLYCHAETES	48.62	26.6
Aphrodita	1.54	0.8
Other nereidiforms	46.90	25.7
Other polychaetes	0.18	0.1
CRUSTACEANS	26.76	14.7
Amphipods	0.73	0.4
Cancer	0.69	0.4
Hyas	4.14	2.3
Pagurus	1.56	0.9
Spirontocaris	2.34	1.3
Dichelopandalus	14.43	7.9
Other decapod shrimp	2.34	1.3
Meganyctiphanes	0.28	0.1
Other crustaceans	0.25	0.1
MOLLUSKS	3.81	2.1
Cephalopods	3.81	2.1
FISH	69.39	38.0
Myctophidae	0.52	0.3
Other fish	68.87	37.7
ANIMAL REMAINS	34.03	18.6
Total	182.61 g	100.0%

Raja senta (Garman) smooth skate
29 stations; 87 specimens; 13 empty

Table 15. Stomach contents of smooth skate.

ITEMS	wt(g)	% wt
POLYCHAETES	1.54	0.6
CRUSTACEANS	193.52	73.0
Axiidae	6.70	2.5
Majidae	2.51	0.9
Pagurus pubescens	9.06	3.4
Pagurus polita	4.49	1.7
Other paguridae	1.52	0.6
Other decapod crabs	1.74	0.7
Crangon	2.60	1.0
Other crangonidae	1.48	0.6
Eualus	4.84	1.8
Lebbeus	2.05	0.8
Spriontocaris	5.83	2.2
Other hippolytidae	0.49	0.2
Dichelopandalus leptocerus	18.80	7.1
Pandalus montagui	4.26	1.6
Other pandalidae	9.48	3.6
Other decapod shrimp	15.04	5.7
Other decapods	37.42	14.1
Meganyctiphanes norvegica	54.68	20.5
Stylocheiron	2.34	0.9
Other euphausiids	3.92	1.5
Other crustaceans	4.27	1.6
FISH	59.54	22.3
Myoxocephalus scorpius	44.26	16.6
Other cottidae	3.54	1.3
Other fish	11.74	4.4
MISCELLANEOUS	2.44	0.9
ANIMAL REMAINS	8.79	3.2
Total	265.83 g	100.0%

Dasyatis centroura (Mitchill) roughtail stingray
1 station; 1 specimen; 0 empty

Table 16. Stomach contents of roughtail stingray.

ITEMS	wt(g)		% wt	
POLYCHAETES	13.96		26.4	
Glyceridae		9.41		17.8
Other polychaetes		4.55		8.6
CRUSTACEANS	17.14		32.6	
Decapod crabs		17.14		32.6
MOLLUSKS	21.67		41.0	
Pelecypods		18.20		34.5
Cephalopods		1.34		2.5
Other mollusks		2.13		4.0
Total	52.77 g		100.0%	

Myliobatidae eagle rays
1 station; 2 specimens; 0 empty

Table 17. Stomach contents of eagle rays.

ITEMS	wt(g)		% wt	
CRUSTACEANS	15.43		51.3	
Pagurus		15.43		51.3
MOLLUSKS	14.63		48.7	
Gastropods		13.65		45.4
Gastropod opercula		0.98		3.3
Total	30.06 g		100.0%	

Conger oceanicus (Mitchill) Conger eel
1 station; 4 specimens; 2 empty

Table 18. Stomach contents of conger eel.

ITEMS	wt(g)	% wt
CRUSTACEANS	2.96	5.7
Gammarids	0.06	0.1
Cancer	2.90	5.6
ECHINODERMS	48.98	94.3
Echinarachnius	48.98	94.3
Total	51.94 g	100.0%

Ophichthidae snake eels
1 station; 2 specimens; 0 empty

Table 19. Stomach contents of snake eels.

ITEMS	wt(g)	% wt
POLYCHAETES	0.07	100.0
NEMATODES	+	+
SAND	+	+
Total	0.07 g	100.0%

Alosa pseudoharengus (Wilson) alewife
33 stations; 136 specimens; 13 empty

Table 20. Stomach contents of alewife.

ITEMS	wt(g)		% wt	
CRUSTACEANS	89.11		81.7	
Gammarids		1.19		1.1
Crangon		0.40		0.4
Meganyctiphanes norvegica		38.66		35.5
Neomysis americana		44.13		40.4
Copepods		0.44		0.4
Other crustaceans		4.29		3.9
MOLLUSKS	7.88		7.2	
Limacina retroversa		7.88		7.2
CHAETOGNATHS	4.40		4.0	
ASCIDIANS	2.18		2.0	
FISH	3.81		3.5	
Anarhichadidae		3.81		3.5
ANIMAL REMAINS	1.77		1.6	
Total	109.15 g		100.0%	

Alosa sapidissima American shad
3 stations; 7 specimens; 0 empty

Table 21. Stomach contents of American shad.

ITEMS	wt(g)		% wt	
CRUSTACEANS	8.00		71.6	
Gammarids		0.01		0.1
Meganyctiphanes		4.26		38.1
Other euphausiids		3.70		33.1
Copepods		0.02		0.2
Other crustaceans		0.01		0.1
FISH	2.84		25.4	
Merluccius larvae		2.84		25.4
ANIMAL REMAINS	0.33		3.0	
Total	11.19 g		100.0%	

Clupea harengus harengus (Linnaeus) Atlantic herring*
42 stations; 344 specimens; 59 empty

Table 22. Stomach contents of Atlantic herring.

ITEMS	wt(g)		% wt	
CRUSTACEANS	77.32		55.1	
Amphipods		0.16		0.1
Crangon septemspinosa		0.16		0.1
Pandalidae		0.79		0.6
Other decapods		1.40		1.0
Diastylis		3.62		2.6
Other cumaceans		0.10		0.1
Euphausia		4.89		3.5
Meganyctiphanes norvegica		51.30		36.4
Other euphausiids		3.12		2.2
Cirriped larvae		0.50		0.4
Copepods		10.78		7.7
Other crustaceans		0.50		0.4
MOLLUSKS	5.02		3.6	
Limacina retroversa		5.02		3.6
CHAETOGNATHS	46.35		32.9	
Sagitta elegans		10.56		7.5
Sagitta		25.57		18.1
Other chaetognaths		10.22		7.3
FISH	0.65		0.4	
Ammodytidae		0.35		0.2
Other fish		0.30		0.2
ANIMALS REMAINS	11.54		8.0	
SAND	0.01		+	
Total	140.89 g		100.0%	

*Includes 219 samples from the spring of 1974.

Etrumeus teres (DeKay) round herring
1 station; 20 specimens; 0 empty

Table 23. Stomach contents of round herring.

ITEMS	wt(g)		% wt	
CRUSTACEANS	0.519		97.3	
Mysids		0.001		0.2
Copepods		0.016		3.0
Other crustaceans		0.502		94.1
FISH	0.011		2.1	
Fish scales		0.011		2.1
UNIDENTIFIED LARVAE	0.003		0.6	
Total	0.533 g		100.0%	

Argentina silus (Ascanius) Atlantic argentine
26 stations; 110 specimens; 71 empty

Table 24. Stomach contents of Atlantic argentine.

