

ANNUAL REPORT

LIFE HISTORY ASPECTS OF MIDDLE ATLANTIC

BIGHT FINFISHES

(July 1975 to June 1976)

BY

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INTRODUCTION

This annual report summarizes collections made during a continuing study of the finfishes occurring in the Middle Atlantic Bight (MAB). The MAB is here defined as that section of the Atlantic continental shelf between Cape Cod, Massachusetts and Cape Hatteras, North Carolina. This study was designed and initiated to provide material for the formulation of a comprehensive life history data base relevant to current and anticipated research needs.

Analysis of these data will ultimately provide a significant portion of the material essential for: 1) future comparison of man-induced changes and the resulting effects on finfishes (e.g., offshore petroleum exploration and production, construction and operation of nuclear power plants and deep water ports, and increased or shifted ocean dumping of solid and liquid wastes); 2) detection, prediction, and understanding of natural changes which periodically occur in finfish populations (e.g., relative abundance, distribution, size composition, reproductive cycles, condition factor, etc.); and 3) construction of biostatistical models used for assessment predictions and national and international management policies pertinent to recreational and commercial fishery stocks.

MATERIALS AND METHODS

Station locations in the MAB were selected by a stratified random sampling design. Strata boundaries were determined by depth, i.e., 0-10, 11-19, 20-28, 29-55, 56-110, 111-183, 184-366 m. A minimum of two stations per stratum were randomly selected for each cruise. Inshore strata (0-28 m)

were sampled at a rate of approximately one station per 515 Km² and off-shore strata (29-366 m) at a rate of approximately one station per 1030 km².

Figures 1-4 illustrate station positions for the four cruises from which biological data has been collected.

The National Ocean Survey's 47.2-m Delaware II was employed during the aforementioned four cruises. Finfish were collected by towing an otter trawl at approximately 6.5 km/h for 30 min at each station. A No. 36 Yankee trawl was used by Delaware II; this gear has a 24.4-m footrope and an 18.3-m headrope.

At the conclusion of each tow, the trawl was retrieved and emptied onto a sorting table where all finfish species were separated and identified. All specimens of each species were weighed and a random sample measured from the snout to the extent of the middle caudal finray in centimeters (MCL). Usually, all specimens of each species were measured; but, when a species was very numerous, an estimate of the total number was made by measuring and weighing a subsample.

At the laboratory each specimen was thawed in water, measured to the nearest millimeter (MCL), and weighed to the nearest gram. In addition, each mature specimen was sexed, stage of development-determined, and ovaries weighed to the nearest one-hundredth of a gram (0.01 g).

Collected data were recorded on appropriate data processing forms, transferred to punch cards, and incorporated into sorting, listing, and statistical systems to simplify data recall and analysis.

COLLECTIONS

During this study, 23,487 specimens were examined from 636 otter trawl stations. Tables 1-4 summarize collections for each of the aforementioned cruises and Table 5 gives combined totals for all cruises.

Appendix Tables 1 through 82 summarize collected materials for 21 of the more numerous and/or important species; namely: offshore hake (Merluccius albidus), silver hake (Merluccius bilinearis), red hake (Urophycis chuss), spotted hake (Urophycis regius), ocean pout (Macrozoarces americanus), black sea bass (Centropristes striata), bluefish (Pomatomus saltatrix), scup (Stenotomus chrysops), weakfish (Cynoscion regalis), spot (Leiostomus xanthurus), southern kingfish (Menticirrhus americanus), northern kingfish (Menticirrhus saxatilis), Atlantic croaker (Micropogon undulatus), butterfish (Peprilus triacanthus), northern searobin (Prionotus carolinus), striped searobin (Prionotus evolans), summer flounder (Paralichthys dentatus), fourspot flounder (Paralichthys oblongus), windowpane (Scophthalmus aquosus), yellowtail flounder (Limanda ferruginea), and winter flounder (Pseudopleuronectes americanus).

FIGURES

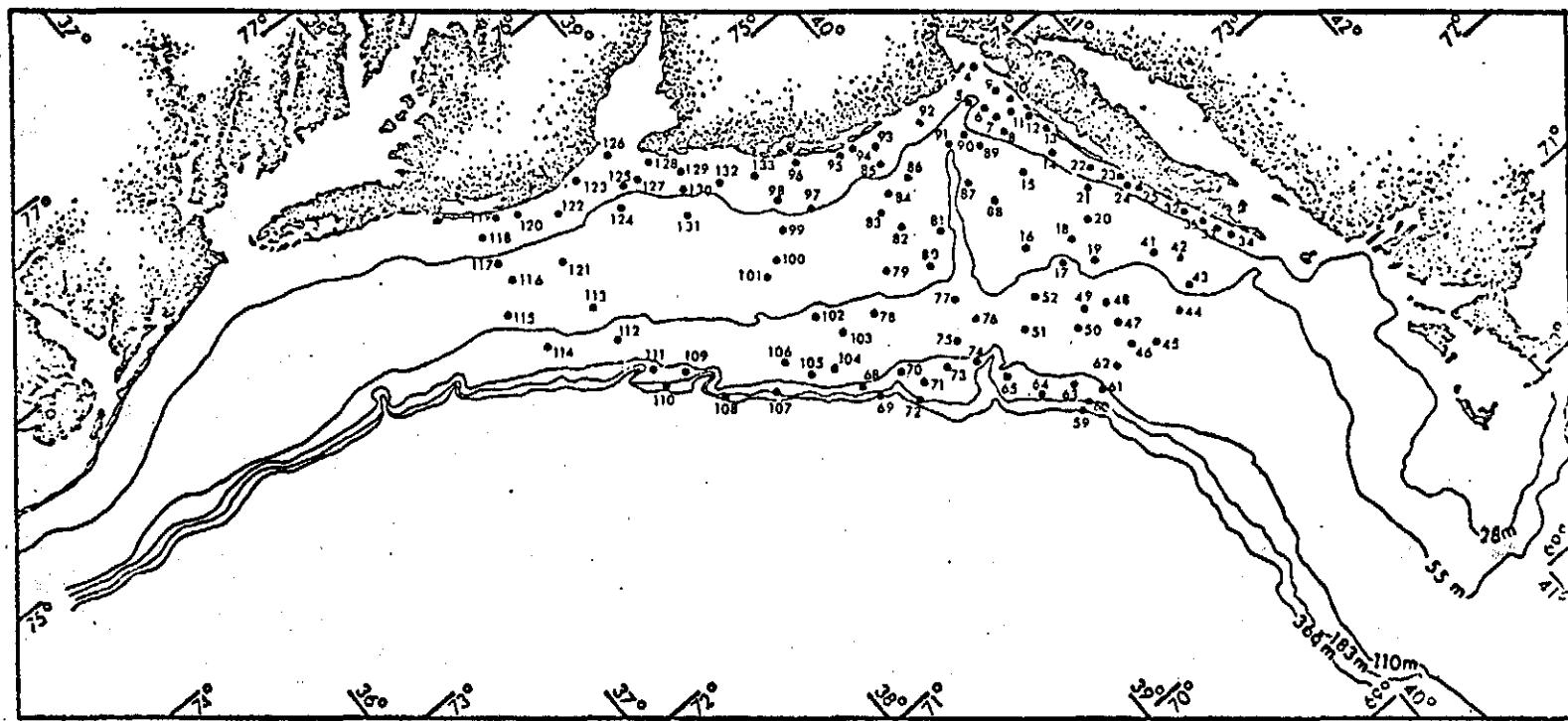


Figure 1. R. V. Delaware II cruise 438, September 8-18, 1975. Location of collecting stations.



Figure 2. R. V. Delaware II cruise 758, October 15-November 7, 1975. Location of collecting stations.



Figure 3. R/V Delaware II cruises 446 and 447, December 1 - 18, 1975. Location of collecting stations.

Prepared by M. J. Silverman



Figure 4. R/V Delaware II cruises 762 and 450, March 4 - 25, 1976. Location of collecting stations.

Prepared by M. J. Silverman

TABLES

TABLE 1.--Summary of examined specimens collected during Delaware II cruise 438, September 8-18, 1975; including number examined, sex ratio, number of gonads weighed, and size range information for 20 of the most numerous and/or important species

Classification	Specimens Examined	Sex Ratio			Gonads Weighted	Size Range (mm)
		Male	Female	Neuter		
GADIDAE						
<u>Merluccius albidus</u> Offshore hake	118	46	56	16	52	121-475
<u>Merluccius bilinearis</u> Silver hake	398	85	133	180	92	51-486
<u>Urophycis chuss</u> Red hake	269	96	78	95	64	41-528
<u>Urophycis regius</u> Spotted hake	530	185	273	72	264	100-371
ZOARCIDAE						
<u>Macrozoarces americanus</u> Ocean pout	46	6	7	33	2	125-389
SERRANIDAE						
<u>Centropristes striata</u> Black sea bass	86	29	51	6	46	34-336
POMATOMIDAE						
<u>Pomatomus saltatrix</u> Bluefish	102	17	17	68	10	69-753
SPARIDAE						
<u>Stenotomus chrysops</u> Scup	131	20	8	103	5	61-233

TABLE 1 (continued)

Classification	Species Examined	Male	Sex Ratio		Neuter	Gonads Weighted	Size Range (mm)
			Female				
SCIAENIDAE							
<u>Cynoscion regalis</u> Weakfish	133	36	27		70	27	53-663
<u>Leiostomus xanthurus</u> Spot	46	4	3		39	2	114-223
<u>Menticirrhus saxatilis</u> Northern kingfish	5	3	1		1	1	228-339
<u>Micropogon undulatus</u> Atlantic croaker	76	38	35		3	34	215-397
STROMATEIDAE							
<u>Peprilus triacanthus</u> Butterfish	542	49	52		441	47	22-200
TRIGLIDAE							
<u>Prionotus carolinus</u> Northern searobin	333	169	127		37	111	43-286
<u>Prionotus evolans</u> Striped searobin	50	14	11		25	10	54-324
BOTHIDAE							
<u>Paralichthys dentatus</u> Summer flounder	446	254	172		20	164	180-650
<u>Paralichthys oblongus</u> Fourspot flounder	317	89	108		120	72	50-359

TABLE 1 (continued)

Classification	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighted	Size Range (mm)
BOTHIDAE (continued)							
<u>Scophthalmus aquosus</u> Windowpane	467	223	182		62	153	44-319
PLEURONECTIDAE							
<u>Limanda ferruginea</u> Yellowtail flounder	58	17	12		29	6	39-375
<u>Pseudopleuronectes americanus</u> Winter flounder	102	41	48		13	41	57-350
TOTALS	4,255					1,203	

TABLE 2.--Summary of examined specimens collected during Delaware II cruise 758, October 15-November 7, 1975; including number examined, sex ratio, number of gonads weighed, and size range information for 20 of the most numerous and/or important species

Classification	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighted	Size Range (mm)
			Female				
GADIDAE							
<u><i>Merluccius albidus</i></u> Offshore hake	49	12	30		7	27	151-458
<u><i>Merluccius bilinearis</i></u> Silver hake	626	174	216	236	177		48-491
<u><i>Urophycis chuss</i></u> Red hake	218	70	94	54	82		57-560
<u><i>Urophycis regius</i></u> Spotted hake	526	196	266	64	239		62-376
SERRANIDAE							
<u><i>Centropristes striata</i></u> Black sea bass	342	106	127	109	97		38-402
POMATOMIDAE							
<u><i>Pomatomus saltatrix</i></u> Bluefish	262	65	61	136	33		74-754
SPARIDAE							
<u><i>Stenotomus chrysops</i></u> Scup	660	133	108	419	68		58-322
SCIAENIDAE							
<u><i>Cynoscion regalis</i></u> Weakfish	436	113	143	180	121		84-699
<u><i>Leiostomus xanthurus</i></u> Spot	442	50	74	318	53		102-273

TABLE 2 (continued)

Classification	Specimens Examined	Sex Ratio			Neuter	Gonads Weighted	Size Range (mm)
		Male	Female				
SCIAENIDAE (continued)							
<u>Menticirrhus americanus</u> Southern kingfish	20	7	6		7	5	122-304
<u>Menticirrhus saxatilis</u> Northern kingfish	67	16	15		36	11	96-365
<u>Micropogon undulatus</u> Atlantic croaker	409	137	147		125	110	109-379
STROMATEIDAE							
<u>Peprilus triacanthus</u> Butterfish	889	148	171		570	136	24-214
TRIGLIDAE							
<u>Prionotus carolinus</u> Northern searobin	291	88	86		117	66	31-394
<u>Prionotus evolans</u> Striped searobin	202	68	95		39	79	55-392
BOTHIDAE							
<u>Paralichthys dentatus</u> Summer flounder	829	352	455		22	381	190-756
<u>Paralichthys oblongus</u> Fourspot flounder	284	59	108		117	76	119-409
<u>Scophthalmus aquosus</u> Windowpane	535	254	262		19	209	87-332

TABLE 2 (continued)

Classification	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighted	Size Range (mm)
PLEURONECTIDAE							
<u>Limanda ferruginea</u>							
Yellowtail flounder	51	24	15		12	13	179-395
<u>Pseudopleuronectes americanus</u>							
Winter flounder	127	42	82		3	72	185-360
TOTALS	7,265					2,055	

Table 3. Summary of examined specimens collected during Delaware II cruises 446 and 447 December 1 - 18 1975; including number examined, sex ratio, number of gonads weighed, and size range for 21 of the most numerous and/or important species.

Classification	Specimens Examined	Sex Ratio			Gonads Weighted	Size Range (mm)
		Male	Female	Neuter		
GADIDAE						
<u><i>Merluccius albidus</i></u> Offshore hake	171	72	84	15	73	221-576
<u><i>Merluccius bilinearis</i></u> Silver hake	822	199	375	248	246	56-550
<u><i>Urophycis chuss</i></u> Red hake	503	117	194	192	107	77-538
<u><i>Urophycis regia</i></u> Spotted hake	409	100	221	88	160	51-343
ZOARCIDAE						
<u><i>Macrozoarces americanus</i></u> Ocean pout	21	9	8	4	0	228-588
SERRANIDAE						
<u><i>Centropristes striata</i></u> Black sea bass	468	121	161	186	81	36-450
POMATOMIDAE						
<u><i>Pomatomus saltatrix</i></u> Bluefish	138	32	27	79	17	121-690
SPARIDAE						
<u><i>Stenotomus chrysops</i></u> Scup	704	157	171	376	64	68-349

Table 3. (continued)

Classification	Specimens Examined	Male	Female	Neuter	Gonads Weighted	Size Range (mm)
SCIENIDAE						
<u>Cynoscion regalis</u> Weakfish	400	91	133	176	105	107-666
<u>Leiostomus xanthurus</u> Spot	136	2	12	122	7	101-206
<u>Menticirrhus americanus</u> Southern kingfish	18	2	3	13	3	106-290
<u>Menticirrhus saxatilis</u> Northern kingfish	88	8	6	74	3	102-396
<u>Micropogon undulatus</u> Atlantic croaker	122	27	28	67	19	79-334
STROMATEIDAE						
<u>Peprilus triacanthus</u> Butterfish	647	104	136	407	65	68-260
TRIGLIDAE						
<u>Prionotus carolinus</u> Northern searobin	500	110	135	255	59	37-385
<u>Prionotus evolans</u> Striped searobin	346	89	142	115	100	57-411

Table 3. (continued)

Classification	Specimens Examined	Male	Sex Ratio		Gonads Weighted	Size Range (mm)
			Female	Neuter		
BOTHIDAE						
<u>Paralichthys dentatus</u> Summer flounder	999	524	379	96	304	155-699
<u>Paralichthys oblongus</u> Fourspot flounder	287	74	88	125	33	97-430
<u>Scophthalmus aquosos</u> Windowpane	1,101	515	504	82	345	48-385
PLEURONECTIDAE						
<u>Limanda ferruginea</u> Yellowtail flounder	175	80	79	16	46	155-394
<u>Pseudopleuronectes americanus</u> Winter flounder	321	132	172	17	130	140-371
TOTALS	8,376				1967	

Table 4.--Summary of examined specimens collected during Delaware II cruises 762 and 450, March 4-25, 1976; including number examined, sex ratio, number of gonads weighed, and size range for 21 of the most numerous and/or important species.

Classification	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighted	Size Range (mm)
			Female	Male			
GADIDAE							
<u>Merluccius albidus</u> Offshore hake	103	31	54	18	49	97-534	
<u>Merluccius bilinearis</u> Silver hake	716	213	343	160	297	79-554	
<u>Urophycis chuss</u> Red hake	259	36	99	124	87	82-512	
<u>Urophycis regius</u> Spotted hake	183	27	52	104	49	74-399	
ZOARCIDAE							
<u>Macrozoarces americanus</u> Ocean pout	90	57	31	2	21	183-710	
SERPANIDAE							
<u>Centropristes striata</u> Black sea bass	161	42	51	68	45	35-500	
POMATOMIDAE							
<u>Pomatomus saltatrix</u> Bluefish	10	2	8		4	314-695	
SPARIDAE							
<u>Stenotomus chrysops</u> Scup	61	8	23	30	12	86-279	

Table 4 (continued)

Classification	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighted	Size Range (mm)
			Female				
SCIAENIDAE							
<u>Cynoscion regalis</u> Weakfish	29	10	8	11		6	140-472
<u>Leiostomus xanthurus</u> Spot	25	2	9	14		3	158-243
<u>Menticirrhus americanus</u> Southern kingfish	3	1	2			2	300-323
<u>Menticirrhus saxatilis</u> Northern kingfish	3	1	2			2	274-331
<u>Micropogon undulatus</u> Atlantic croaker	55	13	29	13		17	207-378
STROMATEIDAE							
<u>Peprilus triacanthus</u> Butterfish	264	76	100	88		91	72-226
TRIGLIDAE							
<u>Prionotus carolinus</u> Northern searobin	158	24	52	82		48	41-355
<u>Prionotus evolans</u> Striped searobin	35	9	15	11		11	103-360

Table 4. (continued)

Classification	Specimens Examined	Male	Sex Ratio		Gonads Weighted	Size Range (mm)
			Female	Neuter		
BOTHIDAE						
<u>Paralichthys dentatus</u> Summer flounder	339	162	134	43	121	170-634
<u>Paralichthys oblongus</u> Fourspot flounder	275	85	105	85	96	141-407
<u>Scophthalmus aquosos</u> Windowpane	431	170	208	53	175	32-347
PLEURONECTIDAE						
<u>Limanda ferruginea</u> Yellowtail flounder	87	37	49	1	47	230-418
<u>Pseudopleuronectes americanus</u> Winter flounder	302	72	174	56	157	108-441
TOTALS	3589				1340	

Table 5. Summary combining all examined specimens collected during Delaware II cruises; including number examined, sex ratio, number of gonads weighed, and size range for 21 of the most numerous and/or important species.

