

1983 YEAR CLASS REPORT
FOR THE HUDSON RIVER ESTUARY
MONITORING PROGRAM

VOLUME 3.
APPENDICES B (PART 2), C, AND D

Prepared under contract with
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R-175

April 1985

APPENDIX B
ABUNDANCE DATA

INDEX OF TABLE NUMBERS

PART 2. DENSITY AND CATCH PER UNIT EFFORT DATA

SPECIES	ICHTHYOPLANKTON						FALL SHOALS			BEACH SEINE		
	EGGS	YSL	PYSL	YOY	YRLG	OLDER	YOY	YRLG	OLDER	YOY	YRLG	OLDER
Striped bass	98	99	100	101	104	107	102	105	108	103	106	109
White perch	110	111	112	113	116	119	114	117	120	115	118	121
American shad	122	123	124	125	128	NC	126	129	131	127	130	132
Atlantic tomcod	--	--	133	134	--	--	135	--	--	136	--	--
Blueback herring					143	146	141	144	147	142	145	NC
	a	a	a	a								
Alewife	137	138	139	140	150	153	148	151	154	149	152	155
Bay anchovy	--	--	--	NC	158	161	156	159	162	157	160	163
Weakfish	--	--	--	NC	--	--	164	--	--	165	--	--
White catfish	--	--	--	166	169	172	167	170	173	168	171	174
Spottail shiner	--	--	--	NC	177	180	175	178	NC	176	179	181
Atlantic sturgeon	--	--	--	NC	182	184	NC	183	185	NC	NC	NC
Shortnose sturgeon	--	--	--	186	NC	188	NC	187	189	NC	NC	NC

a

= Due to the difficulty in identifying the early life stages of the blueback herring and alewife, these stages were combined.

NC = none caught

Dashes indicate that life stage was not looked at

Stages: YSL = yolk-sac larvae; PYSL = post yolk-sac larvae;

YOY = young-of-the-year; YRLG = yearling

TABLE B-98
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	STRIPED BASS												EGGS			
	YONKERS						TAPPAN ZEE						CROTON-HAVERSTRAW			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	3	10	6	4	3	10	6	3	6	15
09MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.44	0.00	6.40	9.75
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.68	0.00	6.40	5.02
	NO. TOWS	3	3	6	6	3	3	10	6	4	3	10	6	3	6	15
16MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.90	2.77	59.66	33.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.42	1.39	22.48	10.72
	NO. TOWS	3	3	6	6	3	3	10	6	4	3	10	6	3	6	15
23MAY83	DENSITY	0.00	0.00	0.00	0.00	19.78	16.44	18.52	16.44	5.29	18.52	16.44	73.63	58.34	28.12	51.38
	S.E.	0.00	0.00	0.00	0.00	17.92	7.20	5.12	7.20	5.29	5.12	7.20	49.19	11.53	27.13	21.34
	NO. TOWS	3	3	6	6	3	11	4	11	4	4	11	5	4	4	13
30MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	2.28	0.00	2.28	11.80	2.28	2.28	68.64	37.35	3.43	34.69
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.80	0.00	0.00	26.70	18.73	2.06	10.61
	NO. TOWS	3	3	6	6	3	10	4	10	3	4	10	5	5	3	13
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.99	0.72	0.00	2.71
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.68	0.72	0.00	1.71
	NO. TOWS	3	3	6	6	3	11	4	11	4	4	11	4	4	4	12
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.73	0.57	0.54	0.98
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.73	0.57	0.54	0.68
	NO. TOWS	1	8	9	9	3	14	6	14	5	6	14	4	6	6	16
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	9	3	14	6	14	5	6	14	4	6	5	15
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	9	3	13	6	13	4	6	13	4	6	6	16
04JUL83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	9	3	14	6	14	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-98 (CONTINUED).