ITEMS	wt(g)	% wt
POLYCHAETES	0.01	±
CRUSTACEANS	23.54	65.5
Lysianassidae	0.03	0.1
Hyperids	0.02	0.1
Decapod shrimp	0.54	1.5
Meganyctiphanes norvegica	20.14	56.0
Other euphausiids	2.08	5.8
Calanoid copepods	0.03	0.1
Other crustaceans	0.70	1.9
UNIDENTIFIED EGGS	0.11	0.3
ANIMAL REMAINS	12.29	34.2
Total	35.95 g	100.0%

Chlorophthalmus agassizi (Bonaparte) shortnose greeneye
1 station; 13 specimens; 2 empty

Table 25. Stomach contents of shortnose greeneye.

ITEMS	wt(g)		% wt	
CRUSTACEANS	0.329		93.0	
Decapods		0.057		16.1
Pleuromamma		0.018		5.1
Candacia armata		0.161		45.5
Candacia		0.046		13.0
Other calanoid copepods		0.047		13.3
ANIMAL REMAINS	0.025		7.0	
Total	0.354 g		100.0%	

Myctophidae lanternfishes
4 stations; 9 specimens; 0 empty

Table 26. Stomach contents of lanternfishes.

ITEMS	wt(g)	% wt
CRUSTACEANS	0.244	100.0
Gammarids	0.06	24.6
Euphausiids	0.151	61.9
Temora stylifera	0.004	1.6
Pleuromamma	0.002	0.8
Candacia armata	0.007	2.9
Other calanoid copepods	0.020	8.2
Total	0.244 g	100.0%

Maurolicus pennanti (Walbaum) pearlsides
4 stations; 16 specimens; 6 empty

Table 27. Stomach contents of pearlsides.

ITEMS	wt(g)	% wt
CRUSTACEANS	0.036	100.0
Pontellidae	0.002	5.6
Other calanoid copepods	0.012	33.3
Other crustaceans	0.022	61.1
Total	0.036 g	100.0%

Lophius americanus (Valenciennes) goosefish
94 stations; 250 specimens; 118 empty

Table 28. Stomach contents of goosefish.

ITEMS	wt(g)		% wt	
CRUSTACEANS	128.44		1.4	
Cancer irroratus		38.40		0.4
Pandalidae		25.23		0.3
Other decapods		64.81		0.7
MOLLUSKS	1123.21		12.1	
Loligo		214.05		2.3
Illex		447.20		4.8
Other squid		461.96		5.0
FISH	7857.11		85.2	
Raja ocellata		145.84		1.6
Squalus		72.23		0.8
Clupeidae		25.74		0.3
Lophiidae		1352.70		14.7
Enchelyopus		56.13		0.6
Merluccius bilinearis		133.42		1.4
Urophycis chuss		280.89		3.0
Urophycis tenuis		293.85		3.2
Other gadidae		1321.63		14.3
Myoxocephalus octodecemspinosus		171.59		1.9
Scomber scombrus		689.59		7.5
Helicolenus dactylopterus		52.13		0.6
Sebastes marinus		412.29		4.5
Peprilus triacanthus		34.63		0.4
Prionotus carolinus		42.31		0.5
Other perciforms		156.54		1.7
Ophidiidae		70.66		0.8
Citharichthys arctifrons		7.63		0.1
Glyptocephalus cynoglossus		418.92		4.5
Other flatfish		25.01		0.3
Other fish		2249.92		24.2
ANIMAL REMAINS	117.24		1.3	
Total	9226.00 g		100.0%	

Ogcocephalidae batfishes
1 station; 1 specimen; 0 empty

Table 29. Stomach contents of batfishes.

ITEMS	wt(g)	% wt
NEMATODES	0.05	15.2
DECAPODS	0.11	33.3
FISH SCALES	0.15	45.5
ANIMAL REMAINS	0.02	6.0
Total	0.33 g	100.0%

Brosme brosme (Müller) cusk
50 stations; 86 specimens; 64 empty

Table 30. Stomach contents of cusk.

ITEMS	wt(g)	% wt
CRUSTACEANS	49.22	20.4
Hyas coarctatus	3.91	1.6
Pandalus	7.83	3.2
Dichelopandalus leptocerus	1.58	0.7
Penaeidae	3.07	1.3
Other decapods	26.00	10.8
Meganyctiphanes norvegica	0.74	0.3
Other crustaceans	6.09	2.5
ECHINOIDS	15.66	6.5
Ophiopholis aculatea	15.66	6.5
BRACHIOPODS	0.52	0.2
FISH	173.67	71.9
ANIMAL REMAINS	2.16	0.9
ROCK	0.35	0.1
Total	241.58 g	100.0%

Enchelyopus cimbrius (Linnaeus) fourbeard rockling
1 station; 3 specimens; 2 empty

Table 31. Stomach contents of fourbeard rockling.

ITEMS	wt(g)		% wt	
CRUSTACEANS	0.045		60.0	
Oedicerotidae		0.015		20.0
Other gammarid amphipods		0.030		40.0
ANIMAL REMAINS	0.030		40.0	
Total	0.075 g		100.0%	

Gadus morhua (Linnaeus) Atlantic cod
334 stations; 1706 specimens; 127 empty

Table 32. Stomach contents of Atlantic cod.

ITEMS	wt(g)		% wt	
POLYCHAETES	611.83		1.3	
CRUSTACEANS	9965.275		20.7	
Amphipods		215.29		0.4
Cancer		2166.17		4.5
Geryon		1117.35		2.3
Hyas		975.45		2.0
Paguridae		998.43		2.1
Pandalidae		1390.97		2.9
Other decapods		1333.53		2.8
Euphausiids		919.79		1.9
Mysids		161.35		0.3
Other crustaceans		686.945		1.4
MOLLUSKS	3915.41		8.1	
Placopecten		1516.88		3.2
Chlamys		536.23		1.1
Gastropods		1185.08		2.5
Other mollusks		677.22		1.4
ECHINODERMS	505.80		1.1	
FISH	33074.85		68.8	
Clupea harengus harengus		7200.38		15.0
Other clupeidae		4628.47		9.6
Argentinidae		685.43		1.4
Gadidae		1834.87		3.8
Ammodytidae		932.13		1.9
Anarhichadidae		388.33		0.8
Cottidae		707.97		1.5
Scomber scombrus		1344.79		2.8
Sebastes marinus		1135.36		2.4
Limanda ferruginea		837.23		1.7
Fish eggs		2096.41		4.4
Other fish		8702.61		18.1
MISCELLANEOUS	2580.87		5.4	
Total	48073.16 g		100.0%	

Melanogrammus aeglefinus (Linnaeus) haddock
182 stations; 1216 specimens; 110 empty

Table 33. Stomach contents of haddock.

ITEMS	wt(g)		% wt	
POLYCHAETES	1105.70		16.2	
Capitellids		29.30		0.4
Terrebellids		129.34		1.9
Sabellids		108.70		1.6
Nereidiforms		156.60		2.3
Other polychaetes		681.76		10.0
CRUSTACEANS	1254.55		18.4	
Amphipods		509.52		7.5
Hyas		25.19		0.4
Paguridae		39.61		0.6
Pasiphaea		76.00		1.1
Axiidae		67.65		1.0
Hippolytidae		18.48		0.3
Pandalidae		77.41		1.1
Other decapods		67.59		1.0
Meganyctiphanes		145.21		2.1
Other euphausiids		55.93		0.8
Other crustaceans		171.96		2.5
MOLLUSKS	252.73		3.7	
Pectinidae		16.67		0.2
Nuculanidae		30.84		0.5
Other pelecypods		117.69		1.7
Gastropods		25.34		0.4
Octopods		15.48		0.2
Other mollusks		46.71		0.7

cont'd

Table 33. Stomach contents of haddock (cont'd).