Classification	Specimens Examined	Sex Ratio			Gonads Weighted	Size Range (mm)
		Male	Female	Neuter		
GADIDAE						
<u><i>Merluccius albidus</i></u>						
Offshore hake	441	161	224	56	201	97-576
<u><i>Merluccius bilinearis</i></u>						
Silver hake	2562	671	1067	824	812	48-554
<u><i>Urophycis chuss</i></u>						
Red hake	1249	319	465	465	340	41-560
<u><i>Urophycis regius</i></u>						
Spotted hake	1648	508	812	328	712	51-399
ZOARCIDAE						
<u><i>Macrozoarces americanus</i></u>						
Ocean pout	157	72	46	39	23	125-710
SERRANIDAE						
<u><i>Centropristes striata</i></u>						
Black sea bass	1057	298	390	369	269	34-500
POMATOMIDAE						
<u><i>Pomatomus saltatrix</i></u>						
Bluefish	512	116	113	283	64	69-754
SPARIDAE						
<u><i>Stenotomus chrysops</i></u>						
Scup	1556	318	310	928	149	58-349

Table 5. (continued)

Classification	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighted	Size Range (mm)
			Female	Neuter			
SCIACENIDAE							
<u>Cynoscion regalis</u> Weakfish	998	250	311	437	259	53-699	
<u>Leiostomus xanthurus</u> Spot	649	58	98	493	65	101-273	
<u>Menticirrhus americanus</u> Southern kingfish	41	10	11	20	10	106-323	
<u>Menticirrhus saxatilis</u> Northern kingfish	163	28	24	111	17	96-396	
<u>Micropogon undulatus</u> Atlantic croaker	662	215	239	208	180	79-397	
STROMATEIDAE							
<u>Peprilus triacanthus</u> Butterfish	2342	377	459	1506	339	22-260	
TRIGLIDAE							
<u>Prionotus carolinus</u> Northern searobin	1282	391	400	491	284	31-394	
<u>Prionotus evolans</u> Striped searobin	633	180	263	190	200	54-411	

Table 5 (continued)

Classification	Specimens Examined	Sex Ratio			Gonads Weighted	Size Range (mm)
		Male	Female	Neuter		
BOTHIDAE						
<u>Paralichthys dentatus</u> Summer flounder	2613	1292	1140	181	970	155-756
<u>Paralichthys oblongus</u> Fourspot flounder	1163	307	409	447	277	50-430
<u>Scophthalmus aquosos</u> Windowpane	2534	1162	1156	216	882	32-385
PLEURONECTIDAE						
<u>Limanda ferruginea</u> Yellowtail flounder	371	158	155	58	112	39-418
<u>Pseudopleuronectes americanus</u> Winter flounder	852	287	476	89	400	57-441
TOTALS	23485				6565	

APPENDIX TABLES

APPENDIX TABLE 1.--List of Offshore hake (*Merluccius albidus*) examined from collections made during Delaware II cruise 438, September 8-18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
			Female				
59	1	1					332
60	25	25					225-352
61	4	1	3			3	311-441
69	48	10	34		4	32	217-419
70	1		1			1	475
72	33	7	15		11	13	121-465
107	4		3		1	3	310-414
109	2	2					304-325

APPENDIX TABLE 2.--List of Offshore hake (*Merluccius albidus*) examined from collections made during Delaware II cruise 758, October 15-November 7, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Male	Sex Ratio			Gonads Weighed	Size Range (mm)
			Female	Neuter			
43	5		2	3		2	151-458
55	1	1					318
101	1		1			1	400
104	2		2			1	253-310
107	13	6	7			7	251-299
129	17	3	12	2		11	230-363
131	4		2	2		2	240-331
136	6	2	4			3	223-341

APPENDIX TABLE 3 -- List of Offshore hake (*Merluccius albidus*) examined from collections made during Delaware II cruises 446 and 447, December 1 - 18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
			Female				
20	12	2	10			10	250-500
42	12	10	2			2	316-519
46	51	33	14		4	12	221-576
47	3		3			3	338-390
50	10	6	4			3	242-356
58	10	2	8			7	313-422
60	3		3			3	350-390
101	23	6	14		3	11	240-363
112	15	6	9			7	262-350
113	17	6	10		1	9	235-380
121	10		3		7	3	238-366
123	4	1	3			2	232-330
168	1		1			1	373

APPENDIX TABLE 4 -- List of Offshore hake (*Merluccius albidus*) examined from collections made during Delaware II cruises 762 and 450, March 4-25, 1976; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio			Gonads Weighed	Size Range (mm)
			Female	Neuter			
44	24	4	15	5		14	107-517
45	19	8	8	3		8	97-454
46	6	4	2			2	260-534
48	7		1	6			238-295
110	3		3			3	390-421
117	20	4	14	2		12	151-411
121	11	4	5	1		5	265-437
122	12	7	4	1		4	229-304
160	1		1			1	431

APPENDIX TABLE 5.--List of Silver hake (*Merluccius bilinearis*) examined from collections made during Delaware II cruise 438, September 8-18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Male	Sex Ratio Female	Neuter	Gonads Weighed	Size Range (mm)
4	1			1		75
6	5			5		65- 85
9	5			5		67- 87
10	1			1		72
12	2			2		51- 56
17	16	6	8	2	6	178-345
18	16	6	5	5	5	193-374
20	12	4	1	7		218-272
23	1			1		70
31	6	1	4	1	1	210-246
41	12	2	5	5	2	170-249
43	13	1	3	9	2	190-243
44	15	5	7	3	6	185-408
46	17		5	12	2	140-439
47	14	4	7	3	4	140-379
48	15	1	6	8	4	213-412
50	17	6	9	2	8	72-370
52	13	2	6	5	4	203-370
61	1	1				246
62	4	2	2		2	248-327
64	17	6	3	8		182-322
68	1	1				254
70	5	4	1		1	228-241
74	3	2	1		1	233-486
75	15	5	6	4	5	202-398
76	15	6	5	4	2	201-429
79	1		1		1	225
80	13		9	4	6	196-270
83	19	1	9	9	5	54-241
84	1		1		1	240
86	1			1		214
88	16	4	6	6	5	196-244
90	9			9		171-233
94	1			1		55
100	11	1	2	8	1	204-255
101	7	4	3		2	205-250
102	13		1	12	1	151-230
103	5			5		186-215
104	2			2		224-234
106	4		2	2	2	230-254
107	1			1		53
109	4	1		3		196-249

APPENDIX TABLE 5. (continued)

Station Number	Specimens Examined	Male	Sex Ratio		Gonads Weighed	Size Range (mm)
			Female	Neuter		
111	3		2	1	2	226-242
112	18		1	17	1	190-253
113	8	1	2	5	1	191-237
114	18	7	10	1	9	190-245
115	1	1				243

APPENDIX TABLE 6.--List of Silver hake (*Merluccius bilinearis*) examined from collections made during Delaware II cruise 758, October 15-November 7, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Male	Sex Ratio		Gonads Weighed	Size Range (mm)
			Female	Neuter		
2	4			4		81-101
7	4	3	1		1	225-250
8	2		2			248-250
9	3		3		3	250-395
14	1			1		98
15	6			6		62-140
18	2			2		83- 94
19	5			5		67-111
20	5			5		63- 69
23	5		4	1	4	50-336
24	2		2		2	255-261
27	3			3		54- 63
28	5			5		59- 73
29	5			5		59- 73
30	5			5		51- 66
31	11		5	6	5	66-280
32	16	4	5	7	5	56-267
33	3			3		58- 63
34	16	3	10	3	9	209-416
35	11	3	2	6	2	48-403
36	8	2	5	1	5	66-426
37	17	5	7	5	5	97-389
38	16	6	9	1	7	248-491
39	23	8	8	7	7	56-394
40	2		1	1	1	275-375
41	1		1		1	348
42	1		1		1	424
44	17	5	10	2	9	57-458
45	4	2	2		1	196-330
46	22	16	4	2	2	205-359
47	15	4	11		10	276-467
48	18	6	8	4	8	63-391
49	17	10	7		6	249-421
50	7	3	3	1	3	242-438
51	15	9	3	3	3	244-429
53	7		5	2	4	228-356
58	2	1	1		1	246-311
59	2		1	1	1	242-332
60	15	2	1	12		215-255
61	11	1	2	8	1	224-245
62	9		5	4	4	144-375
63	11	1	1	9	1	218-388
72	6			6		64-136

APPENDIX TABLE 6. (continued)

Station Number	Specimens Examined	Male	Sex Ratio		Gonads Weighed	Size Range (mm)
			Female	Neuter		
73	4			4		92-118
75	5			5		73-126
76	4			4		86-120
82	9	3	4	2	4	214-252
83	1		1		1	267
85	11	4	5	2	5	216-250
86	12	6	6		2	225-258
87	13	8	2	3	2	212-247
88	16	5	10	1	7	207-247
89	2			2		250-252
90	5		4	1	4	231-367
91	15	5	8	2	4	213-266
92	13	1	8	4	7	223-368
100	15	9	4	2	3	191-272
101	14	3	1	10	1	215-308
102	3		2	1	1	235-310
104	17	6	6	5	3	183-255
125	5	2	3		3	252-297
126	9	2	4	3	3	228-267
128	2	1		1		236-240
130	13	9	2	2	2	233-302
131	15	3	6	6	6	215-295
132	15	6	7	2	4	221-287
135	2		2		2	284-306
137	15	7	1	7	1	155-273
166	5			5		67-117
176	5			5		64- 81
178	5			5		70- 88
179	3			3		78-106
181	7			7		94-125
182	5			5		66-126
184	1			1		128

APPENDIX TABLE 7 -- List of Silver hake (*Merluccius* *linearis*) examined from collections made during Delaware II cruises 446 and 447, December 1 - 18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio			Gonads Weighed	Size Range (mm)
			Female	Neuter			
1	16		8	8		3	73-289
2	6		4	2		1	127-268
3	8	2	6			2	241-342
4	8	2	1	5			195-262
5	1	1					464
6	8		2	6		1	144-275
9	4			4			66-120
11	8	1	2	5		1	64-491
12	2		1	1		1	84-343
13	1		1			1	391
14	2		2			1	320-433
15	6		1	5		1	267-471
16	15	7	6	2		3	243-395
17	17	3	13	1		12	263-485
18	15	6	7	2		4	249-442
19	13	6	7			5	260-525
20	15	4	7	4		4	247-360
21	15	7	7	1		5	260-381
22	10	4	3	3		3	233-386
23	14		14			13	332-550
24	10	2	7	1		2	366-513
25	21	2	8	11		6	62-481
26	14	6	7	1		6	272-350
27	9	2	5	2		2	256-364
28	15	6	8	1		6	256-390
29	22	2	11	9		9	74-422
30	14	2	11	1		6	275-439
31	15	7	8			5	266-430
32	16	4	8	4		7	76-440
33	15	2	12	1		10	323-482
34	14	6	8			5	295-410
35	16	7	9			8	248-433
36	11	2	6	3		6	279-484
37	1		1			1	480
38	9	5	4			4	277-387
39	4	3	1			1	273-340
44	6	2	4			3	304-403
45	2	1	1				310-402
47	10	3	4	3		2	225-293
49	4	2	2			2	275-553

APPENDIX TABLE 7 -- (continued)

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
			Female				
51	3		1		2		77-263
52	1		1			1	436
53	1		1			1	325
57	1	1					263
60	7	4			3		164-354
61	2		2			1	251-323
63	1		1			1	357
64	3	1	2			2	292-408
66	2		1		1		291-351
67	6		4		2		256-315
68	7	5	1		1		259-289
69	14	2	5		7	4	56-476
70	1		1			1	415
72	1		1			1	465
73	2	1	1			1	335-395
74	4	2	2			2	244-421
75	15	8	4		3	3	247-301
77	15	1	6		8	1	229-271
78	18	4	12		2	1	39-269
79	2		2			2	362-410
80	11		4		7	2	249-272
81	7	1	3		3	2	245-446
82	7		5		2		266-394
83	7		1		6		110-271
84	14	4			10		140-281
85	4	2			2		240-340
86	1	1					243
87	10		5		5	2	71-281
88	3				3		86-148
89	3				3		135-152
91	2				2		92-105
93	2	1			1		258-280
94	15	4	7		4	7	267-424
95	2	1	1			1	303-360
96	1		1				315
97	14	6	8			7	262-369
98	17	10			7		194-405
100.	1			1			260

APPENDIX TABLE 7 -- (continued)

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
			Female				
107	12	7	4		1	4	227-310
119	3				3		258-288
120	2		2			1	290-307
121	6		1		5		230-274
122	15	2	13			11	219-318
123	11	3	8			5	229-307
129	2				2		90-106
136	2				2		85- 93
145	2				2		92- 95
148	1				1		133
150	5				5		93-118
151	5				5		92-107
152	5				5		87-112
157	3				3		95-108
159	5				5		87-118
161	4				4		113-138
162	2				2		88-101
165	4				4		102-120
167	5				5		71- 98
170	5				5		99-147
171	3				3		72- 80
172	1		1			1	300
173	18	5	12		1	9	235-434
174	2	1	1				278-313
175	13	4	9			6	274-377
176	6				6		137-324
178	5				5		101-175
179	6	3	3			2	264-341
180	15	2	9		4		244-365
181	15	3	11		1	6	248-427

APPENDIX TABLE 8 -- List of Silver hake (*Merluccius bilinearis*) examined from collections made during Delaware II cruises 762 and 450, March 4-25, 1976; including station number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio			Gonads Weighed	Size Range (mm)
			Female	Neuter			
1	10	5	2	3		2	167-334
2	9	2	1	6		1	123-337
4	15	6	7	2		6	260-351
5	10	1	7	2		3	256-361
6	12	7	5			5	257-382
7	15	3	10	2		9	209-365
8	9	3	5	1		5	203-375
9	15	4	5	6		5	109-319
12	7	1	6			6	269-495
13	10	2	8			8	285-554
15	8	3	5			5	265-514
16	18	5	3	10		2	80-285
17	4	2	2			2	267-414
18	13			13			122-283
19	6		1	5			143-371
21	1		1				382
27	5		3	2		3	204-351
29	14	6	6	2		6	80-368
30	8	4	4			4	257-380
36	9	5	4			3	264-452
37	7	3	4			4	290-340
41	4		4			3	285-355
45	4	2	2			2	326-384
46	7	5	2			2	290-365
48	13	10	2	1		1	263-310
50	5	5					265-337
51	16	5	11			5	273-409
52	11	7	4			4	216-357
53	8	4	4			4	301-409
54	9	3	2	4		2	81-354
55	11	2	8	1		8	269-362
56	10	3	7			5	271-400
57	9	6	2	1		2	79-315
58	3	2	1			1	326-411
59	7	5	2			2	286-368
60	10	3	7			7	272-365
61	6	4	2			2	282-341
64	6		6			6	454-521
66	9		6	3		5	92-435
67	13	4	3	6		3	141-375
68	6	2	4			3	285-425

APPENDIX TABLE 8 -- (continued)

Station Number	Specimens Examined	Male	Sex Ratio			Gonads Weighed	Size Range (mm)
			Female	Neuter			
69	14	1	10	3		8	150-384
70	13		8	5		8	127-388
71	10	4	6			5	157-354
74	14		12	2		8	115-337
75	12	2	9	1		7	163-379
77	6		1	5		1	151-428
78	5			5			154-180
80	7	4	1	2			130-390
81	4	2	2			1	306-348
82	2	1	1			1	330-490
85	19	5	13	1		13	284-317
88	11	5	2	4		2	276-346
89	5	3	2			1	280-344
91	1		1			1	269
97	2	2					286-356
99	1			1			170
103	1	1					430
107	1	1					345
108	10	2	8			8	272-320
110	12	6	4	2		3	257-297
113	3	1	2			2	277-410
115	1		1			1	305
116	13	5	7	1		7	138-294
117	12	4	6	2		5	227-421
121	10	3	6	1		4	239-287
122	10	4	3	3		3	219-264
132	1			1			100
146	5				5		142-170
147	1			1			126
148	2			2			109-145
149	6			6			138-172
150	9		3	6		3	164-399
151	11		6	5		4	151-480
152	4		1	3		1	164-412
155	2			2			138-159
156	2			2			174-191
157	10	1	7	2		3	143-355
158	7		2	5		2	159-424
159	13	2	9	2		9	280-492
160	2	1	1			1	345-445

APPENDIX TABLE 8 -- (continued)

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
			Female				
161	19	4	13		2	12	145-413
164	3	1	2			2	301-463
169	7	2	3		2	3	180-446
170	23	7	12		4	11	102-420
171	4		3		1	3	95-370
172	2		2			2	335-357
173	12	5	6		1	6	256-303

APPENDIX TABLE 9.--List of Red hake (Urophycis chuss) examined from collections made during Delaware II cruise 438, September 8-18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Male	Sex Ratio			Gonads Weighed	Size Range (mm)
			Female	Neuter			
6	5			5			75- 87
7	5		1	4			71-211
8	2			2			71-102
9	5			5			61-109
10	4			4			76-104
11	2			2			41-114
12	4			4			63- 88
17	19	4	8	7	5		167-462
18	4	3	1		1		233-475
20	1	1					219
24	1			1			130
41	8	4	1	3	1		240-349
43	3	1		2			203-230
44	17	12	4	1	3		190-427
46	13	3	6	4	5		189-479
47	10	3	2	5	2		181-389
48	13	1	5	7	3		217-420
50	20	5	13	2	13		174-416
52	9	3	4	2	4		193-429
60	3	3					288-334
61	13	11	1	1	1		241-360
62	14	6	7	1	7		256-401
64	10	9	1		1		262-310
68	1	1					249
74	18	12	5	1	4		192-440
75	15	4	7	4	4		160-417
76	5	2		3			191-228
80	1		1		1		430
90	6	1	5		5		337-444
91	12	7	5		3		193-528
92	1			1			195
94	1			1			92
96	1			1			98
102	1			1			202
103	5			5			207-220
104	7		1	6	1		196-276
106	7			7			185-230
107	1			1			187
112	2			2			193-222

APPENDIX TABLE 10.--List of Red hake (Urophycis chuss) examined from collections made during Delaware II cruise 758, October 15-November 7, 1975; including station number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Male	Sex Ratio			Gonads Weighed	Size Range (mm)
			Female	Neuter			
22	1				1		65
23	1				1		71
31	1	1					293
33	1		1			1	366
34	4		3	1		2	273-433
35	1		1				342
36	5	2	2	1		1	235-331
37	9		4	5		4	230-355
38	15	6	9			9	246-487
39	15	2	9	4		7	205-360
41	1		1			1	511
44	1		1			1	359
45	8	3	5			5	258-351
46	18	14	4			4	223-440
47	17	7	9	1		9	205-439
48	18	7	3	8		3	212-449
50	1		1			1	396
51	9	6	3			3	260-420
53	17	7	10			8	214-385
60	12	2	1		9	1	189-399
61	1				1		57
62	14	4	5		5		220-350
84	8	3	1		4		220-330
85	2	1	1			1	320-364
86	16	3	11	2		10	203-406
92	2		1		1		232-400
101	2	1	1			1	210-263
102	5	1	4			3	316-560
104	2		1		1		220-320
129	7		1		6		165-375
131	2		1		1		202-230
136	1				1		226
162	1				1		104