WEEK BEGINNING MONDAY	STRIPED BASS												EGGS			
	INDIAN POINT				WEST POINT				CORNWALL							
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	7	25	36	4	30	34	5	12	6	23	5	12	6	23
09MAY83	DENSITY	8.02	0.89	2.34	2.46	0.78	6.86	6.02	0.00	0.27	0.00	0.07	0.00	0.27	0.00	0.07
	S.E.	5.26	0.59	0.83	0.73	0.78	3.51	3.03	0.00	0.27	0.00	0.07	0.00	0.27	0.00	0.07
	NO. TOWS	4	8	24	36	4	30	34	5	13	5	23	5	13	5	23
16MAY83	DENSITY	60.89	44.75	302.95	246.91	5.70	61.33	53.66	3.16	1.10	3.19	2.64	3.16	0.82	1.95	1.36
	S.E.	17.45	27.71	79.61	62.20	3.98	16.34	14.10	3.16	0.82	1.95	1.36	3.16	0.82	1.95	1.36
	NO. TOWS	4	7	25	36	7	30	37	5	10	5	20	5	10	5	20
23MAY83	DENSITY	217.94	99.73	101.65	108.38	136.90	89.25	95.82	6.02	30.49	19.78	21.80	6.02	30.49	19.78	21.80
	S.E.	148.41	35.56	45.73	37.19	104.18	30.07	29.63	3.88	16.90	13.45	10.16	3.88	16.90	13.45	10.16
	NO. TOWS	3	6	13	22	7	23	30	5	9	6	20	5	9	6	20
30MAY83	DENSITY	2.84	7.43	5.69	5.79	1.29	4.05	3.67	0.00	9.18	3.00	4.45	0.00	9.18	3.00	4.45
	S.E.	2.84	4.03	1.77	1.53	1.29	1.70	1.48	0.00	5.50	3.00	2.50	0.00	5.50	3.00	2.50
	NO. TOWS	3	6	15	24	6	23	29	5	9	6	20	5	9	6	20
06JUN83	DENSITY	52.76	68.34	27.32	35.44	7.85	14.38	13.48	7.92	17.68	22.19	20.18	7.92	17.68	22.19	20.18
	S.E.	36.56	23.41	7.30	7.17	3.02	5.13	4.44	5.40	8.34	11.12	7.87	5.40	8.34	11.12	7.87
	NO. TOWS	4	6	14	24	7	23	30	5	9	5	19	5	9	5	19
13JUN83	DENSITY	3.69	0.00	4.03	3.36	4.10	8.29	7.71	0.00	0.48	1.01	0.81	0.00	0.48	1.01	0.81
	S.E.	2.06	0.00	1.80	1.41	3.53	2.71	2.38	0.00	0.32	1.01	0.69	0.00	0.32	1.01	0.69
	NO. TOWS	5	5	16	26	8	25	33	3	12	13	28	3	12	13	28
20JUN83	DENSITY	0.00	2.71	0.49	0.82	69.12	5.88	14.60	2.03	7.90	0.25	2.37	2.03	4.87	0.25	1.30
	S.E.	0.00	2.71	0.49	0.58	32.49	2.40	4.93	2.03	4.87	0.25	1.30	2.03	4.87	0.25	1.30
	NO. TOWS	5	5	17	27	8	25	33	3	12	13	28	3	12	13	28
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.13	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.13	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	6	16	27	8	25	33	3	12	13	28	3	12	13	28
04JUL83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	16	26	8	25	33	3	12	13	28	3	12	13	28

N -- STRATUM NOT SAMPLED

TABLE B-98 (CONTINUED).

WEEK BEGINNING MONDAY	EGGS											
	POUGHKEEPSIE				HYDE PARK				KINGSTON			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E. NO. TOWS	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
09MAY83	DENSITY	N	1.83	0.33	N	2.80	0.79	1.21	N	2.40	0.00	0.81
	S.E. NO. TOWS	N	1.04	0.33	N	2.00	0.79	0.75	N	1.55	0.00	0.52
16MAY83	DENSITY	N	3.86	2.03	N	5.43	0.47	1.50	N	5.00	0.92	2.30
	S.E. NO. TOWS	N	2.02	1.75	N	3.62	0.31	0.79	N	5.00	0.92	1.80
23MAY83	DENSITY	N	5.23	9.02	N	1.73	9.17	7.63	N	0.00	0.81	0.53
	S.E. NO. TOWS	N	2.51	4.43	N	1.73	6.61	5.25	N	0.00	0.81	0.53
30MAY83	DENSITY	N	8.81	3.34	N	7.03	2857.13	2266.44	N	30.83	1.94	11.70
	S.E. NO. TOWS	N	3.28	2.37	N	4.39	2831.25	2244.47	N	25.03	1.94	8.55
06JUN83	DENSITY	N	154.78	18.32	N	11.96	12.00	11.99	N	0.00	8.08	5.35
	S.E. NO. TOWS	N	137.80	7.52	N	4.77	5.89	4.77	N	0.00	8.08	5.35
13JUN83	DENSITY	N	12.31	0.19	N	0.62	0.00	0.13	N	5.26	1.14	2.53
	S.E. NO. TOWS	N	10.21	0.19	N	0.62	0.00	0.13	N	4.34	1.14	1.65
20JUN83	DENSITY	N	2.93	0.00	N	1.69	0.00	0.35	N	0.00	1.29	0.85
	S.E. NO. TOWS	N	2.13	0.00	N	1.69	0.00	0.35	N	0.00	1.29	0.85
27JUN83	DENSITY	N	0.00	0.35	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E. NO. TOWS	N	0.00	0.35	N	0.00	0.00	0.00	N	0.00	0.00	0.00
04JUL83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E. NO. TOWS	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00

N -- STRATUM NOT SAMPLED

TABLE B-98 (CONTINUED).