ITEMS	wt(g)	% wt
ECHINODERMS	2523.62	37.4
Asteroids	25.38	0.4
Strongylocentrotus	194.34	2.9
Echinarachnius	64.98	1.0
Other echinoids	202.09	3.0
Ophiopholis	407.59	6.0
Ophiura	557.09	8.2
Other ophiuroids	892.21	13.2
Crinoids	11.67	0.2
Holothuroids	164.05	2.4
Other echinoderms	4.22	0.1
TUNICATES	34.25	0.5
FISH	130.55	1.9
ANIMAL REMAINS	701.96	10.3
SAND AND ROCK	709.01	10.5
MISCELLANEOUS	71.81	1.1
Total	6784.18 g	100.0%

Merluccius bilinearis (Mitchill) silver hake
218 stations; 2049 specimens; 680 empty

Table 34. Stomach contents of silver hake.

ITEMS	wt(g)		% wt	
POLYCHAETES	12.56		0.2	
CRUSTACEANS	1378.22		25.9	
Amphipods		20.86		0.4
Crangonidae		73.49		1.4
Pandalidae		284.18		5.3
Pasiphaea		106.91		2.0
Other decapods		34.82		0.7
Euphausiids		713.37		13.4
Other crustaceans		144.59		2.7
MOLLUSKS	111.07		2.1	
Cephalopods		111.07		2.1
FISH	3720.51		70.0	
Alosa pseudoharengus		222.96		4.2
Clupea harengus harengus		547.69		10.3
Merluccius bilinearis		134.26		2.5
Other gadidae		197.39		3.7
Scomber scombrus		1000.93		18.8
Peprilus triacanthus		81.43		1.5
Other fish		1535.85		28.9
MISCELLANEOUS	93.65		1.8	
Total	5316.01 g		100.0%	

Merluccius albidus (Mitchill) offshore hake*
17 stations; 76 specimens; 43 empty

Table 35. Stomach contents of offshore hake.

ITEMS	wt(g)		% wt	
CRUSTACEANS	10.10		5.7	
Dichelopandalus leptocerus		4.23		2.4
Pandalus		0.15		0.1
Pasiphaea		1.56		0.9
Other decapod shrimp		2.20		1.2
Meganyctiphanes		1.56		0.9
Other euphausiids		0.40		0.2
MOLLUSKS	1.69		0.9	
Cephalopods		1.69		0.9
FISH	166.63		93.2	
Gadidae		106.86		59.8
Other fish		59.77		33.4
ANIMAL REMAINS	0.37		0.2	
Total	178.79 g		100.0%	

*Includes three samples from 1962.

Phycis chesteri (Goode and Bean) longfin hake
13 stations; 87 specimens; 49 empty

Table 36. Stomach contents of longfin hake.

ITEMS	wt(g)	% wt
CRUSTACEANS	33.36	97.1
Pandalus	3.02	8.8
Other decapod shrimp	1.01	2.9
Decapod crabs	4.46	13.0
Other decapods	0.32	0.9
Meganyctiphanes	18.84	54.8
Other euphausiids	2.12	6.2
Other crustaceans	3.59	10.5
FISH	0.40	1.2
ANIMAL REMAINS	0.59	1.7
Total	34.35 g	100.0%

Pollachius virens (Linnaeus) pollock
143 stations; 587 specimens; 84 empty

Table 37. Stomach contents of pollock.

ITEMS	wt(g)	% wt
CRUSTACEANS	6052.03	65.7
Amphipods	14.03	0.2
Pasiphaea	2856.81	31.0
Pandalidae	213.69	2.3
Other decapods	32.64	0.4
Meganyctiphanes norvegica	2076.42	22.5
Other euphausiids	713.74	7.7
Other crustaceans	144.70	1.6
MOLLUSKS	47.35	0.5
Limacina retroversa	40.18	0.4
Other mollusks	7.17	0.1
FISH	2939.80	31.9
Omochelys cruentifer	177.88	1.9
Synaphobranchidae	239.60	2.6
Other anguilliforms	254.52	2.8
Clupeidae	171.04	1.9
Gonostomatidae	35.74	0.4
Myctophidae	230.06	2.5
Melanogrammus aeglefinus	22.35	0.2
Merluccius bilinearis	128.56	1.4
Pollachius virens	2.60	+
Ammodytes americanus	12.76	0.1
Sebastes marinus	6.14	0.1
Other fish	1658.55	18.0
ANIMAL REMAINS	136.87	1.4
MISCELLANEOUS	47.62	0.5
Total	9223.67 g	100.0%

Urophycis chuss (Walbaum) red hake
160 stations; 1128 specimens; 185 empty

Table 38. Stomach contents of red hake.

ITEMS	wt(g)	% wt
NEMERTEANS	13.29	0.5
POLYCHAETES	74.05	2.8
CRUSTACEANS	1374.96	51.5
Amphipods	185.49	6.9
Cancer	137.26	5.1
Hyas	1.41	0.1
Pagurus	69.09	2.6
Munida	254.10	9.5
Munidopsis	12.91	0.5
Other decapod crabs	21.98	0.8
Axiidae	49.66	1.9
Crangon	76.29	2.9
Pandalus	47.38	1.8
Dichelopandalus	183.17	6.9
Other pandalidae	78.05	2.9
Other decapod shrimp	29.88	1.1
Other decapods	17.81	0.7
Cirolana	19.56	0.7
Other isopods	5.54	0.2
Meganyctiphanes	43.15	1.6
Other euphausiids	37.69	1.4
Cumaceans	6.28	0.2
Mysids	1.75	0.1
Other crustaceans	96.51	3.6

cont'd

Table 38. Stomach contents of red hake (cont'd).

ITEMS	wt(g)	% wt
MOLLUSKS	157.97	0.5
Buccinum	5.55	0.2
Other gastropods	72.13	2.7
Cephalopods	32.60	1.2
Other mollusks	47.69	1.8
ECHINODERMS	14.31	0.6
Holothuroids	12.20	0.5
Other echinoderms	2.11	0.1
FISH	772.54	28.8
Ophichthidae	22.70	0.8
Clupeidae	13.70	0.5
Enchelyopus cimbrius	27.39	1.0
Merluccius bilinearis	4.60	0.2
Urophycis chuss	4.85	0.2
Cryptacanthodes maculatus	27.07	1.0
Scomber scombrus	8.90	0.3
Flatfish	12.86	0.5
Other fish	650.47	24.3
ANIMAL REMAINS	244.13	9.1
MISCELLANEOUS	21.66	0.8
Total	2672.91 g	100.0%

Urophycis regius (Walbaum) spotted hake
25 stations; 333 specimens; 36 empty

Table 39. Stomach contents of spotted hake.