APPENDIX TABLE 11.-- List of Red hake (*Urophycis chuss*) examined from collections made during Delaware II cruises 446 and 447, December 1 - 18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio			Gonads Weighed	Size Range (mm)
			Female	Neuter			
1	8		1	7			131-365
2	11	1	6	4	5		118-476
3	5		3	2	1		117-448
4	6	1	4	1			140-475
6	7		2	5	1		143-450
8	7	1		6			88-206
9	10			10			105-187
10	16			16			119-430
11	11	1	7	3			133-470
13	2	1	1				400-500
17	19	6	8	5	8		230-398
18	10	5	3	2	1		213-355
19	15	2	8	5	2		255-408
20	4		4		3		372-435
21	7	2	4	1	4		296-447
22	15	2	11	2	6		272-502
23	22	3	12	7	5		98-472
25	24	3	16	5	7		177-438
27	1			1			310
28	3			3			117-138
29	15	4	6	5	4		222-427
31	15	11	1	3			232-429
32	18	6	2	10	1		96-369
33	3	1	1	1			117-321
34	14	2	6	6	1		307-447
35	17	1	13	3	8		232-490
36	1		1				405
37	9	1	7	1	6		225-402
38	15	3	11	1	10		246-497
44	15	8	7		4		262-435
46	10	6	2	2	1		273-355
47	16	9	5	2	3		204-425
50	10	4	6		4		223-314
53	7	1	6		5		260-415
58	5	3	2		1		246-395
60	10	2		8			188-447
70	2	2					243-259
72	7	2	4	1			248-310
73	1		1				435
74	1		1		1		365

APPENDIX TABLE 11 -- (continued)

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
			Female				
75	2	1	1		3	1	321-331
78	3				3	7	117-147
80	10		7	3	3	7	184-527
81	5		2	3	4	1	119-538
82	4				4		96-116
83	6	1	3	2	1	1	159-458
							95
87	1				1		107-154
89	2				2		348-419
97	2	1	1				
98	14	7	1	6	1	3	175-398
101	15	10	4	1	4	3	194-341
112	8	2	2		4		187-245
113	1				1		182
121	8				8		191-331
123	1				1		275
139	5				5		87-120
151	2				2		105-108
152	5				5		90-187
161	2				2		109-147
169	5				5		130-196
170-	2				2		123-224
177	2				2		99-154
178	2				2		164-166
180	2	1	1			1	425-535

APPENDIX TABLE 12 -- List of Red hake (Urophycis chuss) examined from collections made during Delaware II cruises 762 and 450, March 4 - 25, 1976; including station number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio		Gonads Weighed	Size Range (mm)
			Female	Neuter		
4	11		1	10		151-220
5	6	1		5		148-226
6	5		1	4		174-214
7	8	3	2	3	2	151-389
8	9			9		100-157
17	8			8		110-169
19	12	1	5	6	1	170-440
21	13	4		9		110-308
29	4		1	3	1	169-336
30	8	1	2	5	1	220-372
31	5			5		158-175
36	5	2	3		2	297-460
37	8	4	4		4	317-355
40	1		1		1	384
51	6	1	4	1	4	127-422
52	5			5	5	354-434
53	5		3	2	2	197-421
57	6		6		5	305-385
59	3		3		3	354-407
61	1	1				222
66	3	1	2		2	378-436
70	3			3		109-149
71	5	2		3		164-207
74	6			6		82-150
77	6		1	5	1	150-426
78	7			7		160-202
80	10	3	2	5	2	172-380
81	6		5	1	5	168-447
82	3		3		3	380-472
91	1		1		1	306
94	9	1	7	1	5	250-410
112	1	1				350
117	11	1	6	4	6	240-309
132	1			1		120
150	3		2	1	2	153-512
151	11		7	4	7	135-474
155	13	1	4	8	4	144-451

APPENDIX TABLE 12 -- (continued)

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
			Female				
156	4	1	1	2		1	126-362
157	1		1			1	395
159	2		2			2	390-450
160	9	4	5			5	279-445
161	5	1	4			4	365-476
170	2			2			124-141
171	4	1	3			3	253-496
172	3	1	1		1	1	112-460
174	1		1			1	333

APPENDIX TABLE 13.--List of Spotted hake (*Urophycis regius*) examined from collections made during Delaware II cruise 438, September 8-18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Male	Sex Ratio			Gonads Weighed	Size Range (mm)
			Female	Neuter			
4	1			1			199
6	19	9	10			8	177-249
7	5		5			5	222-251
8	18	7	9	2		9	182-264
9	12	4	8			7	184-263
11	1	1					245
14	1		1			1	205
35	1		1			1	211
41	11	2	5	4		5	206-264
60	18	5	12	1		12	184-338
61	14	9	5			5	179-330
62	16	8	8			7	172-339
64	18	10	6	2		6	174-356
68	15	1	14			13	186-278
70	13	10	3			3	177-311
71	11	4	2	5		2	100-337
74	20	6	14			14	183-371
75	15	8	7			7	175-331
76	12	5	7			7	176-250
80	3	1	2			2	189-250
83	19	4	14	1		14	189-277
84	7	6	1			1	183-239
86	10	8	2			2	172-227
88	19	13	6			6	190-296
89	3	2	1			1	195-265
90	2			2			199-210
92	10	3	6	1		6	188-235
93	5	2	3			3	168-257
94	20	9	11			11	191-257
95	4	2	2			2	200-238
96	5	1	4			4	210-270
99	5	5					181-200
100	2		2			2	201-210
101	5	2	1	2		1	184-219
102	1				1		188
103	4		1	3			159-220
104	16	1	14	1		13	180-268
105	13	5	8			8	176-248
106	15	1	14			14	175-279
107	17	3	14			14	158-277
109	12	3	2	7		2	171-281
111	11	6	5			5	174-255
112	9	1	7	1		7	183-251

APPENDIX TABLE 13 (continued)

Station Number	Specimens Examined	Male	Sex Ratio			Gonads Weighed	Size Range (mm)
			Female	Neuter			
113	17	3	12	2		12	119-230
114	7	4	3			3	167-220
115	23		2	21		2	148-235
116	15		3	12		1	153-289
118	1		1			1	205
120	2		2			2	214-230
121	14	4	8	2		8	147-253
124	11	5	5	1		5	172-250
126	2	2					213-237

APPENDIX TABLE 14 --List of Spotted hake (*Urophycis regius*) examined from collections made during Delaware II cruise 758, October 15-November 7, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Male	Sex Ratio Female	Neuter	Gonads Weighed	Size Range (mm)
5	1		1		1	251
7	3		3		3	232-242
18	6	1	5		3	259-302
19	3	1	2		2	247-269
20	5	2	3		2	246-302
30	3	2	1		1	217-268
41	2	1	1		1	284-340
42	17	13	4		3	190-376
44	12	10	2		2	192-339
45	3	1	2		2	186-277
52	19	14	5		5	182-311
54	13	8	3	2	3	188-357
55	5	3	2		2	191-245
60	13	9	3	1	3	185-241
61	18	8	10		10	192-265
62	2	1	1		1	238-239
63	16	11	4	1	4	183-264
70	3		3		3	263-296
73	2	2			4	209-243
82	9	5	4		4	182-232
83	11	7	3	1	3	179-229
84	8	3	4	1	4	202-249
85	16	8	8		8	180-275
86	3		3		2	235-267
87	5		5		5	202-280
88	8	1	5	2	4	175-226
90	2		2		2	230-243
91	20	12	8		8	187-288
92	15	5	10		10	185-332
93	3	1		2		178-209
100	15	9	5	1	5	186-255
101	15	4	11		11	204-283
102	8	5	3		2	171-254
104	1		1		1	325
105	15	3	11	1	10	171-267
106	18	3	13	2	12	162-271
107	7	2	2	3	2	178-247
110	1		1		1	281
116	1		1		1	242
125	12	1	5	6	4	168-287
126	13	7	4	2	3	185-226
128	14	9	2	3	1	173-283
130	11	1	10		7	182-240

APPENDIX TABLE 14 (continued)

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
			Female				
131	16	1	13		2	13	162-273
132	18	1	17			13	179-265
133	11	2	7		2	7	196-249
135	18	1	11		6	9	157-291
137	9	4	1		4	1	181-270
138	4		2		2	2	178-248
139	8	1	6		1	4	170-239
141	3		1		2	1	157-212
142	12	3			9		176-236
143	2		2			2	202-214
145	1	1					186
146	2		2			2	184-212
147	1	1					234
149	1		1			1	219
150	3	1	1		1	1	210-261
151	3		2		1	1	190-252
153	5		5			4	198-257
160	1		1				265
161	2		2			2	250-254
162	6		5		1	5	94-294
164	1		1			1	249
165	3	1	2			1	212-301
167	1		1			1	275
172	1		1			1	312
176	5				5		62- 88
177	2	1	1			1	202-231
178	1		1			1	229
179	3	3					230-294
180	3		3			3	247-289
181	3	2	1			1	214-243

APPENDIX TABLE 15 -- List of Spotted hake (*Urophycis regius*) examined from collections made during Delaware II cruises 446 and 447, December 1 - 18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio		Gonads Weighed	Size Range (mm)
			Female	Neuter		
1	1		1			302
2	4		4		3	269-301
3	7	1	6		2	233-290
4	9	3	3	3	2	222-299
6	12	3	5	4	4	85-327
7	1			1		307
8	3		3			262-314
9	3		3		2	285-312
10	15	4	11		9	245-341
11	2		1	1		263-325
18	1			1		232
19	1		1		1	277
20	10	2	6	2	6	220-291
21	3	2	1		1	232-280
23	3		3		2	300-334
25	1	1				266
26	1		1			285
27	2			2		273-299
31	1			1		289
33	1		1			276
38	1	1				243
40	8	6	1	1		244-269
42	1		1		1	280
44	5	2	3		3	243-381
45	2		2			323-342
49	3	1	2		2	271-313
51	6	2	4		4	230-340
53	3	2	1		1	213-315
56	6	2	4		2	228-315
57	2		2		1	235-267
60	7	4	3		3	210-331
61	3		3		1	245-300
62	5		3	2	1	230-321
64	2		1	1		235-277
68	3	1	1	1		205-241
69	2		2		2	280-343
70	2		2		1	313-332
72	1	1				227
77	3	1	2		2	243-256
78	8	3	5		5	243-316
79	1	1				235

APPENDIX TABLE 15 -- (continued)

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
			Female				
80	7	4	3			3	235-304
81	1		1			1	298
83	4		3	1		3	95-295
84	16	9	7			6	240-328
85	3	1	2			1	250-285
88	8		4	4		3	90-291
89	9	1	8			5	241-316
92	2	1			1		170-235
93	5		3	2		3	252-330
95	1		1			1	325
96	2	1	1			1	217-283
97	17	4	13			8	201-298
98	2	1	1				195-230
100	12	4	8			5	212-285
101	4	2	2			2	194-255
103	2				2		242-300
107	12	6	4	2		3	199-252
108	1	1			2		238
111	2					2	248-263
113	2	1	1			1	209-246
114	16	6	8	2		5	186-289
120	1	1			3		214
121	3					13	215-253
122	20	7	13			8	186-299
123	16	1	14	1		8	198-287
124	1		1				272
125	1		1			1	229
126	1			1			102
127	1	1				4	210
128	4			4		1	214-286
129	7		1	6		1	96-286
131	1	1				6	205
133	7		6	1		6	245-296
134	8		3	5		3	71-224
135	6		3	3		3	193-281
136	3		1	2		1	85-246
137	4			4			104-121
138	3			3			91-123

APPENDIX TABLE 15 -- (continued)

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
			Female				
139	12		6		6	4	89-281
140	6	4			2		228-300
141	3		1		2		102-283
143	1		1			1	263
147	6		1		5	1	89-304
148	2				2		99
150	1				1		124
151	8		3		5	2	81-309
152	9		2		7	1	100-265
153	7	1	1		5	1	80-219
154	6				6		110-229
155	2				2		124-141
156	2				2		111-130
157	12		9		3	7	104-328
159	5		3		2	3	84-337
161	4		2		2	1	120-237
162	1				1		114
164	5		1		4		114-238
165	1		1				252
166	14	3	8		3	8	114-335
167	5				5		103-144
168	2				2		197-243
169	8	1	4		3	2	88-260
170	12	1	5		6	4	81-279
171	10		1		9	1	51-295
176	5		1		4		97-288
177	11	1	8		2	8	87-326
178	11	1	6		4	3	99-295
179	2		1		1	1	82-278
180	6	1	4		1	4	172-325
181	1		1			1	258

APPENDIX TABLE 16 -- List of Spotted hake (*Urophycis regius*) examined from collections made during Delaware II cruises 762 and 450, March 4-25, 1976; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio Female	Neuter	Gonads Weighed	Size Range (mm)
18	1			1		143
39	2	2				261-266
42	6	3	3		3	250-399
43	2			2		221-236
47	2		2		2	321-346
50	6	2	4		4	265-350
59	8	2	4	2	4	249-340
60	7	4	2	1	1	230-315
62	2		2		2	314-340
80	1			1		74
81	1			1		82
88	2			2		98-116
91	2		2		2	258-302
94	2		2		2	276-364
100	3		3		3	310-361
101	1		1		1	296
108	4		4		4	250-307
110	1		1		1	222
116	1		1			228
118	4	2	2		2	205-373
119	5	2	3		3	235-312
123	17	7	10		9	192-276
130	2			2		98-277
131	11			11		130-195
132	9		2	7	2	168-295
133	6	2		4		141-237
142	5			5		128-168
144	8			8		125-240
145	5			5		79-100
146	5			5		140-156
147	4			4		107-169
148	5			5		144-187
149	2			2		114-162
150	6	1		5		132-200
151	4			4		122-152
155	5		1	4	1	138-310
156	5		3	2	3	171-194
157	5			5		98-146
158	5			5		102-124
159	5			5		80-109
160	5			5		147-173
172	1			1		101

APPENDIX TABLE 17.--List of Ocean pout (*Macrozoarces americanus*) examined from collections made during Delaware II cruise 438, September 8-18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Male	Sex Ratio			Gonads Weighed	Size Range (mm)
			Female	Neuter			
17	15	5	2	8		1	143-294
41	5		1	4		1	125-389
43	1			1			150
44	6	1	1	4			157-355
47	5		1	4			130-326
52	2			2			145-155
76	6		1	5			129-275
80	3			3			166-180
90	1		1				324
100	1			1			190
103	1			1			170

APPENDIX TABLE 18-- List of Ocean pout (*Macrozoarces americanus*) examined from collections made during Delaware II cruises 446 and 447, December 1-18, 1975; including station, number examined, sex ratio, number of gonads weighed and size range information.

Station Number	Specimens Examined	Male	Sex Ratio		Gonads Weighed	Size Range (mm)
			Female	Neuter		
32	3			3		228-331
37	14	8	6			343-588
173	4	1	2	1		323-467

APPENDIX TABLE 19 -- List of Ocean pout (*Macrozoarces americanus*) examined from collections made during Delaware II cruises 762 and 450, March 4 - 25, 1976; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
			Female	Neuter			
4	3	3					287-492
5	4	4					306-539
7	2	1	1				497-550
8	1		1		1		565
9	15	7	8		4		412-605
17	2	1	1		1		620-625
18	3	3					610-710
19	12	8	3	1	1		183-662
21	2	2					439-697
22	1	1					647
23	1		1				582
29	2	1	1		1		592-678
30	1		1		1		638
31	15	9	6		6		308-514
37	1	1					435
51	4	1	2	1	1		290-363
52	5	3	2		2		356-409
53	2	2					364-388
57	3	3					310-485
66	1	1					517
71	3	2	1		1		587-660
74	1		1		1		572
80	2		2		1		390-440
170	1	1					510
171	2	2					528-625
172	1	1					493

APPENDIX TABLE 20.--List of Black sea bass (*Centropristes striata*) examined from collections made during Delaware II cruise 438, September 8-18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Male	Sex Ratio			Gonads Weighed	Size Range (mm)
			Female	Neuter			
1	1	1					207
4	5	4	1			1	200-309
6	1		1			1	223
7	7	2	5			3	215-241
11	2		1	1		1	34-210
19	19	5	13	1		12	195-290
22	3	1	2			2	205-286
25	3	1	2			2	201-226
92	7	1	6			6	168-306
94	2	1			1		43-205
95	23	9	13	1		11	180-336
96	2		2			2	190-205
97	2	1	1			1	197-247
116	1	1					316
117	1		1			1	204
120	1	1					259
121	3		2	1		2	150-187
122	1		1			1	174
124	1	1					226
126	1				1		135

APPENDIX TABLE 21.--List of Black sea bass (*Centropristes striata*) examined from collections made during Delaware II cruise 758, October 15-November 7, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Male	Sex Ratio Female	Neuter	Gonads Weighed	Size Range (mm)
6	7			7		64- 86
15	5	3	2		2	236-253
18	2			2		72- 79
19	11			11		58-106
20	3			3		51- 80
30	3			3		52- 55
32	21	1		20		45-318
61	1			1		85
64	1		1		1	186
65	1			1		58
67	1		1			276
68	4	1	3		3	254-318
70	4	3	1			244-298
71	9	7	2		2	217-303
73	4	2	2		2	198-306
74	10	6	4		4	198-264
76	5		5		5	228-300
80	1	1				197
93	1	1				169
95	6			6		39- 60
105	2	1	1		1	133-197
106	7	4	3		3	163-215
110	1			1		200
111	1	1				282
114	1	1				182
115	3		2	1		152-168
118	1		1		1	287
122	2			2		56- 65
125	3		3		2	179-193
126	3	1	2		2	178-220
128	5	2		3		101-183
130	64	26	31	7	23	141-282
131	5	1	4		4	157-301
132	34	11	21	2	18	144-225
133	4			4		48-191
135	7	4	2	1		142-177
138	1		1		1	162
139	3			3		103-171
144	16	7	4	5	1	110-269
145	1	1				144
147	1			1		221
148	3	2		1		134-165
151	1		1			187

APPENDIX TABLE 21 (continued)

Station Number	Specimens Examined	Male	Sex Ratio			Gonads Weighed	Size Range (mm)
			Female	Neuter			
154	1	1					201
157	2			2			173-176
158	2	2					186-272
164	2		1	1	1		60-364
166	6			6			38- 65
172	2		2		2		265-304
176	16	7	5	4	5		212-402
177	11	4	1	6	1		44-384
178	8	2	6		6		210-247
179	1			1			223
181	11	1	6	4			150-330
182	1		1		1		276
183	1		1		1		210
186	1		1		1		265
189	8	2	6		4		217-307