WEEK BEGINNING MONDAY	STRIPED BASS			EGGS				
	SAUGERTIES			CATSKILL				
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	3	3	6	N	3	3	6
09MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	3	3	6	N	3	3	6
16MAY83	DENSITY	3.85	0.00	1.38	N	1.07	0.00	0.51
	S.E.	3.85	0.00	1.38	N	1.07	0.00	0.51
	NO. TOWS	4	3	7	N	3	3	6
23MAY83	DENSITY	0.00	0.00	0.00	N	2.14	1.78	1.95
	S.E.	0.00	0.00	0.00	N	1.07	1.78	1.06
	NO. TOWS	5	3	8	N	3	3	6
30MAY83	DENSITY	1.82	0.00	0.65	N	1.08	0.88	0.98
	S.E.	1.23	0.00	0.44	N	1.08	0.88	0.69
	NO. TOWS	5	3	8	N	3	3	6
06JUN83	DENSITY	0.00	1.75	1.12	N	0.89	0.00	0.43
	S.E.	0.00	1.75	1.12	N	0.89	0.00	0.43
	NO. TOWS	5	3	8	N	3	3	6
13JUN83	DENSITY	12.89	0.00	4.62	N	0.00	1.03	0.54
	S.E.	9.70	0.00	3.47	N	0.00	1.03	0.54
	NO. TOWS	4	2	6	N	3	3	6
20JUN83	DENSITY	0.00	0.00	0.00	N	0.00	2.06	1.08
	S.E.	0.00	0.00	0.00	N	0.00	2.06	1.08
	NO. TOWS	3	2	5	N	3	3	6
27JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	4	2	6	N	3	3	6
04JUL83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	4	2	6	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-98 (CONTINUED).

WEEK BEGINNING MONDAY	STRIPED BASS			EGGS				
	ALBANY			COMBINED				
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	N	0.00	0.00	0.00	0.00	0.00
	S.E.	N	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	5	5	21	66	107	194
09MAY83	DENSITY	N	N	0.56	5.15	0.79	1.46	1.66
	S.E.	N	N	0.56	2.84	0.24	0.51	0.44
	NO. TOWS	N	5	5	21	69	104	194
16MAY83	DENSITY	N	N	0.00	8.61	5.05	43.70	30.78
	S.E.	N	N	0.00	3.62	1.83	8.95	5.91
	NO. TOWS	N	5	5	21	67	106	194
23MAY83	DENSITY	N	N	0.00	41.14	20.12	28.28	27.54
	S.E.	N	N	0.00	17.54	5.96	6.40	4.77
	NO. TOWS	N	3	3	19	68	99	186
30MAY83	DENSITY	N	N	0.00	16.76	9.16	253.89	170.60
	S.E.	N	N	0.00	6.46	2.84	249.49	163.82
	NO. TOWS	N	3	3	19	68	99	186
06JUN83	DENSITY	N	29.84	N	4.96	29.68	10.64	14.75
	S.E.	N	18.63	N	2.36	17.39	1.84	4.44
	NO. TOWS	N	3	3	19	68	99	186
13JUN83	DENSITY	N	0.00	N	0.63	3.76	1.68	2.09
	S.E.	N	0.00	N	0.44	1.73	0.40	0.50
	NO. TOWS	N	3	3	16	63	108	187
20JUN83	DENSITY	N	0.00	N	0.07	4.71	0.97	1.80
	S.E.	N	0.00	N	0.07	1.73	0.33	0.48
	NO. TOWS	N	3	3	16	63	108	187
27JUN83	DENSITY	N	0.00	N	0.00	0.00	0.07	0.05
	S.E.	N	0.00	N	0.00	0.00	0.06	0.04
	NO. TOWS	N	3	3	16	62	109	187
04JUL83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.00	0.00
	NO. TOWS	N	3	3	16	62	109	187