ITEMS	wt(g)		% wt	
POLYCHAETES	0.94		0.3	
CRUSTACEANS	165.68		54.5	
Ampeliscidae		1.74		0.6
Other gammarids		9.72		3.2
Hyperiidae		39.50		13.0
Other amphipods		0.47		0.2
Cancer		14.83		4.9
Pagurus		0.40		0.1
Munidopsis		16.14		5.3
Munida		26.93		8.8
Calocaris		0.29		0.1
Erangon		12.38		4.1
Dichelopandalus		24.59		8.1
Pandalus		0.87		0.3
Other decapod shrimp		12.11		4.0
Other decapods		0.31		0.1
Cirolana		2.70		0.9
Euphausiids		0.37		0.1
Other crustaceans		2.33		0.7
MOLLUSKS	64.85		21.3	
Ensis		0.80		0.3
Other pelecypods		1.02		0.3
Rossia		3.29		1.1
Other cephalopods		59.74		19.6
FISH	65.54		21.6	
Merluccius bilinearis		1.11		0.4
Limanda ferruginea		0.23		0.1
Other flatfish		2.71		0.9
Other fish		61.49		20.2
ANIMAL REMAINS	6.82		2.1	
MISCELLANEOUS	0.57		0.2	
Total	304.40 g		100.0%	

Urophycis tenuis (Mitchill) white hake
123 stations; 610 specimens; 193 empty

Table 40. Stomach contents of white hake.

ITEMS	wt(g)		% wt	
POLYCHAETES	15.47		0.2	
CRUSTACEANS	1382.72		17.3	
Amphipods		9.40		0.1
Cancer		11.39		0.1
Pagurus		6.02		0.1
Geryon		53.22		0.7
Axiidae		12.94		0.2
Hippolytidae		6.32		0.1
Crangon		19.07		0.2
Dichelopandalus		47.71		0.6
Pandalus		708.42		8.8
Other pandalidae		111.49		1.4
Other decapods		12.80		0.2
Maganyctiphanes		149.42		1.9
Other euphausiids		180.65		2.2
Other crustaceans		53.87		0.7
MOLLUSKS	200.93		2.5	
Loligo		43.93		0.5
Rossia		14.56		0.2
Other cephalopoda		139.60		1.8
Other mollusks		2.84		+
FISH	6257.75		77.8	
Ammodytes americanus		108.40		1.3
Cryptacanthodes maculatus		59.45		0.7
Scomber scombrus		1199.99		14.9
Melanogrammus aeglefinus		65.32		0.8
Merluccius bilinearis		409.31		5.1
Phycis chesteri		5.46		0.1
Urophycis tenuis		39.43		0.5
Other gadidae		25.58		0.3
Chloropthalmidae		11.60		0.1
Flatfish		125.64		1.6
Other fish		4207.57		52.4
ANIMAL REMAINS	178.51		2.2	
MISCELLANEOUS	3.70		+	
Total	8039.08 g		100.0%	

Lepophidium ceruinum (Goode and Bean) fawn cusk-eel
14 stations; 109 specimens; 25 empty

Table 41. Stomach contents of fawn cusk-eel.

ITEMS	wt(g)		% wt	
NEMATODES	0.980		29.5	
POLYCHAETES	0.328		9.9	
Scalibregma		0.033		1.0
Nephtys		0.060		1.8
Onuphis		0.020		0.6
Spionidae		0.045		1.4
Ophelidae		0.020		0.6
Other polychaetes		0.150		4.5
CRUSTACEANS	0.990		29.4	
Aoridae		0.005		0.2
Other gammarids		0.153		4.6
Caprellids		0.019		0.6
Munidopsis		0.020		0.6
Sabinea		0.088		2.6
Crangon		0.075		2.3
Other crangonidae		0.050		1.5
Calocaris		0.010		0.3
Other decapod shrimp		0.005		0.2
Cirolana		0.420		12.6
Other crustaceans		0.130		3.9
ECHINODERMS			0.5	
Asteroids		0.010		0.3
Ophiuroids		0.005		0.2
FISH	0.075		2.3	
Flatfish		0.075		2.3
ANIMAL REMAINS	0.950		28.4	
Total	3.323 g		100.0%	

Macrozoarces americanus (Block and Schneider) ocean pout
48 stations; 238 specimens; 55 empty

Table 42. Stomach contents of ocean pout.

ITEMS	wt(g)		% wt	
COELENTERATES	13.12		0.7	
POLYCHAETES	75.67		3.9	
Aphrodita		68.86		3.6
Other polychaetes		6.81		0.3
CRUSTACEANS	223.05		11.6	
Corophiidae		73.96		3.8
Gammarus		6.06		0.3
Other gammarids		13.49		0.7
Other amphipods		15.20		0.8
Cancer		64.70		3.4
Hyas		7.79		0.4
Paguridae		9.03		0.5
Other decapods		21.42		1.1
Other crustaceans		11.40		0.6
MOLLUSKS	74.26		3.9	
Chlamys		52.15		2.7
Placopecten		1.28		0.1
Ensis		1.81		0.1
Other pelecypods		16.42		0.9
Other mollusks		2.60		0.1
ECHINODERMS	1345.82		70.0	
Echinarachnius		1029.80		53.6
Strongylocentrotus		13.04		0.7
Other echinoids		191.02		9.9
Ophiopholis		12.71		0.7
Other ophiuroids		99.25		5.1
ASCIDIANS	7.00		0.4	
FISH	77.64		4.0	
Sculpin eggs		70.56		3.7
Other fish eggs		7.08		0.3
ANIMAL REMAINS	94.15		4.9	
SAND AND ROCK	12.35		0.6	
Total	1923.06 g		100.0%	

Coelorhynchus carminatus (Goode) long-nosed grenadier
5 stations; 18 specimens; 4 empty

Table 43. Stomach contents of long-nosed grenadier.

ITEMS	wt(g)		% wt	
POLYCHAETES	0.392		14.2	
CRUSTACEANS	1.500		54.2	
Gammarids		0.006		0.2
Decapod shrimp		0.224		8.1
Euphausiids		1.147		41.5
Mysidopsis		0.053		1.9
Other mysids		0.033		1.2
Isopods		0.026		0.9
Undeuchaeta plumosa		0.009		0.3
Other calanoid copepods		0.002		0.1
NEMERTEANS	0.027		1.0	
ANIMAL REMAINS	0.844		30.5	
MISCELLANEOUS	0.002		0.1	
Total	2.765 g		100.0%	

Strongylura marina (Walbaum) Atlantic needlefish
3 stations; 5 specimens; 4 empty

Table 44. Stomach contents of Atlantic needlefish.

ITEMS	wt(g)	% wt
CRUSTACEANS	0.239	100.0
Calanoid copepods	0.239	100.0
Total	0.239 g	100.0%

Menidia beryllina (Cope) tidewater silverside
1 station; 36 specimens; 30 empty

Table 45. Stomach contents of tidewater silverside.

ITEMS	wt(g)	% wt
CRUSTACEANS	+	100.0
Caprellids	+	100.0
Total	+	100.0%

Polymixiidae beardfishes*
7 stations; 36 specimens; 7 empty

Table 46. Stomach contents of beardfishes.

ITEMS	wt(g)		% wt	
CRUSTACEANS	4.422		79.8	
Munida iris		0.278		5.0
Other Munida		0.467		8.4
Crangon septemspinosus		0.217		3.9
Other decapods		2.846		51.4
Meganyctiphanes		0.582		10.5
Other euphausiids		0.007		0.1
Other crustaceans		0.025		0.5
ANIMAL REMAINS	0.975		17.6	
ROCK	0.141		2.6	
Total	5.538 g		100.0%	

*Includes four fish from 1968.