APPENDIX TABLE 22 -- List of Black sea bass (Centropristes striata) examined from collections made during Delaware II cruises 446 and 447, December 1 - 18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio			Gonads Weighed	Size Range (mm)
			Female	Neuter			
11	1			1			251
12	3	2	1			1	251-321
16	1		1				261
17	6		1	5			77-289
18	2	1	1				219-232
20	7	3	2	2		2	94-325
21	5	3	2			2	311-410
22	1		1			1	329
25	1			1			93
28	3	1		2			59-244
32	9	4		5			71-330
33	1			1			78
36	4	3	1			1	302-423
45	1		1			1	336
52	2		1	1		1	285-310
53	1		1				325
61	1	1					223
62	3	2		1			201-267
63	3	3					205-281
64	3		2	1			56-252
65	2		2				250-292
68	2	2					288-327
69	2	1		1			95-278
71	11	4	6	1		4	60-307
72	1	1					241
73	8	7	1				217-287
74	10	6	3	1		1	190-356
76	2	1	1			1	236-290
85	1			1			190
93	1	1					240
94	6	3	3			1	227-289
95	1		1			1	375
96	7	1	2	4		2	67-286
97	1		1				189
99	22	5	10	7		6	70-255
100	1	1					226
102	40	7	25	8		14	40-431
103	2			2			186-241
105	2	1		1		1	241-404
106	17	7	9	1		7	229-427
108	19	4	6	9		4	48-448

APPENDIX TABLE 22 -- (continued)

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
			Female				
109	23	6	4		13	3	44-396
110	18	3	7		8	2	36-400
111	5		1		4		81-373
114	18	6	8		4	4	169-215
115	7	2	3		2		336-450
116	11	3	6		2	4	135-466
117	2		2				335-345
120	30				30		54-174
122	13		11		2	4	128-183
123	1				1		144
124	16	6	6		4		147-178
132	1	1					250
134	5		1		4	1	77-293
139	5	1			4		123-325
140	8	3	1		4		115-290
141	1		1				232
143	1	1					166
144	1		1			1	197
145	1				1		163
146	4	1	3				183-297
147	6		2		4	1	180-202
148	1				1		68
151	4				4		71-119
152	5		1		4		73-182
153	7	2	1		4		59-193
155	1	1					177
164	7	1	3		3	3	75-251
165	1				1		82
168	15	2	1		12		72-250
171	7	1	2		4	1	60-199
173	3	1	1		1		178-301
174	7	3	4			2	229-295
175	8	2	6			4	205-291
178	8				8		66- 88
179	1				1		73

APPENDIX TABLE 23 -- List of Black sea bass (Centropristes striata) examined from collections made during Delaware II cruises 762 and 450, March 4 - 25, 1976; including station number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
			Female				
22	2				2		35- 52
39	2		1	1		1	90-375
62	2	1			1		82-300
88	6	3	3			3	255-401
89	3		3			3	296-382
90	11				11		55-217
91	1		1				210
95	11	4	7			4	224-420
97	5		5			5	263-475
99	3				3		53- 63
107	1		1			1	277
108	1		1			1	266
111	1	1					346
113	1		1			1	331
115	20	12	4	4		3	194-385
118	5	1	1	3			138-221
119	18	7	11			11	276-476
120	11	8	3			3	267-440
134	1		1			1	453
139	7	2	5			5	367-500
140	3		1	2		1	205-362
142	15	3	2	10		2	60-261
144	5				5		55- 81
145	9				9		36- 80
146	12				12		43- 80
151	1				1		106
156	1				1		60
159	1				1		49
160	2				2		62- 76

APPENDIX TABLE 24.--List of Bluefish (*Pomatomus saltatrix*) examined from collections made during Delaware II cruise 438, September 8-18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Male	Sex Ratio		Gonads Weighed	Size Range (mm)
			Female	Neuter		
1	21	3	5	13	4	69-377
2	7	1	2	4	2	75-358
3	10	7	3			173-365
10	1			1		69
13	11	2	1	8		164-356
14	5	1		4		158-178
22	1		1		I	504
33	7			7		167-207
34	1	1				180
35	1	1				190
84	1		1		1	778
94	2		2		2	696-753
95	2			2		176-365
118	1			1		210
120	1			1		177
122	6	1		5		193-210
123	10		2	8		164-251
124	3			3		170-192
125	1			1		358
126	10			10		170-373

APPENDIX TABLE 25.--List of Bluefish (*Pomatomus saltatrix*) examined from collections made during Delaware II cruise 758, October 15-November 7, 1975; including station number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Male	Sex Ratio			Gonads Weighed	Size Range (mm)
			Female	Neuter			
1	2			2			201-206
2	2			2			169-182
4	10	1	1	8			170-361
6	1	1					243
11	1		1		1		520
12	3			3			119-138
13	8	1	2	5	2		163-535
14	3	1	1	1			250-519
15	1		1		1		543
20	4	3		1			217-233
21	2	2					192-681
25	2			2			178-227
26	2	1	1		1		535-653
27	2	1	1		1		508-721
33	1		1		1		744
47	1		1		1		754
51	1		1				696
63	1		1				530
64	2	1	1		1		708-733
65	1		1				691
67	15	4	3	8	2		178-550
68	1		1		1		700
70	3	1		2			113-465
71	2	2					480-532
72	6	3		3			74-194
74	1		1		1		719
75	2	2					674-708
76	1		1		1		387
78	1		1		1		446
80	1	1					624
94	1		1		1		550
116	1		1				244
117	1	1					521
119	13	4	6	3	4		173-583
120	20	3	7	10	5		175-463
121	2			2			187-202
138	12	5	7		5		289-447
139	7	2	3	2			193-321
140	10		1	9			184-300
141	8		1	7			120-228
143	6	1	1	4			141-243
145	2			2			186-196
146	2			2			197-200

APPENDIX TABLE 25 (continued)

Station Number	Specimens Examined	Male	Sex Ratio			Gonads Weighed	Size Range (mm)
			Female	Neuter			
147	1			1			227
149	10	1	1	8			190-217
150	5	3		2			215-336
151	11	4	4	3			186-339
153	2	1		1			194-215
154	1			1			192
155	3	1		2			180-220
156	5			5			182-310
157	3			3			183-194
158	1			1			212
160	7		1	6	1		144-384
161	2			2			103-124
162	1	1					190
163	2		1	1			171-500
164	1	1					311
165	1	1					395
168	2			2			180-195
169	1	1					541
170	1	1					635
171	1			1			202
172	10	1	2	7	1		74-405
173	1		1		1		723
175	2		1	1			385-395
180	1			1			218
185	9		1	8			187-239
186	10	8		2			172-385

APPENDIX TABLE 26 -- List of Bluefish (*Pomatomus saltatrix*) examined from collections made during Delaware II cruises 446 and 447, December 1 - 18, 1975; including station number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio		Gonads Weighed	Size Range (mm)
			Female	Neuter		
1	5			5		133-192
11	10			10		121-206
12	2			2		193-235
21	1		1		1	635
23	1		1		1	723
69	1		1			595
71	1		1		1	705
81	1			1		239
90	6	4	2		2	515-690
91	2		1	1		135-233
114	1			1		535
124	2		1	1	1	309-419
126	9	4	3	2	2	405-649
127	10			10		186-234
128	10		1	9	1	181-236
129	11	8	1	2		182-402
130	2			2		541-547
131	7	6	1		1	364-687
134	2		2		2	386-429
136	1	1				394
141	3	1		2		267-569
142	5	1	2	2	1	395-725
143	12	3	2	7	1	191-340
145	6			6		190-226
146	19	1	1	17	1	230-766
153	2	1	1			324
159	2	1	1			368-382
160	1	1				698
161	2		1	1	1	272-387
168	1		1			542

APPENDIX TABLE 27-- List of Bluefish (*Pomatomus saltatrix*) examined from collections made during Delaware II cruises 762 and 450, March 4 - 25, 1976; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio Female	Neuter	Gonads Weighed	Size Range (mm)
124	1	1				314
128	4		4			314-329
134	1		1		1	556
135	2	1	1		1	663-695
136	2		2		2	409-667

APPENDIX TABLE 28.--List of Scup (Stenotomus chrysops) examined from collections made during Delaware II cruise 438, September 8-18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Sex Ratio			Gonads Weighed	Size Range (mm)
		Male	Female	Neuter		
4	15	5	1	9		126-166
7	3			3		127-146
11	14	1	5	8	3	45-157
12	4			4		128-152
13	5			5		47- 56
14	2	1		1		143-145
22	6	1		5		68-145
23	5			5		62- 69
24	5			5		70- 80
25	6			6		42-134
31	9			9		128-185
32	5			5		62- 80
33	4			4		69- 80
34	5			5		62-132
35	3			3		61- 64
43	1		1		1	205
83	2	1	1		1	196-202
86	9	3		6		181-202
88	4	1		3		191-233
90	1			1		184
94	2	1		1		123-125
95	5	5				140-149
96	1	1				177
120	1			1		170
122	10			10		138-178
125	2			2		140-153
126	2			2		80-141

APPENDIX TABLE 29.--List of Scup (*Stenotomus chrysops*) examined from collections made during Delaware II cruise 758, October 15-November 7, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
			Female				
1	1				1		175
2	9			1	8	1	66-150
4	5				5		147-213
5	4				4		74-200
6	5				5		83- 88
7	9	2	2		5	2	81-189
8	9	2	2		5	2	173-205
9	1				1		155
10	5				5		87- 90
11	5				5		76-154
13	1						168
14	6	2			4		174-232
15	12		3		9	3	65-199
16	4		1		3		160-194
17	3	1			2		81-164
18	5	3			2		196-241
19	7	4			3		150-193
20	7	1			6		82-192
21	13	4	1		8	1	73-208
22	5				5		85- 92
23	10		1		9		144-197
24	3	2	1			1	181-192
25	7				7		61- 92
27	1				1		76
28	9	2	2		5	2	58-259
29	5				5		73- 91
30	8				8		79-180
31	13	4	4		5	4	92-269
32	12	1	3		8	2	74-191
33	15	5	5		5	4	70-262
34	10	2	2		6	2	195-290
35	2	2					181-197
36	1	1					206
37	3			2	1	1	239-247
48	12	7	2		3		202-322
49	2			2		2	240-242
50	8	3	4		1	3	200-265
51	8	5	2		1	1	232-282
57	10	3	5		2	1	185-270
58	7	1	3		3	3	189-241
59	10	4	5		1	4	194-250
60	15	6	3		6		134-274
61	14	4	2		8		140-173

APPENDIX TABLE 29 (continued)

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
			Female				
62	10	1	7	2	6	150-281	
63	12	4	1	7	1	132-231	
64	5			5		72-84	
65	1			1		78	
66	1			1		94	
67	2		1	1	1	290-293	
68	17	1	1	15		72-251	
71	12	6	2	4		80-204	
72	1			1		81	
73	7		1	6		81-213	
74	15	7	4	4	4	140-243	
75	9	3	1	5	1	87-225	
76	15	5	5	5	3	63-198	
77	7			7		91-216	
79	5			5		81-94	
80	5			5		85-93	
81	6			6		74-146	
82	10	2	6	2	4	143-295	
83	8	1	1	6		89-212	
84	10	3	3	4	2	190-225	
89	1	1				213	
90	12	6	5	1	3	188-258	
93	12			12		95-167	
94	8			8		85-153	
95	7	3		4		90-162	
96	4			4		84-93	
97	15		2	13	2	90-186	
98	1	1				182	
106	1	1				243	
109	2			2		164-165	
113	1			1		153	
115	1		1			180	
118	5			5		96-131	
120	4	2		2		141-173	
121	11			11		115-139	
122	2			2		121-123	
123	1			1		128	
126	1		1		1	205	
139	9			9		117-137	
141	5			5		116-125	
144	6		1	5		112-205	
145	1			1		119	
146	6	2	2	2		132-161	
147	2	1		1		149-161	
151	1	1				219	
153	9	1	1	7		121-189	
154	5			5		122-135	

APPENDIX TABLE 29 (continued)

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
158	1			1			134
164	1		1				191
166	4				4		86-179
176	3			1	2	1	170-254
177	11	3		1	7		84-188
178	6				6		92-185
179	1				1		90
181	5				5		170-195
182	5				5		84- 93
183	5				5		70- 94
188	5				5		75- 92
189	16	5		2	9		93-208
190	5				5		82-105

APPENDIX TABLE 30 -- List of Scup (*Stenotomus chrysops*) examined from collections made during Delaware II cruises 446 and 447, December 1 - 18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio	Neuter	Gonads Weighed	Size Range (mm)
			Female			
11	4			1		69
12	3			3		76-85
15	9			9		71-223
16	8	1	2	5		159-259
17	12	3	9		1	185-236
18	11	2	2	7		202-254
19	6	2	3	1	1	226-295
20	15	7	1	7		105-220
21	11	2	2	7	1	97-266
22	11	3	2	6	1	118-250
27	15	1	1	13		95-285
28	3	1	1	1		204-244
31	6		1	5		83-216
32	8	2	1	5		78-268
33	5			5		78-123
34	2			2		96-105
35	7	1		6		212-293
36	13		1	12		96-300
37	3	1		2		265-270
38	1			1		263
49	1	1				268
52	11		1	10		188-248
53	3	1		2		195-245
61	4		4			160-192
62	7		1	6		88-250
63	10	1	2	7	2	88-245
64	11	3	1	7		107-272
65	3	2		1		173-219
66	8	2		6		68-243
67	16	1	2	13	1	88-241
68	9		3	6		75-202
69	9			9		100-275
70	9			9		101-228
71	10	6	3	1	1	154-250
72	15	4	4	7	1	77-294
73	10	2	5	3	1	83-252
74	13	3	4	6		85-299
75	5	1	4			203-268
76	1			1		76

APPENDIX TABLE 30-- (continued)

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
			Female				
79	2				2		85- 90
94	13	7	2	4		1	95-296
95	14	2			12		90-297
96	13		2		11		89-332
99	11		1		10		148-196
100	11		1		10		159-206
102	15	4	3		18		153-223
103	15				15		83-273
105	12	1			11		107-274
106	8	4	2		2	2	99-282
108	11	1	2		8	1	94-283
109	8		1		7	1	70-345
111	7		1		6		95-158
116	1				1		101
117	5				5		85- 99
118	6				6		84-100
120	5				5		98-163
124	2				2		97-115
125	6		1		5		84-173
130	4				4		93- 98
134	5				5		72-114
136	1				1		104
168	1				1		74
172	2				2		70- 81
173	16	1	4		11		79-349
174	14		7		7	2	90-278
175	16	4	5		7	1	77-257

APPENDIX TABLE 31-- List of Scup (*Stenotomus chrysops*) examined from collections made during Delaware II cruises 762 and 450, March 4 - 25, 1976; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
39	1				1		118
62	12	3	7		2	7	163-192
95	10	1	4		5		118-185
97	4	2	2				165-232
107	12	2	5		5	3	108-196
112	9		2		7	1	101-279
113	5				5		121-135
116	2		2			1	166-173
130	1		1				192
133	1				1		177
134	3				3		86-115
146	1				1		199

APPENDIX TABLE 32.--List of Weakfish (*Cynoscion regalis*) examined from collections made during Delaware II cruise 438, September 8-18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Sex Ratio			Gonads Weighed	Size Range (mm)
		Male	Female	Neuter		
1	23	1	7	15	7	56-663
2	31	9	6	16	6	53-654
3	15	6	4	5	4	123-626
6	1	1				600
7	2		2		2	646-648
10	8			8		160-463
11	1	1				558
13	5	2		3		160-180
25	1			1		140
94	2		2			582-660
95	1		1		1	635
96	17	10	3	4	3	111-524
119	2	2				427-458
120	6	1		5		172-478
123	12	1	3	8	3	121-459
126	6		1	5	1	163-363

APPENDIX TABLE 33.--List of Weakfish (*Cynoscion regalis*) examined from collections made during Delaware II cruise 758, October 15-November 7, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Male	Sex Ratio Female	Neuter	Gonads Weighed	Size Range (mm)
2	1			1		178
4	11	7	3	1	3	104-526
14	6			6		151-197
18	2			2		118-222
20	1			1		137
30	1	1				676
31	1		1		1	699
67	5	1	1	3	1	114-634
70	2	2				515-561
72	7	4	1	2	1	133-570
73	1		1		1	677
75	1	1				583
109	9	1	1	7		139-272
110	14	6	3	5	3	147-350
111	12	2		10		135-330
112	6		2	4	2	187-280
113	15	4	2	9	1	84-289
114	10	3	4	3	3	208-321
115	20	6	7	7	5	136-301
120	8	3		5		196-381
139	12	4	5	3	3	157-276
140	14	1	8	5	5	177-251
141	8	1	1	6	1	110-223
142	18	4	3	11	2	146-246
143	8	3	5		4	202-340
144	10	6	4		4	231-292
145	21	5	5	11	5	194-308
146	11	3	5	3	2	194-295
147	10	5	2	3	2	176-334
149	4		3	1	2	254-276
150	12	4	6	2	3	190-310
151	11	4	6	1	5	205-317
153	1		1			307
154	10	3	6	1	6	230-315
155	15	3	6	6	3	150-264
156	12	1	8	3	7	177-325
157	1	1				515
159	10	1	1	8	1	142-337
160	9	3	4	2	4	171-671
161	13	2	4	7	2	117-372
162	16	6	5	5	5	131-642
163	12	1	4	7	4	122-367
164	1		1		1	552

APPENDIX TABLE 33 (continued)

Station Number	Specimens Examined	Male	Sex Ratio			Gonads Weighed	Size Range (mm)
			Female	Neuter			
165	18	4	10	4		8	121-677
167	10		3	7		3	134-520
168	9	1	3	5		3	132-466
169	3	1	1	1		1	146-400
172	7	3	3	1		3	305-445
179	8		3	5		3	113-511
180	7	1		6			137-221
185	1		1			1	565
186	1	1					170

APPENDIX TABLE 34 -- List of Weakfish (*Cynoscion regalis*) examined from collections made during Delaware II cruises 446 and 447, December 1-18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio	Neuter	Gonads Weighed	Size Range (mm)
			Female			
1	7	1	1	5		135-187
6	2			2		145-190
7	1			1		582
8	5			5		130-162
9	6			6		110-197
10	5			5		124-147
11	2	2				520-565
12	1			1		143
18	2	1	1		1	631-657
23	6			6		128-233
24	4			4		125-144
25	3		1	2		121-239
32	1		1		1	615
80	2			2		125-159
81	3	1	2		2	471-647
82	1		1		1	433
83	3			3		107-143
89	5			5		120-149
90	6	4	2		2	431-637
91	1	1				571
92	1	1				610
93	5	2	3			462-645
108	1		1		1	647
111	2	2				611-680
124	12	2	10		8	314-412
126	2	2				631-670
127	13	4	4	5		154-351
128	10		1	9	1	148-356
129	7	3	4		4	401-682
131	1		1		1	636
133	3	1	2		2	266-330
135	10	3	7		6	331-423
136	3	2	1		1	413-568
137	16	1	9	6	9	133-458
138	8		2	6	2	110-357
139	19	1	7	11	5	175-516
141	14	4	3	7	2	142-386
144	8	1	2	5	2	132-296
145	2		2		2	622-647
146	9	6	3		3	535-633
147	18	2	7	9	6	140-589

APPENDIX TABLE 34-- (continued)

Station Number	Specimens Examined	Male	Sex Ratio Female	Neuter	Gonads Weighed	Size Range (mm)
148	9		2	7	1	97-368
149	8	5	2	1	2	221-666
150	8			8		118-235
151	15	6	5	4	3	129-498
152	7	2	5		5	360-515
153	5	2	3		3	503-630
154	11	1	2	8	2	121-216
155	10	1	3	6	2	141-394
156	8	1	3	4	1	218-390
157	6	3	3		3	340-500
159	9	1	5	3	3	195-479
161	10	3	5	2	5	195-464
162	3	1	2		2	317-489
165	17	4	8	5	5	127-422
166	13	8	2	3	2	140-437
167	4	1	1	2	1	138-511
169	3	1	1	1	1	156-225
170	15	2	1	12		129-497
173	1	1			1	641
176	2	1	1		1	498-501
177	5		1	4	1	111-500
178	1			1		231

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APPENDIX TABLE 35 -- List of Weakfish (*Cynoscion regalis*) examined from collections made during Delaware II cruises 762 and 450, March 4 - 25, 1976; including station number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
			Male	Female			
124	1			1		1	450
130	1	1		1	1	1	290-299
131	6	4		2		2	229-294
132	9	3		3	3	2	180-410
133	1	1					327
155	5				5		140-161
156	3	1			2		143-421
160	1			1			472

APPENDIX TABLE 36.--List of Spot (*Leiostomus xanthurus*) examined from collections made during Delaware II cruise 438, September 8-18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
			Female				
119	14	1			13		114-223
120	16	3	2		11	1	118-219
122	10				10		139-166
123	1			1		1	241
126	5				5		137-150

APPENDIX TABLE 37.--List of Spot (Leiostomus xanthurus) examined from collections made during Delaware II cruise 758, October 15-November 7, 1975; including station number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Male	Sex Ratio			Gonads Weighed	Size Range (mm)
			Female	Neuter			
82	3				3		131-142
109	10				10		114-184
110	11				11		119-189
111	12				12		128-170
112	5				5		134-143
113	13		1	12			122-205
114	22				22		124-182
115	10	1	4	5		1	135-216
119	6				6		124-147
120	11	1		10			136-178
138	10				10		172-206
139	15		4		11		125-190
140	15	2	7	6		5	147-221
141	7				7		120-157
142	9	1			8		119-177
143	1				1		120
144	19	6	6	7		6	125-266
145	32	10	14	8		13	114-265
146	16	4	6	6		4	124-250
147	13	6	3	4		2	137-241
149	14			14			133-210
150	11	1	6	4		5	150-273
151	16	1	5	10		3	125-203
153	10			10			143-179
154	11			11			142-170
155	17		8	9		2	145-247
156	11	5	5	1		5	130-247
157	13			13			134-170
159	14	2	6	6		5	102-212
160	15		1	14		1	131-236
161	7				7		121-156
162	15		4		11		130-235
163	11	1			10		141-194
164	4		1		3		152-166
165	8				8		127-178
166	1				1		154
167	8				8		136-157
168	9		1		8	1	130-177
169	2	1			1		148-182
171	5				5		130-209

APPENDIX TABLE 38-- List of Spot (*Leiostomus xanthurus*) examined from collections made during Delaware II cruises 446 and 447, December 1 - 18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
121	1				1		114
124	10		6	4		3	164-206
127	7				7		125-183
128	8		1	7		1	137-197
137	4			1	3	1	143-205
138	9		2		7	2	126-217
139	1				1		158
141	3				3		134-145
143	1				1		145
144	10				10		115-165
147	8				8		111-157
148	6				6		112-153
149	6				6		117-195
150	5				5		119-148
151	3				3		149-169
154	5				5		106-134
155	7				7		116-172
156	6				6		123-158
159	6		1		5		135-152
161	5				5		123-151
162	1				1		140
165	5				5		112-146
166	11	1			10		101-174
170	1				1		156
177	7	1	1		5		131-156

APPENDIX TABLE 39-- List of Spot (*Leiostomus xanthurus*) examined from collections made during Delaware II cruises 762 and 450, March 4 - 25, 1976; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Sex Ratio			Gonads Weighed	Size Range (mm)
		Male	Female	Neuter		
131	15	1	1	13		158-234
132	10	1	8	1	3	171-243

APPENDIX TABLE 40.--List of Southern kingfish (*Menticirrhus americanus*) examined from collections made during Delaware II cruise 758, October 15-November 7, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
144	9	4	3		2	3	184-267
151	6	1	3		2	2	177-304
161	3				3		122-136
163	1	1					293
165	1	1					284

APPENDIX TABLE 41 -- List of Southern kingfish (*Menticirrhus americanus*) examined from collections made during Delaware II cruises 446 and 447, December 1 - 18, 1976; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Sex Ratio			Neuter	Gonads Weighed	Size Range (mm)
		Male	Female	Neuter			
128	10	1	3	6		3	106-290
137	8	1			7		114-225

APPENDIX TABLE 42-- List of Southern kingfish (*Menticirrhus americanus*) examined from collections made during Delaware II cruises 762 and 450, March 4 - 25, 1976; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
			Female	Male			
130	1		1			1	323
131	2	1	1			1	300-308

APPENDIX TABLE 43.--List of Northern kingfish (*Menticirrhus saxatilis*) examined from collections made during Delaware II cruise 438, September 8-18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Male	Sex Ratio	Gonads Weighed	Size Range (mm)
			Female	Neuter	
13	1		1	1	259
89	1	1			328
96	1			1	339
120	2	2			228-234

APPENDIX TABLE 44.--List of Northern kingfish (*Menticirrhus saxatilis*) examined from collections made during Delaware II cruise 758, October 15-November 7, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Male	Sex Ratio Female	Neuter	Gonads Weighed	Size Range (mm)
2	1			1		168
4	3	1		2		126-340
5	1		1			224
15	1	1				208
18	2			2		179-213
19	2			2		192-220
31	1	1				212
32	1	1				203
109	2			2		96-140
110	4		3	1	2	245-342
111	8		1	7	1	103-330
113	6			6		140-295
114	1	1				247
115	2			2		100-240
144	1		1		1	312
147	3	1	1	1	1	266-365
151	3	2	1		1	213-276
153	2			2		206-216
154	1			1		248
155	1	1				281
156	1		1		1	320
157	1	1				271
160	1			1		110
161	3	1		2		56-308
162	8	4	3	1	1	245-292
164	1		1		1	240
167	2	1	1		1	220-277
181	2			2		225-232
182	1			1		143
189	1		1		1	362

APPENDIX TABLE 45-- List of Northern kingfish (*Menticirrhus saxatilis*) examined from collections made during Delaware II cruises 446 and 447, December 1 - 18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio	Neuter	Gonads Weighed	Size Range (mm)
			Female			
1	1			1		147
3	1		1		1	292
4	3	2		1		185-224
5	1	1				396
6	1			1		232
8	2			2		152-197
9	1			1		130
10	4			4		142-165
29	1			1		168
83	1			1		140
88	1			1		169
124	1		1		1	207
125	1		1		1	219
127	3			3		210-242
133	2			2		155-205
135	11			11		166-310
141	9	1	1	7		105-229
143	2	1		1		172-255
147	6			6		137-234
148	1			1		119
149	1		1			274
150	4			4		85-121
151	4	1		3		145-253
153	1	1				337
156	6		1	5		132-223
157	4			4		135-176
159	5			5		130-155
161	2			2		102-116
162	1			1		187
165	6	1		5		122-209
177	1			1		126

APPENDIX TABLE 46-- List of Northern kingfish (*Menticirrhus saxatilis*) examined from collections made during Delaware II cruises 762 and 450, March 4 - 25, 1976; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio	Neuter	Gonads Weighed	Size Range (mm)
37	1		1		1	292
129	1		1		1	274
132	1	1				331

APPENDIX TABLE 47.--List of Atlantic croaker (Micropogon undulatus) examined from collections made during Delaware II cruise 438, September 8-18, 1975; including station number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Male	<u>Sex Ratio</u>		Neuter	Gonads Weighed	Size Range (mm)
			Female				
96	5		5			5	215-330
119	2		2			2	306-397
120	15	5	10			9	244-393
121	8	2	3	3		3	256-296
122	2	1	1			1	322-336
123	44	30	14			14	229-380

APPENDIX TABLE 48.--List of Atlantic croaker (*Micropogon undulatus*) examined from collections made during Delaware II cruise 758, October 15-November 7, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Male	Sex Ratio			Gonads Weighed	Size Range (mm)
			Female	Neuter			
109	11	8	2	1			217-296
110	15	1	7	7		6	149-345
111	10	1	2	7		2	209-260
112	10	2	4	4		3	195-264
113	16	7	6	3		4	220-342
114	14	4	9	1		7	227-350
115	11	2	8	1		5	154-313
116	11	5	6			6	264-304
117	1	1					272
118	1		1			1	275
138	13	4	9			9	245-379
139	12	10	2			2	260-316
140	7	1	2	4		2	197-281
141	11			11			109-202
142	14	2		12			126-186
143	10	3	2	5			180-212
144	10	4	2	4		2	183-240
145	10	4	5	1		5	211-278
146	13	9	4			3	240-315
147	12	4	5	3		3	174-341
148	4		4			4	261-305
149	4	1	3			1	269-294
150	2	2					217-247
151	17	10	5	2		5	206-326
153	15	10	5			3	244-331
154	15	4	11			9	259-351
155	20	8	2	10		2	182-300
156	12	7	1	4		1	207-369
157	5	1	2	2		1	226-293
159	13	6	3	4		1	162-221
160	14		1	13		1	182-352
161	12	4	3	5		3	226-311
162	7	1	5	1		2	232-306
163	11	3	2	6		1	141-375
164	17	2	10	5		6	221-309
165	9		8	1		4	235-325
166	9		4	5		4	95-327
167	9	6	2	1		2	174-288
172	2			2			196-236

APPENDIX TABLE 49-- List of Atlantic croaker (*Micropogon undulatus*) examined from collections made during Delaware II cruises 446 and 447, December 1 - 18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio			Gonads Weighed	Size Range (mm)
			Male	Female	Neuter		
127	14	3	8		3	7	233-334
128	15	3	6		6	6	168-304
135	1	1					181
137	10	1	6		3	3	190-272
138	13		2		11	1	109-264
141	2	2					239-260
144	4	1	2		1	1	184-231
148	16				16		79-212
150	11	2	1		8		172-243
155	14	5	1		8		106-231
157	1				1		158
165	1				1		217
166	14	6	1		7		86-236
171	1		1			1	234
177	5	3			2		193-205

APPENDIX TABLE 50 -- List of Atlantic croaker (Micropogon undulatus) examined from collections made during Delaware II cruises 762 and 450, March 4 - 25, 1976; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
			Female				
130	15	8	5		2	1	259-378
131	6	4	2			1	248-320
132	10		5		5		245-305
133	23		17		6	15	207-324
147	1	1					256

APPENDIX TABLE 51.--List of Butterfish (Peprilus triacanthus) examined from collections made during Delaware II cruise 438, September 8-18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined		Sex Ratio			Gonads Weighed	Size Range (mm)
		Male	Female	Neuter			
1	15	1	3	11	3	55-180	
2	17	3	2	12	2	69-199	
3	17	6		11		81-200	
4	12			12		64- 78	
6	8			8		45- 67	
7	9			9		40- 73	
8	2			2		71- 83	
9	10			10		57- 75	
10	10			10		73- 84	
11	10			10		39- 72	
13	10			10		61- 81	
14	2			2		71- 79	
22	5			5		45- 68	
23	6			6		49- 66	
25	1			1		53	
31	10			10		59- 74	
32	5			5		44- 58	
33	3			3		55- 61	
34	9			9		48- 59	
35	4			4		43- 59	
43	1	1				145	
44	13	2		11		80-180	
46	8			8		82-104	
47	9			9		73-112	
48	6	1	1	4	1	86-177	
50	20	5	5	10	5	73-162	
52	4	1	2	1	2	141-164	
60	6	3	2	1	2	136-157	
61	9	3	5	1	4	132-154	
62	17			17		91-123	
64	14	1	5	8	5	90-156	
70	1		1		1	145	
71	6	2	1	3		130-149	
74	20	2	6	12	6	93-166	
75	4	1	3		2	102-164	
76	3	1		2		79-149	
80	10			10		71- 89	
83	2			2		85- 89	
84	6			6		22- 48	
86	1			1		78	
89	10			10		55- 83	
90	18			18		69- 97	
92	7			7		70- 95	

APPENDIX TABLE 51 (continued)

Station Number	Specimens Examined	Male	Sex Ratio		Gonads Weighed	Size Range (mm)
			Female	Neuter		
93	10			10		24- 89
94	10			10		46- 96
96	2			2		92-143
97	7			7		73- 92
98	6			6		72- 91
99	6	1		5		42-100
100	1			1		95
104	2		2		2	135-157
105	8			8		96-124
106	10	2		8		104-150
107	10	2	4	4	2	44-152
109	10	5	4	1	4	100-168
111	10	4	3	3	3	46-171
112	4		1	3	1	128-155
113	2			2		39- 41
117	3			3		56- 57
118	9			9		32- 82
120	1			1		94
122	10			10		72- 96
123	14	2	2	10	2	94-176
124	10			10		73- 90
125	10			10		74- 90
126	10			10		73-104
127	17			17		69- 94

APPENDIX TABLE 52.--List of Butterfish (*Peprilus triacanthus*) examined from collections made during Delaware II cruise 758, October 15-November 7, 1975; including station number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Female	Neuter	Gonads Weighed	Size Range (mm)
1	12			12		74-119
2	10			10		94-109
5	6			6		63-102
7	1			1		71
8	9	1		8		72-148
9	14	1	1	12	1	81-163
10	7			7		88- 96
11	10			10		75- 99
12	15			15		79-107
13	15	1	2	12	1	79-197
14	3			3		87- 99
18	1			1		76
19	10			10		53-172
20	1			1		99
22	8			8		79- 95
23	12	3	2	7	2	89-189
24	20	5	2	13	2	87-177
25	17		1	16	1	73-180
27	10			10		71- 86
28	5			5		59- 82
29	1			1		82
30	3			3		74- 84
31	9	1		8		78-127
33	10		1	9	1	86-177
34	10	2	8		8	156-203
35	10	5	5		4	149-183
36	10			10		112-124
37	10	3	6	1	5	145-167
38	5	1	1	3	1	111-166
41	18	9	3	6	3	95-158
42	10		9	1	8	143-161
44	10		9	1	9	129-163
46	11	5	3	3	1	144-181
47	14		6	8	5	87-190
48	10		2	8	2	110-153
49	8		3	5	2	100-151
50	15	2	3	10		86-160
51	5	3	1	1	1	93-168
52	10	6	2	2	2	134-152
54	10		9	1	7	141-155
56	15	3	9	3	5	132-157
57	1			1		145

APPENDIX TABLE 52 (continued)

Station Number	Specimens Examined	Male	Sex Ratio Female	Neuter	Gonads Weighed	Size Range (mm)
58	1	1				158
60	1			1		91
61	1			1		24
62	2	1	1		1	139-165
65	2			2		55- 62
66	9			9		75-100
67	17		3	14	3	88-163
68	12			12		76-104
69	4			4		63- 97
70	4	2		2		157-174
71	5			5		89- 96
72	13	1	2	10	1	93-108
73	3	1		2		71-106
74	5			5		82-100
75	9			9		61- 93
76	6			6		46- 78
77	2			2		90-101
82	2	2				157-159
83	1		1		1	147
84	7	1	2	4	2	145-156
85	10	6	4		3	116-214
90	2	2				139-143
91	10	5	5		5	139-154
92	1		1		1	149
94	1			1		59
96	1			1		108
97	1			1		113
108	10			10		100-120
114	1			1		110
118	3			3		58- 82
119	7	3	4		4	104-142
120	10			10		104-130
125	2	1		1		143-146
128	1			1		132
130	11	5	1	5		109-164
135	1	1				150
137	10	8	2		2	144-160
138	10			10		89-108
139	8	3	2	3		123-135
140	10	2		8		120-154
141	12	5	3	4	2	113-149
143	10	3	2	5		117-141
144	2		1	1		160-181
145	8	5	3		3	126-179
146	1			1		150
147	10	4	3	3	3	143-159

APPENDIX TABLE 52 (continued)

Station Number	Specimens Examined	Male	Sex Ratio			Gonads Weighed	Size Range (mm)
			Female	Neuter			
149	10		1	9			126-142
150	10	2	4	4	3		133-176
151	10		3	7			132-162
152	11		6	5	4		130-171
153	10	3		7			125-147
154	10	3	2	5	2		132-178
155	8	1	4	3	3		132-192
156	18	6	6	6	6		122-190
157	10	3	4	3	4		110-161
158	10	2		8			99-126
159	4		2	2	2		142-175
160	9		1	8	1		107-172
162	1			1			153
163	2		1	1	1		95-170
164	1			1			104
166	2			2			59- 63
169	9			9			53-106
170	12			12			57-101
171	2			2			112-115
172	8	4		4			50-192
173	3			3			60-104
175	7	2	1	4			70-162
176	2			2			88- 96
177	2			2			51- 68
178	2			2			98-110
179	2	2					153-182
181	3			3			79-106
182	1			1			71
184	11			11			58-106
185	11	4	6	1	6		89-181
186	8	2	2	4	2		99-196
187	7			7			75-185
188	4			4			83-110
189	9	1		8			96-119
190	10			10			77-105

APPENDIX TABLE 53-- List of Butterfish (*Peprilus triacanthus*) examined from collections made during Delaware II cruises 446 and 447, December 1-18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
			Female				
1	10		4		6	2	180-220
2	10	2	3	5		3	92-238
4	2				2		100-110
11	13	1			12		83-182
12	10				10		74-126
13	4	2	2			1	164-180
14	6	1			5		111-202
15	3				3		96-108
16	8	3	1		4		152-184
17	10	6	2		2	1	122-170
18	7	3	1		3		121-171
19	12	3	2		7	2	152-175
21	10	4	3		3		116-185
22	10	3	4		3		104-164
26	10	5	4		1	2	150-206
27	3	2			1		152-190
28	10	3	3		4	3	157-177
32	10	5	4		1	2	174-272
33	3		1		2		102-207
34	13	3	3		7	2	103-193
35	10	4	2		4		155-187
36	9		1		8		93-165
37	9	1	2		6		105-152
38	13		1		12		97-165
40	9	3			6		108-186
42	6	1	3		2	2	155-178
43	10		3		7		151-177
44	11	3			8		110-158
45	3	1			2		166-175
48	8		1		7		109-155
49	8		1		7		115-169
51	9	1	6		2	2	144-174
52	10	1	6		3	2	148-181
53	11	3	2		6		119-152
61	5		1		4		100-151
62	7		2		5	2	112-157
64	9	3	1		5	1	109-168
65	5	1	3		1	3	146-202
67	7		1		6		99-155
70	3	1			2		128-162
71	6		1		5	1	102-212

APPENDIX TABLE 53 -- (continued)