Zenopsis ocellata (Storer) American john dory*
5 stations; 5 specimens; 2 empty

Table 47. Stomach contents of American john dory.

ITEMS	wt(g)	% wt
FISH	26.954	100.0
Stenotomus chrysops	18.310	32.1
Other fish	8.644	67.9
Total	26.954 g	100.0%

*Includes one empty stomach from 1968.

Macrorhamphosus scolopax (Linnaeus) longspine snipefish
3 stations; 6 specimens; 2 empty

Table 48. Stomach contents of longspine snipefish.

ITEMS	wt(g)	% wt
CRUSTACEANS	(7)	
Gammarids	(6)	
Calanoid copepods	(1)	
NEMATODES	(1)	
Total	(8)	

*Numbers in parentheses indicate number of prey organisms.

Centropristis striata (Linnaeus) black sea bass
5 stations; 67 specimens; 19 empty

Table 49. Stomach contents of black sea bass.

ITEMS	wt(g)		% wt	
POLYCHAETES	105.39		54.2	
Nereidiforms		6.41		3.3
Other polychaetes		98.98		50.9
CRUSTACEANS	69.17		35.7	
Gammarids		0.35		0.2
Cancer		56.59		29.1
Cancer larvae		1.48		0.8
Pagurus		0.16		0.1
Other paguridae		8.28		4.3
Other decapod crabs		2.10		1.1
Crangon		0.03		+
Other decapod shrimp		0.03		+
Cirolana		0.15		0.1
MOLLUSKS	0.45		0.2	
Shells		0.45		0.2
FISH	1.92		1.0	
Hippocampus		1.92		1.0
ANIMAL REMAINS	17.92		8.9	
Total	194.45 g		100.0%	

Epinephelus morio (Valenciennes) red grouper
1 station; 1 specimen; 0 empty

Table 50. Stomach contents of red grouper.

ITEMS	wt(g)	% wt
MOLLUSKS	0.041	100.0
Octopods	0.041	100.0
Total	0.041 g	100.0%

Lopholatilus chamaeleonticeps (Goode and Bean) tilefish
1 station; 1 specimen; 0 empty

Table 51. Stomach contents of tilefish.

ITEMS	wt(g)	% wt
CRUSTACEANS	11.23	100.0
Xanthidae	4.95	44.1
Euprognatha	0.84	7.5
Other crustaceans	5.44	48.4
Total	11.23 g	100.0%

Pomatomus saltatrix (Linnaeus) bluefish
14 stations; 46 specimens; 22 empty

Table 52. Stomach contents of bluefish.

ITEMS	wt(g)		% wt	
CRUSTACEANS	0.49		+	
Isopoda		0.13		+
Decapod shrimp		0.36		+
MOLLUSKS	504.56		30.6	
Loligo pealei		503.63		30.5
Other cephalopods		0.93		0.1
FISH	1130.85		68.4	
Etrumeus teres		83.88		5.1
Other clupeidae		233.31		14.1
Peprilus triacanthus		531.95		32.3
Merluccius bilinearis		10.18		0.6
Strongylura marina		119.50		7.2
Other fish		152.03		9.2
ANIMAL REMAINS	16.08		1.0	
Total	1651.98 g		100.0%	

Stenotomus chrysops (Linnaeus) scup
26 stations; 346 specimens; 43 empty

Table 53. Stomach contents of scup.

ITEMS	wt(g)		% wt	
COELENTERATES	47.24		20.6	
Ceriantharia		47.24		20.6
POLYCHAETES	74.45		32.5	
Scoleciforms		2.24		1.0
Terebelliforms		4.44		1.9
Sabelliforms		10.73		4.7
Eunicidae		1.21		0.5
Lumbrineridae		5.70		2.5
Nephtyidae		3.76		1.6
Phyllodocidae		0.74		0.3
Polynoidae		4.00		1.7
Other nereidiforms		1.32		0.6
Other polychaetes		40.31		17.7
CRUSTACEANS	21.43		9.3	
Ampeliscidae		7.44		3.2
Aoridae		2.01		0.9
Other gammarids		4.21		1.8
Caprellids		0.96		0.4
Other amphipods		3.64		1.6
Decapods		2.73		1.2
Other crustaceans		0.44		0.2
MOLLUSKS	17.78		7.7	
Cerastoderma		2.93		1.3
Other pelecyopds		7.21		3.1
Gastropods		7.28		3.1
Other mollusks		0.36		0.2

cont'd

Table 53. Stomach contents of scup (cont'd).

ITEMS	wt(g)		% wt	
ECHINODERMS	3.0		1.4	
Echinarachnius parma		1.04		0.5
Ophiopholis		1.96		0.9
ASCIDIANS	0.61		0.3	
FISH	2.39		1.0	
ANIMAL REMAINS	61.87		27.0	
MISCELLANEOUS	0.55		0.2	
Total	229.32 g		100.0%	

Cynoscion regalis (Bloch and Schneider) weakfish
3 stations; 21 specimens; 2 empty

Table 54. Stomach contents of weakfish.

ITEMS	wt(g)		% wt	
POLYCHAETES	0.68		0.6	
CRUSTACEANS	24.48		20.2	
Ampelisca		0.30		0.2
Pleustes		0.01		+
Other gammarids		0.09		0.1
Portunidae		3.22		2.7
Cancer		0.06		+
Crangon		1.87		1.5
Calocaris		0.54		0.4
Dichelopandalus leptocerus		17.69		14.6
Cirolana		0.14		0.1
Other isopods		0.43		0.4
Cumaceans		+		+
Other crustaceans		0.13		0.2
MOLLUSKS	26.22		21.6	
Teuthidida		21.53		17.7
Other cephalopods		4.69		3.9
FISH	57.62		47.5	
Prionotus		4.45		3.7
Scombridae		19.22		15.8
Stenotomus chrysops		29.04		24.0
Other fish		4.91		4.0
ANIMAL REMAINS	12.30		10.1	
Total	121.30 g		100.0%	

Micropogon undulatus (Linnaeus) Atlantic croaker
2 stations; 17 specimens; 3 empty

Table 55. Stomach contents of Atlantic croaker.

ITEMS	wt(g)		% wt	
NEMERTEANS	2.52		10.0	
POLYCHAETES	9.64		38.4	
Nephtys		9.47		37.7
Other polychaetes		0.17		0.7
CRUSTACEANS	3.07		12.2	
Gammarids		0.09		0.4
Paguridae		0.35		1.4
Caridean shrimp		0.02		+
Other decapods		2.61		10.4
MOLLUSKS	7.75		30.9	
Cephalopods		2.38		9.5
Nudibranchia		1.11		4.4
Other gastropods		4.26		17.0
FISH	0.25		1.0	
Ammodytes americanus		0.20		0.8
Other fish		0.05		0.2
ANIMAL REMAINS	1.75		6.9	
SAND	0.15		0.6	
Total	25.13 g		100.0%	

Anarhichas lupus (Linnaeus) Atlantic wolffish
66 stations; 176 specimens; 60 empty

Table 56. Stomach contents of Atlantic wolffish.