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
			Female				
72	3	1	1		1		142-175
73	5		2		3		155-170
74	4				4		105-175
75	9	2			7		84-203
76	5				5		97-120
77	16				16		92-135
78	12	2	8	2		1	97-151
79	11		1		10		99-180
81	6				6		91-100
83	1				1		127
85	5				5		98-100
86	1				1		99
87	1				1		104
90	8		1		7		78-126
92	1		1			1	210
93	8	2	3		3	1	115-209
94	10				10		100-112
95	10				10		108-127
96	6				6		104-114
97	2				2		109-159
99	3	1	1		1	1	141-158
103	7				7		93-115
104	5				5		95-108
111	4				4		103-106
119	10				10		148-160
120	7	2			5		120-150
126	6				6		74- 85
127	5		3		2		133-192
129	1				1		83
131	7				7		93-115
142	7	2			5		85-150
143	10	2	4	4		4	68-171
145	10	5	5			3	139-165
146	10	5	4	1		3	117-182
151	4		2		2		124-136
157	1		1			1	140
158	12	1			11		104-164
159	8	1	2		5		118-200
160	11	1	3		7	3	120-191
161	9	2	3		4	2	85-182
162	5		2		3	2	95-191
163	13	4	6	3		6	72-206

APPENDIX TABLE 53-- (continued)

Station Number	Specimens Examined	Male	<u>Sex Ratio</u>		Neuter	Gonads Weighed	Size Range (mm)
			Female				
164	1				1		72
169	3		2		1	2	172-180
171	2				2		95-123
173	3		1		2		123-188
175	11		1		10		107-118
176	16	2	5		9	3	82-198

APPENDIX TABLE 54-- List of Butterfish (Peprilus triacanthus) examined from collections made during Delaware II cruises 762 and 450, March 4 - 25, 1976; including station number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio			Gonads Weighed	Size Range (mm)
			Female	Neuter			
15	10	2	7	1		6	167-222
36	3	2	1			1	171-212
37	1		1			1	188
38	12	2	3	7		3	105-203
39	7	1	2	4			99-119
40	10	3	7			7	136-226
41	14	4	8	2		6	101-190
42	10	4	6			6	152-196
43	10	4	6			6	156-186
47	10	3	6	1		6	101-171
50	8	1	2	5		2	100-186
57	1			1			112
59	2	1	1			1	141-173
60	4	2	1	1		1	148-185
61	14	3		11			102-164
62	11	3	7	1		7	125-172
88	10	3	6	1		5	151-191
100	1		1				187
107	7	2	4	1		3	102-199
109	10	4	6			6	160-215
112	3		1	2		1	105-149
113	1			1			176
116	1	1					190
119	4		4			4	155-168
123	1		1			1	182
130	5	3	2			2	151-163
131	11	5	4	2		4	106-177
132	2	2					149-173
133	3	1		2			94-165
135	1			1			105
136	1			1			154
138	6			6			85-100
142	10			10			85-108
143	5	1		4			72-150
144	2	1		1			104-143
146	3			3			94-120
148	10	5	4	1		4	145-181
149	14	6	4	4		4	105-162
150	10	2	3	5		3	103-170
151	12	4	2	6		1	98-185
160	3	1		2			113-200
164	1			1			110

APPENDIX TABLE 55.--List of Northern searobin (*Prionotus carolinus*) examined from collections made during Delaware II cruise 438, September 8-18, 1975; including station number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
4	2		2			2	222-284
7	3	1	2			1	227-272
10	7	1			6		47-209
11	4	1	1		2	1	43-198
12	9		6		3	1	43-233
13	5	4	1				209-267
14	1		1			1	206
22	1		1				196
23	6	5	1			1	193-245
24	4	2	1		1	1	219-235
25	17	3	2		12	1	43-212
31	1				1		210
32	2		2			2	193-234
35	9	5	1		3	1	162-220
41	5	3	1		1	1	205-297
84	7	3	4			3	207-269
86	10	2	8			8	222-286
88	7	1	6			6	192-257
89	5	2	2		1	2	83-260
92	10	9	1			1	201-255
93	12	6	6			5	196-246
94	11	7	4			4	148-281
95	9	5	4			4	212-272
96	12	5	5		2	3	61-270
97	9	8	1				195-233
98	11	11					187-239
99	10	7	3			3	205-266
100	7	6	1			1	205-251
116	15	7	6		2	5	167-210
117	10	5	5			5	169-195
118	15	5	10			9	159-221
119	11	8	3			3	146-274
120	10	4	6			6	205-259
121	11	8	3			3	179-248
122	10	5	5			5	154-238
123	14	6	8			8	198-242
124	10	6	4			3	172-250
125	11	5	3		3	3	148-207
126	10	6	4			4	210-273
127	11	7	4			2	159-250

APPENDIX TABLE 56.--List of Northern searobin (*Prionotus carolinus*) examined from collections made during Delaware II cruise 758, October 15-November 7, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Male	Sex Ratio			Gonads Weighed	Size Range (mm)
			Female	Neuter			
5	1			1			149
6	6	3	3			2	214-280
7	1		1			1	236
15	2	1	1			1	321-337
16	2			2			219-237
18	7	5	1	1			97-344
19	7		2	5		1	82-346
20	8	3	1	4		1	81-304
21	1		1			1	394
28	2			2			92-100
30	15	7	3	5		3	102-346
31	3	1	2			2	229-290
32	7	1		6			79-306
33	2	1		1			66-267
34	1		1			1	270
61	2		2			1	261-270
67	4	1	2	1		1	212-269
74	1			1			93
77	1			1			91
80	4	2	2			1	192-251
81	1			1			206
93	10	6	3	1		1	169-236
94	4	1	3				174-194
95	3		2	1		2	196-212
98	1		1			1	222
105	1		1			1	230
106	12	4	8			4	170-237
107	1		1			1	227
109	1		1				255
112	1		1			1	214
113	1			1			230
114	1	1					246
115	2		2			2	218-228
122	1			1			168
123	14	3	1	10		1	137-230
124	10	5	5			5	187-241
125	10	4	6			6	209-265
126	4	2	2			2	206-247
127	4	1	3			3	194-224
133	11			11			147-181
134	3	1		2			161-226
139	3		1	2		1	135-195
145	8			8			108-159

APPENDIX TABLE 56 (continued)

Station Number	Specimens Examined	Male	Sex Ratio			Gonads Weighed	Size Range (mm)
			Male	Female	Neuter		
146	6				6		112-151
147	1				1		107
153	3	2			1		153-206
157	1				1		167
158	1				1		150
161	3		2		1	1	210-250
162	10	6	2		2	1	209-247
164	10	2	4		4	4	31-238
165	9	6	3			1	237-298
166	13	8	2		3	2	27-257
167	10	6	4			4	234-262
168	4	2	2			2	221-264
172	1		1			1	241
176	9	1	3		5	3	37-281
177	12	2			10		31-258
178	5				5		41- 91
179	2				2		48- 63
180	1				1		56
181	1				1		232
183	5				5		41- 56

APPENDIX TABLE 57-- List of Northern searobin (*Prionotus carolinus*) examined from collections made during Delaware II cruises 446 and 447, December 1 - 18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio Female	Neuter	Gonads Weighed	Size Range (mm)
6	8			8		56- 98
12	2			2		95-109
14	1			1		111
15	4		1	3		116-216
16	8	1	3	4		138-277
17	11	5	3	3	3	124-319
18	5	1	1	3	1	104-296
20	13	6	4	3	2	124-283
21	15	2	6	7	2	108-309
22	13			13		100-312
23	1			1		94
26	2			2		110-117
27	15	6	9		5	224-342
28	10			10		75-122
29	7			7		88-114
30	1			1		154
31	6	1	1	4	1	110-277
32	15	7	3	5	2	111-306
33	14	3	3	8		109-323
36	11	3	4	4	3	94-335
37	2	1	1			266-305
38	1	1				266
39	11	5	3	3	2	105-385
52	1		1		1	264
61	5	1	4		1	204-250
62	10	2	5	3	1	69-260
63	8	1	6	1		132-257
64	14	5	9		1	194-273
65	8	5	2	1	2	198-274
67	2	1		1		108-234
68	1	1				217
69	1			1		131
70	2		1	1	1	142-231
71	11	6	4	1	3	135-267
72	2		1	1	1	144-216
73	6	4		2		197-300
74	2	1	1			204-245
82	1			1		94
83	1			1		65
86	2			2		82-105
95	11	5	3	3	1	176-238

APPENDIX TABLE 57 -- (continued)

Station Number	Specimens Examined	Male	Sex Ratio			Gonads Weighed	Size Range (mm)
			Female	Neuter			
102	10	6	4			3	188-247
103	10			10			165-273
104	2		2			2	232-239
106	8	4	4			2	159-216
107	13	4	6	3		2	158-210
108	10	1	8	1		6	147-265
109	13		2	11		2	46-276
110	9	2	2	5			47-207
111	9	2	3	4		3	145-253
112	1			1			154
114	7	4	2	1		1	205-233
119	5			5			168-184
120	15		5	10			150-238
133	2	1	1			1	221-250
134	6	1	1	4		1	74-176
136	11	1	1	9			37-217
139	3		1	2		1	89-215
140	13	1	3	9		1	155-285
141	1	1					161
143	2	1			1		152-169
147	7				7		88-175
149	4				4		78-177
152	8		2	6			61-210
153	9	5	1	3			66-233
154	1				1		59
159	1				1		170
161	1	1					209
164	7		1	6			61-163
165	1				1		84
167	1				1		105
168	5				5		68- 87
169	1				1		80
170	3			3			60- 79
171	10			10			51-103
172	5			5			66-109
174	6		4	2		1	206-282
175	5	1	3	1		1	200-267
176	3			3			78-117
178	1				1		107
179	5				5		81-109
180	2				2		62- 70

APPENDIX TABLE 58 -- List of Northern searobin (Prionotus carolinus) examined from collections made during Delaware II cruises 762 and 450, March 4 - 25, 1976; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
30	1				1		76
38	5	4	1			1	290-355
39	8	1	7			7	230-318
57	1				1		130
62	1				1		149
63	2		1		1		150-223
80	2				2		85- 95
88	15	5	5		5	4	108-245
89	5		5			4	224-264
93	4		4			4	245-265
99	5				5		47- 58
101	5	1	3		1	3	166-175
107			1			1	253
112	9	2			7		185-230
113	5	2	3			2	185-250
115	1		1			1	230
119	15	6	9			9	198-274
120	15	3	6		6	6	175-273
121	5		5			5	203-237
132	1		1				235
142	6				6		41-177
144	5				5		56-135
146	7				7		75-167
151	2				2		68- 73
152	2				2		92-109
155	7				7		79-107
156	5				5		68-109
157	5				5		64-103
158	5				5		52-116
159	5				5		54-109
160	2				2		96-101
171	1				1		95

APPENDIX TABLE 59.--List of Striped searobin (Prionotus evolans) examined from collections made during Delaware II cruise 438, September 8-18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Male	Sex Ratio		Gonads Weighed	Size Range (mm)
			Female	Neuter		
4	1	1				302
9	2	2				272
10	7	2		5		57-306
11	6		1	5	1	54-165
13	7	1		6		96-181
24	6			6		104-265
89	1	1				285
94	1	1				276
96	5	2	1	2		250-275
119	10	2	8		8	221-324
120	2		1	1	1	221-240
126	2	2				286-291

APPENDIX TABLE 60.--List of Striped searobin (Prionotus evolans) examined from collections made during Delaware II cruise 758, October 15-November 7, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
4	10	3	7			7	296-380
5	1		1			1	337
14	5	2	3			3	294-370
15	2	1			1		295-389
18	1		1			1	313
19	1				1		162
20	2	1	1			1	355-361
30	2				2		147-150
67	3		2		1	1	245-308
70	7	3	2		2	2	290-317
78	1		1			1	235
105	3	2	1			1	231-313
106	4		3		1	3	236-307
109	1				1		147
110	4	1	3			2	234-277
112	1	1					289
113	7	4	1		2	1	62-301
114	3	2	1			1	215-250
115	12	4	5		3	3	55-326
116	2		1		1		151-242
125	8	3	5			5	232-320
140	2		2			2	294-327
141	1				1		111
143	10	2	3		5	2	114-280
145	2				2		132-150
147	12	7	3		2	2	120-324
149	1				1		218
150	2		2			2	249-295
151	6	3	2		1	1	215-270
153	3	3					222-290
154	8	6	2			2	209-276
155	1		1			1	230
156	9	3	6			6	230-300
157	2		1		1	1	264-304
158	1		1			1	285
161	10		9		1	7	220-341
162	10	5	5			4	241-359
163	9	3	6			4	230-377
164	7	1	1		5		64-268
165	6	4	1		1	1	260-339
166	3	1	2			2	235-338
167	1		1			1	259
168	1		1			1	332

APPENDIX TABLE 60 (continued)

Station Number	Specimens Examined	Male	Sex Ratio			Gonads Weighed	Size Range (mm)
			Female	Neuter			
172	3		2	1		2	277-284
180	10	2	5	3		5	270-392
181	1		1				316
186	1	1					263

APPENDIX TABLE 61-- List of Striped searobin (*Prionotus evolans*) examined from collections made during Delaware II cruises 446 and 447, December 1-18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio Female	Neuter	Gonads Weighed	Size Range (mm)
3	2			2		119-139
4	1			1		145
6	4			4		96-105
11	2			2		117-119
12	1			1		147
16	2	1	1		1	327-371
17	1	1				340
18	5	2	1	2		154-365
19	1		1		1	323
20	6		4	2	3	140-350
21	13	6	6	1	4	225-355
22	3	1	1	1		318-360
25	6			6		118-155
26	1			1		125
27	9	1	7	1	5	139-411
28	11	3		8		132-328
29	4		1	3		92-353
30	14	4	5	5	5	138-391
32	7	2	3	2	3	156-349
52	2	1		1		334-336
53	1	1				320
61	2	1	1		1	296-303
62	3			3		141-211
64	3	1	2		2	284-322
65	5	1	4		1	159-356
68	1		1		1	369
70	3	1	2			325-349
71	6	4	1	1	1	164-348
72	3	2	1		1	156-354
73	1		1		1	338
80	3			3		95-153
83	1			1		130
87	1	1				179
88	3			3		94-146
89	3			3		85-158
96	2		2		1	154-344
97	1			1		181
99	11	4	3	4	3	149-382
100	2		2		1	198-351
102	3	2	1			168-261

APPENDIX TABLE 61-- (continued)

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
			Female				
103	2		1		1		299-306
105	2				2		184-303
106	2	2					296-303
108	5	1	4			4	175-351
110	3	1	2			1	189-327
118	1		1			1	253
119	1				1		251
120	10	3	7			4	227-300
125	6	1	5			5	214-295
126	1	1				1	259-260
127	9	4	1		4	1	153-240
128	3		1		2	1	122-257
129	11	3	7		1	1	115-333
132	1		1			1	178
133	5	3	2			2	248-325
134	1		1			1	300
135	7	1	3		3	2	169-305
136	4		4			4	262-333
137	9	1	7		1	7	57-396
138	18	9	7		2	3	93-304
139	5	3	2			2	245-345
141	10	1	6		3	5	93-310
142	1		1				274
144	3		1		2	1	182-292
145	2	1	1			1	256-283
146	2	1	1			1	270-327
147	9	3	5		1	5	253-316
148	3		1		2	1	72-352
149	3		3				277-302
150	4				4		84-168
151	3		1		2	1	128-282
152	9	1	6		2	4	161-309
153	3	2	1			1	260-295
154	1		1			1	282
155	1				1		112
156	3	1	1		1	1	129-324
157	3	2	1			1	276-290
158	1		1			1	291
159	2				2		114-132
162	1				1		137

APPENDIX TABLE 61-- (continued)

Station Number	Specimens Examined	Male	Sex Ratio	Neuter	Gonads Weighed	Size Range (mm)
164	3	2	1			171-336
165	4	1		3		117-270
166	5			5		123-137
167	2			2		107-281
169	5			2		134-149
173	1			1		181
174	1	1				283
177	5			5		75-125

APPENDIX TABLE 62-- List of Striped searobin (*Prionotus evolans*) examined from collections made during Delaware II cruises 762 and 450, March 4 - 25, 1976; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
59	1			1		1	184
91	1			1			177
95	10	3	6		1	3	160-342
113	1	1					360
121	1		1			1	334
130	6	3	1		2	1	138-236
131	9	1	1		7	1	145-334
132	1	1					205
133	1				1		103
141	4		4			4	309-349

APPENDIX TABLE 63.--List of Summer flounder (Paralichthys dentatus) examined from collections made during Delaware II cruise 438, September 8-18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Male	Sex Ratio		Gonads Weighed	Size Range (mm)
			Female	Neuter		
1	25	8	17		14	317-430
2	15	6	1	8		291-394
3	28	10	16	2	16	308-421
4	15	1	14		14	312-495
10	15	10	5		5	304-486
11	3	1	2		2	367-491
12	7	3	4		4	335-453
13	25	21	4		4	290-352
22	1	1				519
23	1	1				316
24	28	16	12		12	290-645
25	18	11	7		7	281-574
31	2	1	1		1	610-621
32	13	5	8		8	318-552
33	2	1	1		1	442-565
34	3	2	1		1	352-466
35	7	5	2		2	305-470
89	6	4	2		2	356-413
93	2	2				389-395
94	15	8	7		5	209-496
95	25	16	9		9	320-525
96	28	16	12		11	180-415
116	1	1				315
117	13	13				270-318
118	9	7	1	1	1	252-347
119	22	11	7	4	7	194-350
120	26	12	9	5	9	185-379
122	21	16	5		5	282-406
123	11	7	4		3	287-451
124	5	5				310-339
125	9	8	1		1	290-371
126	30	14	16		16	243-650
127	15	11	4		4	301-485

APPENDIX TABLE 64--List of Summer flounder (Paralichthys dentatus)
examined from collections made during Delaware II
cruise 758, October 15-November 7, 1975; including
station, number examined, sex ratio, number of
gonads weighed, and size range information

Station Number	Specimens Examined	Male	Sex Ratio			Gonads Weighed	Size Range (mm)
			Female	Neuter			
1	5	1	4			4	337-442
2	12	5	7			4	336-392
3	9	1	8			8	335-383
4	28	6	22			16	290-429
5	14	3	11			10	296-517
6	4	1	3			3	340-386
10	7	6	1			1	336-582
11	5	3	2			1	332-529
12	20		20			17	328-397
13	5	1	4			3	352-447
14	16	2	13	1		13	322-465
15	9		8	1		8	234-545
16	8	4	4			4	345-540
17	2	2					323-389
18	13	4	9				332-520
19	17	4	13			8	323-553
20	13	1	12			11	326-550
21	8	4	4			4	317-498
22	5	1	4			4	358-585
23	2	1	1			1	391-490
24	1		1			1	756
25	15	2	13			10	336-543
26	3		3			3	371-415
27	2		2			2	355-391
28	8	2	6			6	337-565
29	13	10	3			3	305-445
30	9	3	6			6	347-601
31	1		1			1	431
32	1		1			1	420
36	1	1					390
38	1	1					498
41	2	2					460-462
46	2	2					432-476
48	1		1			1	574
60	1	1					422
64	2	2					352-378
65	2		2			2	395-505
66	2		2			2	362-437
67	4		4			4	279-410
68	3		3			3	352-378
69	3		3			2	323-423
70	6	3	3			2	282-379
71	1		1			1	390

APPENDIX TABLE 64 (continued)