ITEMS	wt(g)		% wt	
COELENTERATES	35.63		1.1	
POLYCHAETES	42.50		1.3	
CRUSTACEANS	639.69		20.1	
Pagurus		346.87		10.9
Other paguridae		5.96		0.2
Hyas		165.35		5.2
Other majidae		5.57		0.2
Spirontocaris		7.58		0.2
Pandalus		42.16		1.3
Other decapods		38.05		1.2
Cirripeds		9.37		0.3
Other crustaceans		18.78		0.6
MOLLUSCA	1334.31		42.0	
Artica		435.74		13.7
Modiolus		68.66		2.2
Chlamys islandica		34.31		1.1
Chlamys		158.87		5.0
Placopecten		215.56		6.8
Aequipecten irradiens		53.88		1.7
Mercenaria mercenaria		29.70		0.9
Anadara ovalis		11.34		0.4
Other pelecypods		42.69		1.3
Buccinum		139.46		4.4
Colus		6.13		0.2
Neptunea		17.00		0.5
Other gastropods		77.52		2.4
Other mollusks		43.45		1.4

cont'd

Table 56. Stomach contents of Atlantic wolffish (cont'd).

ITEMS	wt(g)		% wt	
ECHINODERMS	548.49		17.3	
Strongylocentrotus		215.59		6.8
Echinarachnius parma		91.74		2.9
Other echinoidea		129.26		4.1
Asteroidea		19.49		0.6
Ophiuroidea		87.57		2.8
Other echinoderms		4.84		0.1
FISH	299.17		9.5	
Myoxocephalus octodecemspinosus		46.48		1.5
Triglops nybelini		5.09		0.2
Sebastes marinus		7.01		0.2
Fish eggs		240.59		7.6
ANIMAL REMAINS	189.03		5.9	
SAND AND ROCK	88.59		2.8	
Total	3177.41 g		100.0%	

Cryptacanthodes maculatus (Storer) wrymouth
5 stations; 20 specimens; 7 empty

Table 57. Stomach contents of wrymouth.

ITEMS	wt(g)		% wt	
POLYCHAETES	5.832		54.2	
Scalibregma		0.800		7.4
Other polychaetes		5.032		46.8
CRUSTACEANS	4.719		43.9	
Gammarids		0.164		1.5
Crangon		0.065		0.6
Dichelopandalus		2.170		20.2
Other decapods		2.320		21.6
ECHINODERMS	0.050		0.5	
Holothuroids		0.050		0.5
ANIMAL REMAINS	0.146		1.4	
Total	10.747 g		100.0%	

Ammodytes americanus (De Kay) American sand lance
3 stations; 12 specimens; 2 empty

Table 58. Stomach contents of American sand lance.

ITEMS	wt(g)		% wt	
CRUSTACEANS	0.081		97.6	
Calanus finmarchicus		0.004		4.8
Centropages typicus		0.065		78.3
Pseudocalanus		0.012		14.5
CHAETOGNATHS	0.002		2.4	
Total	0.083 g		100.0%	

Gempylidae snake mackerels
1 station; 1 specimen; 0 empty

Table 59. Stomach contents of snake mackerels.

ITEMS	wt(g)	% wt
FISH	1.402	100.0
Total	1.402 g	100.0%

Scomber scombrus (Linnaeus) Atlantic mackerel*
30 stations; 278 specimens; 80 empty

Table 60. Stomach contents of Atlantic mackerel.

ITEMS	wt(g)		% wt	
CRUSTACEANS	75.42		44.1	
Amphipods		0.48		0.3
Crangon		2.66		1.6
Pandalus		1.33		0.8
Sergestidae		0.10		0.1
Decapod larvae		0.81		0.5
Other decapods		0.08		+
Thysanoessa		0.26		0.1
Meganyctiphanes		19.95		11.7
Neomysis		0.74		0.4
Calanus finmarchicus		3.83		2.2
Centropages typicus		12.97		7.6
Temora longicornis		9.14		5.3
Pseudocalanus minutus		10.21		6.0
Other copepods		12.27		7.2
Other crustaceans		0.59		0.3
MOLLUSKS	49.72		29.1	
Cephalopods		0.21		0.1
Limacina retroversa		49.51		29.0
CHAETOGNATHS	0.70		0.4	
ECHINODERMS	0.30		0.2	
ASCIDIANS	7.99		4.7	
Oikopleura		7.54		4.4
Ascidiidae		0.45		0.3
FISH	7.49		4.4	
Merluccius bilinearis		2.75		1.6
Ammodytidae		2.28		1.3
Fish eggs		0.63		0.4
Other fish		1.83		1.1
ANIMAL REMAINS	29.13		17.0	
MISCELLANEOUS	0.11		0.1	
Total	170.86 g		100.0%	

*Samples from the spring of 1974 only.

Peprilus triacanthus (Peck) butterfish
40 stations; 452 specimens; 89 empty

Table 61. Stomach contents of butterfish.

ITEMS	wt(g)		% wt	
POLYCHAETES	2.50		2.2	
Nephtys		2.43		2.1
Other polychaetes		0.07		0.1
CRUSTACEANS	7.94		6.8	
Amphipods		0.17		0.1
Larval crangonidae		0.31		0.3
Other decapods		2.54		2.2
Meganyctiphanes		1.17		1.0
Other euphausiids		0.09		0.1
Copepods		0.15		0.1
Other crustaceans		3.51		3.0
CHAETOGNATHS	5.56		4.7	
Sagitta		5.28		4.5
Other chaetognaths		0.28		0.2
TUNICATES	79.35		67.7	
Oikopleura		8.28		7.1
Other larvaceans		9.01		7.7
Salpa democratica		6.80		5.8
Salpa		25.71		21.9
Other thaliaceans		15.75		13.4
Ascidians		13.80		11.8
ANIMAL REMAINS	21.78		18.6	
Total	117.13 g		100.0%	

Helicolenus dactylopterus (De la Roche) blackbelly rosefish
3 stations; 20 specimens; 7 empty

Table 62. Stomach contents of blackbelly rosefish.

ITEMS	wt(g)		% wt	
POLYCHAETES	0.038		2.7	
Nereidiforms		0.028		2.0
Other polychaetes		0.010		0.7
CRUSTACEANS	1.351		94.3	
Gammarids		0.003		0.2
Other crustaceans		1.348		94.1
ANIMAL REMAINS	0.044		3.0	
Total	1.433 g		100.0%	

Sebastes marinus (Linnaeus) redfish
95 stations; 921 specimens; 386 empty

Table 63. Stomach contents of redfish.

ITEMS	wt(g)		% wt	
CRUSTACEANS	1131.30		96.4	
Munida		20.17		1.7
Pandalus		23.54		2.0
Other pandalidae		5.69		0.5
Pasiphaea		167.56		14.3
Other decapods		26.54		2.3
Meganyctiphanes norvegica		568.15		48.4
Other *meganyctiphanes*		235.33		20.0
Other euphausiids		50.02		4.3
Copepods		6.77		0.6
Other crustaceans		27.53		2.3
FISH	17.86		1.5	
Stichaeidae		2.15		0.2
Fish eggs		2.05		0.2
Other fish		13.66		1.1
ANIMAL REMAINS	18.06		1.5	
MISCELLANEOUS	7.40		0.6	
Total	1174.62 g		100.0%	

Peristedion miniatum (Goode) armored searobin
1 station; 1 specimen; 0 empty

Table 64. Stomach contents of armored searobin.

ITEMS	wt(g)	% wt
CRUSTACEANS	1.023	100.0
Crangon	1.023	100.0
Total	1.023 g	100.0%

Prionotus carolinus (Linnaeus) northern searobin
1 station; 7 specimens; 3 empty

Table 65. Stomach contents of northern searobin.

ITEMS	wt(g)	% wt
POLYCHAETES	0.040	41.7
CRUSTACEANS	0.006	6.2
MOLLUSKS	0.003	3.1
ANIMAL REMAINS	0.047	49.0
Total	0.096 g	100.0%

Hemitripterus americanus (Gmelin) sea raven
40 stations; 108 specimens; 38 empty

Table 66. Stomach contents of sea raven.

ITEMS	wt(g)		% wt	
POLYCHAETES	0.88		0.1	
CRUSTACEANS	65.52		6.4	
Cancer		37.11		3.6
Paguridae		1.18		0.1
Crangon		4.85		0.5
Dichelopandalus		7.44		0.7
Other decapod shrimp		14.06		1.4
Other crustaceans		0.88		0.1
MOLLUSKS	211.44		20.7	
Loligo pealei		203.37		19.9
Other cephalopods		8.07		0.8
FISH	743.31		72.7	
Rajidae		9.69		0.9
Melanogrammus aeglefinus		136.34		13.3
Other gadidae		25.44		2.5
Myoxocephalus octodecemspinosus		349.53		34.2
Myoxocephalus aenaeus		2.90		0.3
Liparis atlanticus		3.53		0.3
Pholis gunnellus		4.10		0.4
Macrozoarces americanus		9.87		1.0
Flatfish		1.68		0.2
Other fish		200.23		19.6
MISCELLANEOUS	1.49		0.1	
Total	1022.64 g		100.0%	

Myoxocephalus octodecemspinosus (Mitchill) longhorn sculpin
100 stations; 908 specimens; 287 empty

Table 67. Stomach contents of longhorn sculpin.

ITEMS	wt(g)		% wt	
POLYCHAETES	30.06		3.5	
Aphroditidae		22.05		2.6
Other polychaetes		8.01		0.9
CRUSTACEANS	719.74		83.4	
Leptocheirus		3.62		0.4
Corophiidae		6.03		0.7
Other gammarids		28.24		3.3
Caprellids		2.02		0.2
Other amphipods		33.33		3.8
Cancer		266.66		30.9
Hyas		53.18		6.2
Paguridae		110.51		12.8
Other decapod crabs		25.65		3.0
Calocaris		6.90		0.8
Crangon		21.85		2.5
Hippolytidae		5.13		0.6
Pandalidae		52.85		6.1
Other decapods		12.03		1.4
Isopods		16.73		1.9
Euphausiids		16.17		1.9
Other crustaceans		58.84		6.9
MOLLUSKS	8.26		1.0	
FISH	73.36		8.5	
Anguilliforms		2.06		0.2
Ammodytes americanus		1.38		0.2
Cottidae		3.36		0.4
Ulvaria subbifurcata		5.46		0.6
Macrozoarces americanus		12.49		1.4
Limanda ferruginea		3.37		0.4
Other fish		45.24		5.3
MISCELLANEOUS	26.09		3.0	
SAND AND ROCK	5.20		0.6	
Total	862.71 g		100.0%	

Myoxocephalus scorpius (Linnaeus) shorthorn sculpin
2 stations; 10 specimens; 2 empty

Table 68. Stomach contents of shorthorn sculpin.

ITEMS	wt(g)		% wt	
CRUSTACEANS	0.103		61.3	
Amphipods		+		+
Pelia mutica		0.010		6.0
Pasiphaea		0.080		47.6
Other decapod shrimp		0.008		4.8
Other crustaceans		0.005		2.9
ANIMAL REMAINS	0.018		10.7	
SAND AND ROCK	0.047		28.0	
Total	0.168 g		100.0%	

Triglops nybelini (Jensen) mailed sculpin
2 stations; 21 specimens; 6 empty

Table 69. Stomach contents of mailed sculpin.

ITEMS	wt(g)		% wt	
POLYCHAETES	0.80		47.9	
Nereidiforms		0.62		37.1
Other polychaetes		0.18		10.8
CRUSTACEANS	0.84		50.3	
Gammarids		0.16		9.6
Mysids		0.06		3.6
Pandalidae		0.01		0.6
Other decapod shrimp		0.19		11.4
Other decapods		0.38		22.7
Other crustaceans		0.04		2.4
ANIMAL REMAINS	0.03		1.8	
MISCELLANEOUS	+		+	
Total	1.67 g		100.0%	

Aspidophoroides monopterygius (Bloch) alligatorfish
7 stations; 23 specimens; 5 empty

Table 70. Stomach contents of alligatorfish.

ITEMS	wt(g)	% wt
CRUSTACEANS	0.203	100.0
Aoridae	0.073	36.0
Other gammarids	0.002	1.0
Caprellids	0.100	49.3
Decapods	0.007	3.4
Other crustaceans	0.021	10.3
Total	0.203 g	100.0%

Liparis atlanticus (Jordan and Evermann) seasnail
1 station; 2 specimens; 0 empty

Table 71. Stomach contents of seasnail.

ITEMS	wt(g)	% wt
CRUSTACEANS	0.027	100.0
Gammarids	0.027	100.0
Total	0.027 g	100.0%

Citharichthys arctifrons (Goode) Gulf Stream flounder
4 stations; 8 specimens; 5 empty

Table 72. Stomach contents of Gulf Stream flounder.

ITEMS	wt(g)		% wt	
CRUSTACEANS	0.030		43.5	
Gammarids		0.020		29.0
Isopods		0.003		4.4
Copepods		0.001		1.4
Other crustaceans		0.006		8.7
POLYCHAETES	0.039		56.5	
Nereidiforms		0.038		55.1
Polychaete tubes		0.001		1.4
Total	0.069 g		100.0%	

Paralichthys dentatus (Linnaeus) summer flounder
2 stations; 4 specimens; 3 empty

Table 73. Stomach contents of summer flounder.

ITEMS	wt(g)	% wt
FISH	0.850	100.0
Total	0.850 g	100.0%

Paralichthys oblongus (Mitchill) fourspot flounder
87 stations; 895 specimens; 393 empty

Table 74. Stomach contents of fourspot flounder.

ITEMS	wt(g)	% wt
CRUSTACEANS	145.83	32.3
Amphipods	4.65	1.0
Cancer	40.17	8.9
Crangon	26.72	5.9
Dichelopandalus	23.56	5.2
Pandalus	5.55	1.2
Other pandalidae	23.66	5.2
Other decapods	11.04	2.4
Other crustaceans	10.48	2.5
MOLLUSKS	96.64	21.4
Loligo	13.71	3.0
Illex	10.20	2.3
Rossia	5.95	1.3
Other cephalopods	66.16	14.7
Other mollusks	0.62	0.1
FISH	146.67	32.4
Merluccius bilinearis	122.07	27.0
Other gadidae	9.72	2.1
Other fish	14.88	3.3
ANIMAL REMAINS	58.47	12.9
MISCELLANEOUS	4.57	1.0
Total	452.18 g	100.0%

Scophthalmus aquosus (Mitchill) windowpane
15 stations; 120 specimens; 60 empty

Table 75. Stomach contents of windowpane.