Station Number	Specimens Examined	Male	Sex Ratio Female	Neuter	Gonads Weighed	Size Range (mm)
72	1		1		1	374
73	6		6		6	338-390
74	2		2		2	382-384
75	4		4		3	374-530
76	10	1	9		8	346-418
77	7	4	3		2	307-655
78	14	6	8		8	333-521
79	5	2	3		3	361-471
80	6	4	2		2	334-535
81	6	6				330-408
82	1	1				349
84	2	2				354-460
89	2	2				392-460
92	1	1				353
93	6	4	2		2	331-536
94	4	2	2		1	309-410
95	22	14	8		8	319-628
96	2	1	1		1	279-614
97	6	2	4		4	372-553
98	2	2				299-300
99	4	3	1		1	308-407
108	5	3	2		1	264-478
109	13	5	5	3	5	204-440
110	5	3	2		2	202-361
111	3	1	2		2	229-475
112	21	13	7	1	4	216-557
113	14	6	7	1	7	216-460
114	14	5	9		8	258-449
115	16	6	9	1	8	190-396
116	8	6	2		1	256-452
117	1		1		1	410
118	26	18	8		8	255-544
119	3	1	2		2	323-411
120	2		2		2	360-367
121	11	9	2		1	257-675
122	6	5	1		1	278-544
123	3	3				294-297
124	1	1				385
127	2	2				366-423
133	5	5				261-322
139	1	1				239
140	4	3	1		1	254-394
141	1	1				262
142	7	5		2		231-314
143	2	2				284-353
144	2		2		2	240-242

APPENDIX TABLE 64 (continued)

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
			Female				
145	5	3	2			1	219-515
147	10	7	3			1	219-381
148	2	2					270-312
150	4	2	2			2	317-440
151	1		1			1	404
153	6	3	2		1	2	242-441
154	4	3	1			1	236-339
155	3	2	1			1	287-445
156	5		4		1		237-460
157	10	7	3			2	241-361
158	10	6	4			4	245-522
159	11	5	6			6	256-483
160	3	1	2			2	305-452
161	21	5	15		1	12	219-495
162	19	9	8		2	8	209-443
163	11	3	7		1	7	229-548
164	14	11	3			3	248-367
165	5	3	2			1	322-410
166	5	3	2			2	310-384
167	7	1	5		1	4	211-430
168	7	2	5			5	259-541
169	5	2	3			3	331-404
170	1		1			1	340
171	11	2	9			7	254-459
174	2		1		1		347-362
175	1		1			1	416
176	2	2					281-320
177	6	4	2			1	302-396
178	7	3	4			3	275-403
179	7	3	2		2	1	279-383
180	12	6	5		1	4	292-415
181	6	2	4			3	299-384
182	5	3	2			1	213-388
183	5	2	2		1	1	270-608
184	8		8			5	314-430
185	4	2	2			2	272-370
186	2	1	1			1	286-443
187	2	1	1			1	299-401
189	2		2			1	354-373
190	3		3			2	375-400

APPENDIX TABLE 65 -- List of Summer flounder (*Paralichthys dentatus*) examined from collections made during Delaware II cruises 446 and 447, December 1 - 18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio		Gonads Weighed	Size Range (mm)
			Female	Neuter		
4	1	1				297
11	2	2				240-265
14	1	1				295
15	11	2	9		7	283-545
16	15	4	10	1	8	296-572
17	5	3	2		2	318-500
18	3	1	2		2	386-685
19	3	1	2		2	357-475
20	2	1	1		1	366
21	5	4	1		1	315-453
22	1		1		1	365
25	3		3		2	319-406
27	6	1	5		5	338-509
28	3		3		3	386-392
29	4	2	2		1	325-548
30	7	3	4		4	339-483
32	8	2	6		5	332-401
33	1		1		2	376
35	3	1	2		2	322-527
36	7	3	4		4	284-635
37	3	2	1		1	348-410
38	2	2				363-374
39	5	3	2		2	353-414
44	11	9	2		2	344-534
48	1		1		1	460
49	10	10				330-476
52	11	8	3		2	334-699
53	11	11				330-502
61	8	7	1		1	298-389
62	8	5	3			282-386
63	5	1	4		4	320-402
64	12	4	8		4	283-506
65	7	4	3		3	318-463
66	1	1				354
67	2	2				310-332
69	2	1	1		1	324-336
70	9	4	5		3	302-478
71	12	5	7		6	293-550
72	1		1		1	601
73	6	2	3	1	3	258-386
75	2		2		2	351-524

APPENDIX TABLE 65-- (continued)

Station Number	Specimens Examined	Male	Sex Ratio			Gonads Weighed	Size Range (mm)
			Female	Neuter			
86	3.	1	1	1		1	244-358
90	1		1			1	414
93	3	3					318-358
94	6	5	1			1	309-406
95	6	5	1			1	366-444
96	4	3	1			1	325-546
99	24	22	2			2	291-541
100	1			1			344
102	20	18	2			1	280-463
103	8	3	5			4	284-462
104	5	2	3			3	326-575
105	21	13	8			7	299-550
106	16	9	7			7	275-571
108	25	16	8	1		3	260-476
109	18	15	3			3	231-522
110	19	17	1	1		1	247-400
111	4	4					317-395
114	4		4			4	487-556
115	6	3	3			3	310-567
116	8	4	3	1		3	259-438
117	3	3					384-454
118	4	2	2			2	248-395
125	7	5	2			2	253-479
126	20	14	5	1		4	231-568
127	6	3	2	1			155-443
128	2		2			2	223-605
129	15	6	9			1	217-360
130	6	3	3			3	260-525
131	8	3	5			3	246-561
132	4	2	1	1		1	244-432
133	18	10	4	4		3	241-538
134	7	4	2	1		2	348-426
135	16	9	5	2		5	225-392
136	10	4	5	1		5	236-441
137	15	6	6	3		5	205-487
138	15	9	2	4		9	193-427
139	10	7	2	1		2	245-355
140	25	11	11	3		9	233-443
141	17	5	7	5		6	194-542

APPENDIX TABLE 65-- (continued)

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
			Female				
142	7	4	3			3	290-417
143	25	7	17		1	12	222-497
144	16	9	4		3	4	208-411
145	10	4	5		1	4	209-427
146	9	2	7			6	323-413
147	26	9	16		1	15	230-494
148	7	2	1		4		178-236
149	10	2	6		2	5	231-445
150	6	1	1		4		185-297
151	12	7	4		1	3	211-384
152	18	12	4		2	3	207-400
153	20	8	9		3	8	232-366
154	15	6	7		2	6	207-518
155	19	8	2		9	2	166-411
156	16	6	3		7	2	191-427
157	22	11	8		3	3	205-373
158	16	12	4			2	246-433
159	14	8	5		1	1	211-319
160	9	1	8			5	280-381
161	7	3	3		1	2	207-386
162	3	2			1		271-317
163	10	5	5			4	246-450
164	8	7	1			1	222-422
165	7		2		5	1	205-270
166	2		1		1	1	189-316
167	1	1					237
168	20	7	7		6	6	223-461
170	3	3					219-234
171	5	3			2		236-299
172	8	4	3		1	2	256-359
173	6	2	4			2	283-416
174	6	2	4			4	336-480
175	4	2	1		1	1	288-391
176	1	1					223
180	1	1					318

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APPENDIX TABLE 66-- List of Summer flounder (*Paralichthys dentatus*) examined from collections made during Delaware II cruises 762 and 450, March 4-25, 1976; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Female	Neuter	Gonads Weighed	Size Range (mm)
35	3		3		3	413-542
36	1		1		1	417
37	4	2	2		2	287-634
38	5	2	3		3	330-465
39	8	8				310-491
40	3		3		3	380-483
41	4	2	1	1		383-586
42	3		3		3	493-569
47	12	3	9		9	350-519
59	7	2	5		5	340-580
60	3		3		3	374-497
61	2		2		2	475-495
62	1	1				372
63	2		2		2	406-424
73	1		1		1	277
76	1			1		170
84	3	2	1		1	285-441
87	5	2	3		3	309-362
89	7	3	4		4	332-496
90	7	6	1		1	301-445
95	2	1	1		1	362-489
97	5	5				322-403
98	5		1	4	1	183-360
99	1		1		1	573
100	8	5	3		2	255-311
101	12	11	1		1	238-300
102	4	2	2		1	250-343
103	1	1				300
105	1		1		1	437
107	8	5	3		3	294-436
112	7	2	5		5	292-445
114	1		1		1	314
115	6	2	4		4	273-583
116	3		3		3	372-501
118	1		1		1	520
119	1	1				361
120	8	6	2		2	251-619
129	7	6		1		184-289
130	23	20	3		3	239-477
131	8	3	5		5	236-375

APPENDIX TABLE 66 -- (continued)

Station Number	Specimens Examined	Male	Sex Ratio			Gonads Weighed	Size Range (mm)
			Female	Neuter			
132	4	1	1	2			189-266
133	18	9	6	3		4	210-305
134	2	2					248-287
135	5		4	1		3	229-470
136	3		2	1		2	214-335
138	4		4			3	210-400
139	1			1			285
140	3	3					281-360
141	16	10	6			6	210-444
142	7	1	4	2		3	200-422
143	2		2			2	344-441
144	4	2	2			2	208-493
145	1			1			193
146	5	3	1	1			198-230
147	3	1		2			215-251
148	4	1	1	2		1	199-366
151	5	2	2	2		2	190-340
152	3		3			2	235-433
154	1		1			1	358
155	27	15	3	9			189-483
156	5	1	3	1		2	175-276
157	3	1	2			1	228-372
158	5	2	1	2		1	230-377
160	7	1		6			183-225
171	3	3					293-309
172	2		2			1	251-306
174	1	1					305

APPENDIX TABLE 67.--List of Fourspot flounder (Paralichthys oblongus) examined from collections made during Delaware II cruise 438, September 8-18, 1975; including station number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Sex Ratio			Gonads Weighed	Size Range (mm)
		Male	Female	Neuter		
6	5			5		72-109
7	6			6		71-153
8	1			1		78
9	5			5		72-111
10	5			5		76-127
11	8			8		50-109
12	2			2		67- 68
17	10	6	4		3	256-349
18	1		1			314
20	9	3		6		205-314
22	6			6		200-352
24	8	1		7		82-220
25	3			3		66-116
31	1			1		242
35	1			1		103
41	3			3		239-287
43	9	5	4		3	256-321
44	9			9		218-281
46	5	1	3	1		245-274
47	6	3		3		236-347
48	8	3	3	2	3	228-320
50	10	6	4		3	219-307
52	10	5	5		3	182-328
60	5		4	1	2	247-341
61	10	4	5	1	1	215-359
62	10	9	1		1	216-287
64	5	2	3		3	243-300
70	4		3	1	2	228-259
71	6	1	1	4		216-286
74	4	1	3		3	201-217
75	10	7	3		2	224-291
76	10	4	6		2	139-274
79	5	1	3	1	2	78-289
80	3		2	1	1	228-300
83	10	5	4	1	2	157-301
84	11		4	7	3	147-285
86	11	6	3	2	3	196-284
88	13	6	5	2	2	202-295
90	3		1	2	1	248-353
92	3			3		57- 91
96	4			4		115-122
97	2		2		2	247-273

APPENDIX TABLE 67 (continued)

Station Number	Specimens Examined	Sex Ratio			Gonads Weighed	Size Range (mm)
		Male	Female	Neuter		
99	4		4		2	257-278
101	4		4		4	256-305
102	3	1	2		2	265-272
103	9	6	2	1		222-306
104	10		4	6	4	230-286
105	1		1			244
106	3		2	1	2	220-275
109	7	2	2	3	2	214-304
112	1			1		236
113	1		1			270
114	1		1		1	245
115	13	1	8	4	8	163-310

APPENDIX TABLE 68.--List of Fourspot flounder (Paralichthys oblongus) examined from collections made during Delaware II cruise 758, October 15-November 7, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined		Sex Ratio			Gonads Weighed	Size Range (mm)
		Male	Female	Neuter			
6	1		1				252
7	9	1	5	3		5	212-325
9	1	1					265
19	1			1			182
22	1			1			138
31	15	2	4	9		3	119-360
32	2	1		1			188-270
33	4	2	2			2	255-291
34	5		3	2		3	254-279
35	1		1			1	335
36	3			3			282-308
37	3	1	2			2	279-309
38	6		3	3		3	265-360
39	8	1		7			244-324
42	10	3	7			5	249-409
43	1	1					316
44	10	7		3			222-350
46	10	2	2	6			223-292
47	14	3	11			10	224-335
48	3	3					251-274
49	2	1	1			1	277-279
51	10	2		8			241-288
52	2	1	1			1	296-325
53	1		1			1	305
55	3	2	1			1	242-365
56	1		1				278
59	2		2				276-280
60	11			11			178-283
61	7		6	1		5	212-271
62	5	1	3	1		1	245-282
64	2	1		1			255-261
67	8	3	4	1			234-290
76	1			1			127
80	7	3	2	2			174-313
81	1		1			1	271
82	7	2	1	4			249-285
83	5		3	2		2	244-290
84	9	2	6	1		3	230-312
91	4	2	2			2	247-308
92	9		5	4		3	226-302
95	2			2			145-151
100	6			6			194-345
101	10	3	6	1		6	226-319

APPENDIX TABLE 68 (continued)

Station Number	Specimens Examined	Male	Sex Ratio Female	Neuter	Gonads Weighed	Size Range (mm)
102	6		3	3	3	205-290
104	1		1			240
105	9	1	5	3	4	195-321
106	12	2	5	5	4	155-296
125	8		1	7	1	202-271
126	2			2		229-294
131	6	2	1	3	1	211-279
132	8	2	3	3		215-269
135	4	1	2	1	2	207-228
136	1			1		199
179	1			1		171
181	3			3		160-195

APPENDIX TABLE 69-- List of Fourspot flounder (*Paralichthys oblongus*) examined from collections made during Delaware II cruises 446 and 447, December 1-18, 1975; including station number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio Female	Neuter	Gonads Weighed	Size Range (mm)
2	2			2		97-178
4	3			3		135-142
6	5			5		142-172
8	1			1		158
11	4			4		160-195
12	3			3		182-191
15	4	2		2		265-309
17	7	5	2			255-298
18	4			4		225-286
19	4	1		3		249-277
21	5	1	3	1	3	200-327
26	1		1		1	342
27	1			1		154
30	9			9		134-294
31	11	3	4	4		152-348
32	3	1	1	1		270-309
33	3		1	2		215-336
34	1			1		270
35	3		2	1		308-339
36	2	1	1		1	285-305
37	10	3	5	2		255-308
38	5	3	1	1		211-287
39	10	4	5	1	1	272-310
42	5		4	1	4	267-312
44	15	7	5	3		212-305
45	1			1		275
48	4		2	2		232-320
49	11	7	2	2	1	232-296
50	2	1	1		1	241-281
51	12	6	6		5	268-430
53	4	2	2			234-264
56	11	7	4			255-329
57	5			5		226-304
61	7			7		244-296
62	6		3	3		189-297
65	5	2		3		220-292
68	1			1		255
69	8		5	3	3	266-340
70	4	1	2	1		265-321
71	1		1			287
72	5	1	3	1	2	235-270
73	5			5		189-278

APPENDIX TABLE 69 -- (continued)

Station Number	Specimens Examined	Male	Sex Ratio		Gonads Weighed	Size Range (mm)
			Female	Neuter		
75	6		2	4		179-346
86	2			2		144-169
95	4		4		2	266-302
96	1	1				270
97	10	1	7	2	5	212-315
98	3	1	1	1	1	250-345
99	8	5	1	2	1	210-275
102	1			1		336
107	4	1	1	2	1	232-289
108	3	1	2			175-284
111	1			1		209
112	4	3		1		248-292
114	3	1		2		230-269
122	10	1	4	5	1	196-268
123	8			8		160-222
171	1			1		175
172	2			2		109-207
174	3	1		2		194-272

APPENDIX TABLE 70 -- List of Fourspot flounder (*Paralichthys oblongus*) examined from collections made during Delaware II cruises 762 and 450, March 4 - 25, 1976; including station, number examined, sex ratio, number of gonads weighed; and size range information.

Station Number	Specimens Examined		Sex Ratio			Gonads Weighed	Size Range (mm)
		Male	Female	Neuter			
12	1		1			1	338
26	11	4	7			7	171-270
27	1			1			186
35	11	3	8			8	268-379
36	13	3	8	2		5	195-407
37	12	2	2	8		2	190-299
38	19	1	6	12		6	216-316
39	18	7	7	4		7	194-293
40	8	8					236-316
42	7	1	6			6	258-372
43	3		1	2		1	249-355
44	7		2	5		2	278-378
47	15	4	6	5		6	245-310
48	14	10	2	2		2	257-395
50	8		7	1		6	249-370
56	3			3			141-156
57	4		2	2		1	170-285
58	11	4	5	2		4	205-310
59	10	3	2	5		1	230-392
60	12	3	8	1		8	264-365
62	5	3	2			2	248-280
63	8	6	1	1		1	222-275
85	4		3	1		3	200-282
88	14			14			208-282
89	13	3	4	6		3	199-262
91	3	1		2			255-262
94	11	8	2	1		2	240-350
97	7	4	2	1		2	205-273
100	4	2	2			1	206-334
107	2	1		1			240-286
108	4	2	2			2	252-290
111	2			2			226-229
115	2	1		1			260-263
117	1		1			1	287
118	5	1	4			4	211-256
119	1		1			1	240
123	1		1			1	229

APPENDIX TABLE 70 -- (continued)

Station Number	Specimens Examined	Sex Ratio			Gonads Weighed	Size Range (mm)
		Male	Female	Neuter		
70	1		1		1	307
72	2	1	1		1	269-288
73	5	4	1		1	256-289
74	1		1		1	287
75	3	2	1		1	269-280
76	2		2		2	261-298
77	11	9	2		2	185-252
78	15	6	9		7	188-285
79	8	4	4		2	235-274
80	8	2	5	1	5	134-325
81	11	8	3		2	206-273
82	15	10	5		3	235-284
83	20	6	13	1	8	171-311
84	9	5	4		4	167-278
85	12	8	2		1	230-289
86	15	9	6		5	218-292
87	14	10	4		2	210-275
88	14	7	7		3	197-287
89	16	10	4	2	2	62-259
90	16	6	8	2	6	191-321
91	10	7	3		2	207-283
92	7	4	3		3	173-237
93	10	4	5	1	2	188-285
94	4	2	2		2	257-300
104	2		2		2	256-307
138	2		2		2	264-278
140	1	1				260
141	13	4	7	2	3	180-257
144	15	3	10	2	10	192-287
147	13	6	6	1	6	48-296
148	6	4	2		2	208-286
149	15	4	11		8	243-308
150	3		3		2	252-275