ITEMS	wt(g)	% wt
CRUSTACEANS	139.20	90.3
Amphipods	0.62	0.4
Cancer	0.08	0.1
Pagurus	0.28	0.2
Crangon	13.04	8.5
Dichelopandalus	1.30	0.8
Pandalus	1.35	0.9
Other pandalidae	6.70	4.3
Neomysis	107.99	70.1
Other mysids	1.96	1.3
Other crustaceans	5.88	3.7
ECHINODERMS	9.26	6.0
Echinarachnius	9.26	6.0
ANIMAL REMAINS	4.63	3.0
SAND	0.40	0.3
MISCELLANEOUS	0.58	0.4
Total	154.07 g	100.0%

Glyptocephalus cynoglossus (Linnaeus) witch flounder
163 stations; 955 specimens; 105 empty

Table 76. Stomach contents of witch flounder.

ITEMS	wt(g)	% wt
COELENTERATES	9.76	1.5
Cerianthidae	8.70	1.3
Other anthozoans	1.06	0.2
POLYCHAETES	494.26	71.9
Scoleciforms	56.13	8.2
Terebelliforms	10.59	1.5
Sabelliforms	12.31	1.8
Neridiforms	112.27	16.3
Other polychaetes	302.96	44.1
CRUSTACEANS	36.7	5.3
Amphipods	19.30	2.8
Cancer	2.49	0.4
Crangonidae	1.30	0.2
Pandalidae	1.50	0.2
Other decapods	2.23	0.3
Isopods	3.55	0.5
Euphausiids	3.17	0.5
Other crustaceans	3.16	0.4
MOLLUSKS	25.27	3.7
Loligo	18.98	2.8
Other mollusks	6.29	0.9
ECHINODERMS	65.67	9.5
Thyone	35.97	5.2
Other holothureans	28.34	4.1
Ophiuroids	1.36	0.2
FISH	5.24	0.8
ANIMAL REMAINS	42.06	6.1
MISCELLANEOUS	8.03	1.2
Total	686.99 g	100.0%

Hippoglossoides platessoides American plaice
167 stations; 988 specimens; 437 empty

Table 77. Stomach contents of American plaice.

ITEMS	wt(g)	% wt
POLYCHAETES	51.97	4.2
CRUSTACEANS	191.39	15.5
Amphipods	4.10	0.3
Pagurus	79.86	6.5
Pandalidae	49.70	4.0
Other decapods	10.79	0.9
Euphausiids	26.00	2.1
Other crustaceans	20.94	1.7
MOLLUSKS	87.28	7.1
Chlamys	16.86	1.4
Nuculana	9.04	0.7
Yoldia	34.06	2.8
Other mollusks	27.32	2.2
ECHINODERMS	830.43	67.3
Strongylocentrotus	16.46	1.3
Echinarachnius	500.04	40.5
Ophiura sarsi	48.80	4.0
Ophiura	88.21	7.2
Other echinoderms	176.92	14.3
FISH	10.24	0.8
ANIMAL REMAINS	30.05	2.4
MISCELLANEOUS	32.71	2.7
Total	1234.07 g	100.0%

Hippoglossus hippoglossus (Linnaeus) Atlantic halibut
12 stations; 20 specimens; 5 empty

Table 78. Stomach contents of Atlantic halibut.

ITEMS	wt(g)		% wt	
CRUSTACEANS	25.79		8.0	
Pagurus pubescens		5.78		1.8
Pagurus		2.85		0.9
Hyas araneus		3.88		1.2
Pandalus montagui		1.03		0.3
Dichelopandalus leptocercus		8.27		2.6
Other decapods		3.82		1.2
Meganyctiphanes norvegica		0.16		+
MOLLUSKS	0.08		+	
Anomia		0.08		+
FISH	294.22		91.3	
Melanogrammus aeglefinus		64.00		19.8
Other gadidae		16.37		5.1
Myoxocephalus octodecemspinosus		171.34		53.2
Myoxocephalus eggs		16.78		5.2
Other fish		25.73		8.0
ROCK	2.18		0.7	
Total	322.27 g		100.0%	

Limanda ferruginea (Storer) yellowtail flounder
225 stations; 2715 specimens; 618 empty

Table 79. Stomach contents of yellowtail flounder.

ITEMS	wt(g)		% wt	
ANTHOZOA	43.17		3.0	
POLYCHAETES	595.63		42.0	
Spioniforms		39.33		2.8
Eunicidae		57.09		4.0
Nephtyidae		16.55		1.2
Nereis		20.31		1.4
Other nereidiforms		55.01		3.9
Other polychaetes		407.34		28.7
CRUSTACEANS	526.79		37.1	
Byblis serrata		19.16		1.3
Other ampeliscidae		11.15		0.8
Aoridae		13.97		1.0
Unciola irrorata		23.09		1.6
Leptocheirus pinguis		26.21		1.8
Other gammarids		119.33		8.4
Other amphipods		228.49		16.1
Cancer		25.03		1.8
Other decapods		34.94		2.5
Isopods		7.16		0.5
Cumaceans		6.16		0.4
Other crustaceans		12.10		0.9
MOLLUSKS	27.28		1.9	
ECHINODERMS	38.81		2.7	
Echinarachnius		23.39		1.6
Other echinoderms		15.42		1.1
ASCIDIANS	38.20		2.7	
FISH	11.06		0.8	
ANIMAL REMAINS	85.50		6.0	
MISCELLANEOUS	53.43		3.8	
Total	1419.87 g		100.0%	

Pseudopleuronectes americanus (Walbaum) winter flounder
10 stations; 115 specimens; 26 empty

Table 80. Stomach contents of winter flounder.

ITEMS	wt(t)		% wt	
COELENTERATES	51.51		20.3	
Actiniaria		37.78		14.9
Other anthozoans		5.81		2.3
Hydrozoans		7.92		3.1
NEMERTEANS	4.32		1.7	
POLYCHAETES	85.15		33.6	
Spioniforms		24.15		9.6
Scoleciforms		3.39		1.3
Terebelliforms		8.76		3.5
Sabelliforms		2.65		1.0
Nereidiforms		6.38		2.5
Other polychaetes		39.82		15.7
CRUSTACEANS	18.11		7.2	
Gammarus locusta		4.48		1.8
Other gammarids		5.06		2.0
Decapods		1.33		0.5
Other crustaceans		7.24		2.9
MOLLUSKS	2.66		1.1	
ASCIDIANS	12.27		4.9	
Amaroucium		2.74		1.1
Other ascidians		9.53		3.8
SAND AND ROCK	38.01		15.0	
ANIMAL REMAINS	35.39		14.0	
MISCELLANEOUS	5.56		2.2	
Total	252.98 g		100.0%	

Appendix Table 1. Distribution of stomach samples collected between 1969 and 1972.

CRUISE NO.	YEAR	SEASON	NO. SPECIES	NO. FISH
69-11	1969	Fall	32	1,696
70-3	1970	Spring	1	2
70-6	1970	Fall	28	2,777
71-1	1971	Spring	36	3,805
71-4	1971	Fall	6	81
71-5	1971	Fall	3	5
71-6	1971	Fall	30	1,581
72-1	1972	Winter	21	551
72-2	1972	Spring	45	4,813
72-5	1972	Summer	9	73
72-8	1972	Fall	44	3,543
*Other			7	558
				19,485

*Samples from 1962 (3), 1968 (5), 1973 (48), and 1974 (502) are included in the tables so indicated.