APPENDIX TABLE 71.--List of Windowpane (Scophthalmus aquosus) examined from collections made during Delaware II cruise 438, September 8-18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
1	9	1	2		6	2	76-279
2	5	1	1		3		44-155
3	7	2	2		3		115-173
4	10	5	4		1	4	175-318
6	4	3	1			1	210-281
7	17	7	10			9	145-296
8	4	3			1		199-264
9	14	6	3		5	3	64-294
11	13	9	4			3	171-249
12	9	3	3		3	3	111-282
13	8	4	1		3		126-217
17	1		1				243
19	18	6	7		5	4	96-319
20	8	3	5			4	221-285
22	10	6	3		1	1	198-298
23	7	5	2			1	196-246
24	24	10	9		5	6	104-264
25	17	7	6		4	5	96-280
31	6	3	3			3	234-273
32	1	1					227
34	4	1	2		1	2	107-222
35	19	7	8		4	8	111-292
41	15	5	9		1	8	227-316
80	3	1	2			2	250-266
83	15	8	7			7	211-280
84	14	8	6			6	232-276
86	16	10	6			6	187-282
88	15	8	7			5	240-273
89	15	7	8			8	230-302
90	14	7	7			6	237-300
92	15	10	5			5	185-265
93	4	4					170-265
94	10	5	4		1	4	210-286
95	15	12	2		1	2	140-273
96	9	3	6			5	196-269
97	1	1					271
98	2	1	1			1	225-261
99	8	5	2		1	2	239-286
100	2	1	1				270-285
115	7	4	3			3	249-280
116	7	5	1		1	1	218-262
118	5	3			2		178-240
119	10	6	4			4	186-243

APPENDIX TABLE 71 (continued)

Station Number	Specimens Examined	Sex Ratio			Neuter	Gonads Weighed	Size Range (mm)
		Male	Female				
120	10	2	6		2	6	182-241
121	11	3	8			8	206-294
123	10	4	5		1	5	163-265
124	3	1	2			2	188-267
125	1	1					185
126	15	5	3		7	3	154-248

APPENDIX TABLE 72.--List of Windowpane (*Scophthalmus aquosus*) examined from collections made during Delaware II cruise 758, October 15-November 7, 1975; including station number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Male	Female	Neuter	Gonads Weighed	Size Range (mm)
2	4	3	1		1	230-250
3	2	1	1		1	222-227
4	10		10		7	193-323
5	7	5	1	1		181-256
6	3	1	1	1	1	170-272
7	2	2				270-295
11	1		1		1	237
12	1	1				330
13	5		5		5	180-248
14	15	10	5		3	215-278
15	7	3	4		4	230-284
16	1	1				240
17	2	2				232-261
18	11		9	2	8	90-275
19	19	11	6	2	4	126-329
20	21	5	11	5	9	87-284
21	8	1	5	2	4	130-265
22	1		1		1	219
23	1	1				241
26	1		1		1	264
28	9	3	6		6	208-299
29	14	7	6	1	6	127-301
30	13	8	5		5	219-288
31	16	8	8		6	205-320
32	8	6	2		2	205-289
33	1		1		1	263
65	2	1	1		1	233-315
66	2	1	1		1	241-261
67	17	3	14		9	228-298
68	2		2		2	215-261
69	1		1		1	269
70	15	2	13		12	204-332
71	1		1		1	270
72	3	1	1	1	1	185-259
73	12	5	6	1	6	166-295
74	20	10	10		9	175-305
75	11	8	3		3	170-292
76	17	12	5		5	172-291
77	9	6	3		3	215-296
78	9	7	2		1	254-300
93	1	1				252
105	1		1		1	266

APPENDIX TABLE 72 (continued)

Station Number	Specimens Examined	Male	Sex Ratio			Gonads Weighed	Size Range (mm)
			Female	Neuter			
108	1	1					185
109	1	1					245
110	2		2			1	232-261
111	1		1				199
112	5	5					194-260
113	6	3	3			2	200-259
114	7		6	1		2	208-271
115	2	1	1				229-235
120	1	1					231
157	1	1					184
160	1	1					247
161	5		5			4	215-275
162	17	12	5			3	192-277
163	11	3	8			6	207-278
164	12	8	4			2	188-295
165	14	10	4			3	190-278
166	8	5	3			3	204-276
167	8	5	3			3	203-260
168	18	4	13	1		9	191-280
169	1	1					215
171	2		2			2	225-235
172	7	3	4			3	190-272
176	8	4	4			4	241-273
177	10	9	1			1	177-268
178	10	4	6			6	204-285
179	9	7	1	1		1	181-274
180	11	5	6			5	181-257
181	14	8	6			2	200-272
182	5	4	1			1	227-278
183	5	3	2			2	230-297
184	2		2			2	231-267
185	13	7	6			3	153-291
186	6		6			6	248-272
187	2	2					231-253
190	3		3			1	239-275

APPENDIX TABLE 73-- List of Windowpane (Scophthalmus aquosus) examined from collections made during Delaware II cruises 446 and 447, December 1-18, 1975; including station number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
1	.8		2		6	1	119-255
2	.8	5	1		2		152-253
3	9	3	5		1	5	141-337
4	15	7	3		5	3	145-330
5	6	5	1				187-263
6	13	5	3		4	2	127-299
7	9	3	1		5	1	120-300
8	19	8	8		3	3	106-327
9	21	6	9		6	4	96-297
10	20	4	14		2	7	135-325
11	25	9	11		5	8	130-316
12	9	5	3		1	3	154-308
13	17	11	6			5	153-319
14	15	4	8		3	5	137-290
15	4	2	2			1	261-281
16	4	1	3			3	261-300
20	10	3	7			5	242-341
21	9	2	7			6	225-319
22	1		1				305
23	20	7	11		2	7	139-310
24	16	6	9		1	5	150-294
25	15	4	11			8	236-327
26	19	5	9		5	9	136-346
27	17	10	4		3	3	146-261
28	36	24	9		3	4	102-292
29	19	8	6		5	6	103-296
31	15	6	8		1	5	201-307
32	15	5	10			8	222-311
34	15	6	8		1	4	217-283
35	7	5	2				211-325
36	1		1			2	311
62	13	10	3			2	232-290
63	6	4	2			1	242-296
64	3	2	1			1	252-304
65	3	2	1			1	236-299
66	5	3	2			1	259-313
67	1	1	1			1	267
68	2	1	1			1	261-304
69	1		1			1	302

APPENDIX TABLE 73 -- (Continued)

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
151	10	6	4			3	214-278
152	11	9	2			2	219-276
153	4	3	1			1	250-276
154	14	6	8			5	207-258
155	15	2	13			7	208-276
156	15	5	10			9	224-276
157	16	10	6			4	208-275
159	7	4	3			2	212-263
160	10	2	7	1		3	222-287
161	16	6	10			9	211-255
162	12	5	7			3	206-282
163	2	2					232-256
164	15	12	3			2	192-270
165	11	7	4			3	202-265
166	16	8	8			6	193-273
167	11	7	4			3	208-269
168	15	7	8			6	201-305
169	15	4	10	1		6	198-277
170	14	10	4			2	196-262
171	18	11	7			5	186-247
172	11	6	5			3	205-286
175	3		3			3	235-263
176	15	7	7	1		6	189-270
177	15	7	8			7	185-223
178	15	9	6			2	196-242
179	15	9	6			4	171-385
180	15	7	8			5	214-282

APPENDIX TABLE 74-- List of Windowpane (*Scophthalmus aquosus*) examined from collections made during Delaware II cruises 762 and 450, March 4 - 25, 1976; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
1	2	1	1			1	247-250
2	14	7	6	1		5	154-254
4	12	5	4	3		1	136-306
5	7	4	3			3	150-329
6	6	2	4			4	266-337
7	13	4	6	3		3	163-317
8	12	5	6	1		6	146-321
9	14	2	7	5		7	118-335
10	9	3	5	1		5	140-337
17	5	2	3			3	169-335
18	14	7	6	1		6	126-313
19	16	2	13	1		13	175-347
20	19	6	9	4		9	168-316
21	15	4	11			11	192-346
22	5	3	2			2	257-334
23	1		1			1	268
28	1		1				250
29	5	1	3	1		3	120-318
30	7		6	1		5	177-337
31	13	7	5	1		3	151-316
36	1	1					236
51	5	4	1			1	233-292
52	9	2	7			7	172-306
53	5	4	1			1	210-278
54	5	1	4			4	262-306
55	10	5	5			5	257-307
56	1	1					234
57	5	3		2			212-279
66	4	3	1			1	262-296
67	6	3	3			3	245-280
68	8	2	6			5	233-325
69	3	2	1			1	227-259
70	4	1	3			2	212-280
71	5	2	3			3	236-260
75	5	4	1			1	195-285
76	7	3		4			204-266
77	21	5	11	5		5	44-315
78	19	9	10			9	188-275
80	4	4					206-261
81	4	3		1			209-260
82	4	4					198-235
103	2	1	1			1	274-280
130	1		1				205
142	1		1				277

APPENDIX TABLE 74 -- (continued)

Station Number	Specimens Examined	Sex Ratio	Gonads Weighed	Size Range (mm)	
		Male	Female	Neuter	
143	2	1	1	1	244-295
144	2	1	1	1	241-251
146	3	2			265-268
147	1				240
148	1			1	234
149	3	1	2	2	252-310
151	6	2		4	87-245
152	2	1	1		249-259
153	3	3			262-270
155	9		4	5	90-259
156	4		4		242-309
157	5	4	1		215-276
158	7	3	4		233-289
159	11	4	7		204-291
160	14	4	9	1	94-292
161	3	1	1	1	101-237
162	3	2	1		225-290
164	2		1	1	146-275
169	5	2	3		225-260
170	10	1	4	5	32-297
171	2		2		236-269
173	2	2			167-246
174	2		2	2	278-297

APPENDIX TABLE 75.--List of Yellowtail flounder (*Limanda ferruginea*) examined from collections made during Delaware II cruise 438, September 8-18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
9	3				3		39- 58
17	6	2			4		155-336
18	6	1	3		2	2	170-369
20	10	5	2		3		166-206
41	11	2	2		7	2	149-315
43	5	3	1		1	1	197-331
44	6	2	1		3		166-347
52	5	2	1		2		156-375
80	3			1	2		182-282
88	3			1	2	1	153-172

APPENDIX TABLE 76.--List of Yellowtail flounder (*Limanda ferruginea*) examined from collections made during Delaware II cruise 758, October 15-November 7, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
7	3	2			1		179-316
8	1				1		195
9	6	1			5		198-335
34	8	2	4		2	3	191-232
35	8	5	3			3	200-366
36	2	1	1				299-352
39	1	1					332
48	1		1			1	342
50	1	1					186
60	10	6	2		2	2	195-274
61	3	1	1		1	1	198-301
62	6	4	2			2	202-395
67	1		1			1	358

APPENDIX TABLE 77 -- List of Yellowtail flounder (*Limanda ferruginea*) examined from collections made during Delaware II cruises 446 and 447, December 1 - 18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio		Gonads Weighed	Size Range (mm)
			Female	Neuter		
3	1		1		1	377
5	2		2		2	325-381
12	2		2			351-363
15	11	4	3	4	3	195-358
16	7	4	3		2	201-309
17	10	7	2	1	1	212-300
18	2	1		1		190-206
19	1		1		1	379
20	10	1	3	6	1	155-246
21	14	9	3	2	3	207-330
22	10	8	2		2	294-380
23	1	1				318
26	5	1	4		4	293-394
27	3	1	2		2	263-381
28	12	5	7		7	312-381
31	3		3		3	262-382
32	14	6	8		4	193-362
33	12	5	7			202-292
34	3	2	1			235-253
35	7	5	2		1	227-388
36	6	5	1			234-382
62	1		1		1	376
66	2	1	1		1	304-383
71	8	5	3		1	183-262
72	10	6	2	2		174-233
73	8	1	7			209-375
74	5	1	4		2	197-311
75	4		4		4	289-372
86	1	1				350

APPENDIX TABLE 78-- List of Yellowtail flounder (*Limanda ferruginea*) examined from collections made during Delaware II cruises 762 and 450, March 4 - 25, 1976; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
			Male	Female			
1	2			2		2	317-391
2	7	5		2		2	280-386
4	4	4					258-338
8	1			1		1	379
9	5	3		2		2	249-328
10	11	5		6		6	255-386
12	7	4		3		2	230-330
16	9	6		3		3	236-319
17	1			1		1	245
18	15	4		10	1	10	244-418
21	1			1		1	251
22	2			2		2	360-383
23	4			4		3	363-395
27	8	4		4		4	274-401
51	7	2		5		5	297-363
52	2			2		2	316-365
53	1			1		1	385

APPENDIX TABLE 79.--List of Winter flounder (Pseudopleuronectes americanus) examined from collections made during Delaware II cruise 438, September 8-18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information

Station Number	Specimens Examined	Sex Ratio			Gonads Weighed	Size Range (mm)
		Male	Female	Neuter		
1	6	2	4		4	172-209
2	5	3	2		1	167-278
3	15	7	4	4	2	151-270
6	3	1	2		2	202-212
9	2			2		57- 61
10	3	2		1		157-226
17	3	1	2		2	189-345
18	6	2	3	1	2	164-328
20	3	2	1			211-269
31	6	1	5		5	220-297
41	6	3	2	1	2	200-305
43	10	6	3	1	2	186-350
79	2	2				212-247
80	10	1	9		8	182-295
83	8	3	4	1	4	187-236
86	2	1	1		1	211-244
88	1		1		1	190
90	4	1	1	2	1	123-215
92	1	1				192
95	1	1				210
99	2		2		2	215-222
113	1		1		1	366
115	2	1	1		1	214-305

APPENDIX TABLE 80.--List of Winter flounder (Pseudopleuronectes americanus) examined from collections made during Delaware II cruise 758, October 15-November 7, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined		Sex Ratio			Gonads Weighed	Size Range (mm)
		Male	Female	Neuter			
4	1		1			1	299
6	2	2					222-296
7	5	1	4			4	307-345
9	1		1				225
14	1		1			1	307
15	4	2	2			2	224-268
16	3	2	1			1	265-298
21	1		1			1	307
22	1		1				240
23	2		2			2	262-308
24	1		1			1	317
25	1		1			1	320
28	1	1					294
29	2		2			2	283-285
31	14	4	8	2		8	195-337
32	7	3	3	1		2	210-324
33	5	2	3			2	198-338
34	11	2	9			8	185-360
35	1		1			1	322
48	1		1			1	308
60	4		4			4	199-232
61	15	4	11			8	195-356
62	2	1	1			1	259-271
67	9	6	3			3	205-338
69	1		1			1	306
70	2	1	1			1	213-244
71	2	1	1				202-232
73	5	2	3			3	221-251
75	1		1				307
78	8	2	6			5	209-258
79	1		1			1	227
81	2		2			2	236-237
93	4	2	2			1	195-260
95	1		1			1	222
97	1	1					217
105	3	3					194-230
106	1		1			1	222

APPENDIX TABLE 81-- List of Winter flounder (*Pseudopleuronectes americanus*) examined from collections made during Delaware II cruises 446 and 447, December 1 - 18, 1975; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
1	2	1	1			1	245-273
2	10	1	9			7	242-332
3	2		1	1		1	157-252
4	6	1	2	3		2	159-295
5	15	7	8			8	226-355
6	4	2	2			1	255-333
7	10	4	6			5	210-322
8	7	4	3			3	235-334
9	4	4					140-263
10	8	3	5			4	174-352
11	4	2	2			2	252-297
12	5	1	4			4	229-269
13	16	12	4			4	220-313
14	5	3	2				222-265
15	3	1	1	1			197-241
16	2	2					243-296
21	1		1			1	240
22	2		2			1	207-225
23	3		3			1	259-320
24	15	6	6	3		3	117-284
25	15	9	6			3	217-296
26	15	5	9	1		4	220-355
27	3	2		1			247-277
28	3	1	2			2	322-357
29	12	8	4			4	260-359
31	15	5	10			4	233-353
32	5	1	2	2			207-306
33	2	1	1			1	271-304
34	15	7	7	1		4	218-310
35	17	8	9			8	233-312
36	2	2					279-329
62	8	2	6			5	190-276
66	1		1			1	336
68	2	1	1			1	302-371
69	3	2	1			1	225-276
70	1			1			248
72	1		1			1	241
73	3		3			2	202-371
74	6	1	5			4	233-352

APPENDIX TABLE 81-- (continued)

Station Number	Specimens Examined	Sex Ratio			Neuter	Gonads Weighed	Size Range (mm)
		Male	Female				
75	4	1	3			2	206-271
76	1		1			1	256
77	2		2			2	234-337
78	8	1	7			7	241-315
79	1		1				293
80	6	1	5			5	232-313
81	3	2	1			1	221-250
82	1	1					305
83	2		2			1	252-260
84	2	1	1			1	198-264
85	2	1			1		230-300
88	3	1	2			2	240-308
89	1		1			1	337
90	1		1			1	345
91	1		1				296
92	1	1					240
94	1	1					190
103	3	3					199-231
104	1		1				336
161	1		1				247
164	1		1				247
166	7	3	4			4	230-303
168	1	1					229
169	1		1			1	317
170	2		2			1	262-321
172	1		1			1	345
173	1	1					211
174	1			1			218
176	4	1	3			3	289-363
177	1	1					256
178	1			1		1	140
179	1		1			1	251
181	1		1			1	281

APPENDIX TABLE 82-- List of Winter flounder (*Pseudopleuronectes americanus*) examined from collections made during Delaware II cruises 762 and 450, March 4 - 25, 1976; including station, number examined, sex ratio, number of gonads weighed, and size range information.

Station Number	Specimens Examined	Male	Sex Ratio			Gonads Weighed	Size Range (mm)
			Female	Neuter			
1	16	3	10	3		10	158-338
2	2	2					242-278
4	13	2	8	3		5	164-351
5	12	1	4	7		3	115-441
6	4	2	2			1	185-339
7	18	5	10	3		10	135-365
8	15	5	9	1		9	180-382
9	14	1	6	7		6	108-292
17	8	3	3	2		3	115-342
18	14	1	9	4		7	133-292
19	10	2	6	2		6	140-311
20	15	6	4	5		4	132-351
21	6	1	5			5	250-407
22	9	4	3	2		3	157-340
23	6	5	1			1	230-303
28	2		2			2	250-281
29	3	1	2			2	237-351
30	10	4	5	1		4	108-385
31	2	2				2	317-408
51	5		2	3		2	144-246
52	16	2	12	2		10	122-357
53	3		3			3	244-345
54	2		2			2	236-272
67	10	4	5	1		5	164-379
68	7	3	4			4	172-409
69	3		3			3	168-321
70	2		2			2	256-344
71	3		3			3	180-281
75	9	3	5	1		3	132-393
75	4		3	1		2	145-273
77	1		1			1	205
78	2		1	1		1	149-260
80	1		1			1	264
81	6	3	2	1		2	173-276
151	2	1	1			1	223-227
152	1		1			1	303
153	2		2			2	305-332
155	4		4			3	220-300
156	2	1	1			1	233-284
160	1	1				3	316
161	4		3	1		3	158-278

APPENDIX TABLE 82-- (continued)

Station Number	Specimens Examined	Male	Sex Ratio		Neuter	Gonads Weighed	Size Range (mm)
			Female				
162	1		1			1	342
168	1	1					278
169	2		2			2	352-381
170	9	2	5	2		5	156-430
171	4		4			4	151-270
172	5		4		1	4	152-316
173	10		8	2		8	110-305
174	1	1					264