N -- STRATUM NOT SAMPLED

TABLE B-99
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	YOLK-SAC LARVAE											
	STRIPED BASS						CROTON-HAVERSTRAW					
	YONKERS		TAPPAN ZEE		CROTON-HAVERSTRAW		YONKERS		TAPPAN ZEE		CROTON-HAVERSTRAW	
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6
09MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	2.73	0.00	0.58	1.24
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	1.75	0.00	0.58	0.68
	NO. TOWS	3	N	3	6	3	4	3	6	3	6	15
16MAY83	DENSITY	5.02	N	5.11	5.10	2.02	34.64	27.16	35.29	0.00	52.61	34.72
	S.E.	5.02	N	5.11	4.56	1.17	18.98	10.18	18.87	0.00	13.12	8.78
	NO. TOWS	3	N	3	6	4	3	10	6	3	6	15
23MAY83	DENSITY	0.00	N	0.00	0.00	159.62	33.44	145.08	73.08	60.82	188.45	118.27
	S.E.	0.00	N	0.00	0.00	86.75	8.89	53.36	30.19	25.94	97.64	42.38
	NO. TOWS	3	N	3	6	4	4	11	5	4	4	13
30MAY83	DENSITY	4.11	N	9.00	8.43	33.25	67.48	38.82	60.13	32.45	6.89	31.94
	S.E.	4.11	N	6.50	5.76	33.25	29.85	14.73	25.15	17.06	3.52	10.02
	NO. TOWS	3	N	3	6	3	4	10	5	5	3	13
06JUN83	DENSITY	0.00	N	0.00	0.00	18.12	6.26	6.92	20.89	112.62	13.21	37.89
	S.E.	0.00	N	0.00	0.00	9.76	3.92	2.63	7.87	23.93	7.78	6.81
	NO. TOWS	3	N	3	6	4	4	11	4	4	4	12
13JUN83	DENSITY	0.00	N	1.12	0.99	23.16	134.00	76.74	200.64	315.64	73.72	173.27
	S.E.	0.00	N	0.54	0.48	8.48	104.64	46.37	106.89	97.04	35.52	46.85
	NO. TOWS	1	N	8	9	5	6	14	4	6	6	16
20JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.71	0.00	0.16
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.71	0.00	0.16
	NO. TOWS	1	N	8	9	5	6	14	4	6	5	15
27JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	N	8	9	4	6	13	4	6	6	16
04JUL83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	N	8	9	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-99 (CONTINUED).

YOLK-SAC LARVAE

STRIPED BASS

WEEK
BEGINNING
MONDAY

WEEK BEGINNING MONDAY	INDIAN POINT						WEST POINT						CORNWALL											
	SHOAL		BOTTOM		CHANNEL		REGION		SHOAL		BOTTOM		CHANNEL		REGION		SHOAL		BOTTOM		CHANNEL		REGION	
	DENSITY	S.E.	DENSITY	S.E.	DENSITY	S.E.	DENSITY	S.E.	DENSITY	S.E.	DENSITY	S.E.	DENSITY	S.E.	DENSITY	S.E.	DENSITY	S.E.	DENSITY	S.E.	DENSITY	S.E.	DENSITY	S.E.
02MAY83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4	7	25	36	N	N	N	N	4	4	30	34	N	N	N	N	5	5	12	12	6	6	23	23
09MAY83	0.92	0.00	0.00	0.06	0.06	0.06	0.06	0.06	0.00	0.00	1.99	1.71	N	N	N	N	5	5	13	13	5	5	23	23
	4	8	24	36	N	N	N	N	4	4	30	34	N	N	N	N	5	5	13	13	5	5	23	23
16MAY83	14.44	4.93	12.55	11.44	11.44	11.44	11.44	11.44	0.75	0.75	10.94	9.54	N	N	N	N	5	5	10	10	5	5	20	20
	4	7	25	36	N	N	N	N	7	7	30	37	N	N	N	N	5	5	10	10	5	5	20	20
23MAY83	95.34	15.94	39.87	39.39	39.39	39.39	39.39	39.39	2.71	2.71	12.79	11.40	N	N	N	N	5	5	9	9	6	6	20	20
	3	6	13	22	N	N	N	N	7	7	23	30	N	N	N	N	5	5	9	9	6	6	20	20
30MAY83	27.99	85.31	68.39	68.66	68.66	68.66	68.66	68.66	77.80	77.80	78.46	78.37	N	N	N	N	5	5	9	9	6	6	20	20
	3	6	15	24	N	N	N	N	6	6	23	29	N	N	N	N	5	5	9	9	6	6	20	20
06JUN83	29.93	369.83	92.05	132.83	132.83	132.83	132.83	132.83	85.60	85.60	81.08	81.70	N	N	N	N	5	5	9	9	5	5	19	19
	4	6	14	24	N	N	N	N	7	7	23	30	N	N	N	N	5	5	9	9	5	5	19	19
13JUN83	208.22	886.28	396.16	463.38	463.38	463.38	463.38	463.38	241.26	241.26	215.28	218.87	N	N	N	N	3	3	12	12	13	13	28	28
	5	5	16	26	N	N	N	N	8	8	25	33	N	N	N	N	3	3	12	12	13	13	28	28
20JUN83	1.84	15.65	9.85	10.29	10.29	10.29	10.29	10.29	126.20	126.20	48.43	59.15	N	N	N	N	3	3	12	12	13	13	28	28
	5	5	17	27	N	N	N	N	8	8	25	33	N	N	N	N	3	3	12	12	13	13	28	28
27JUN83	0.00	0.00	0.37	0.29	0.29	0.29	0.29	0.29	9.70	9.70	9.03	9.13	N	N	N	N	3	3	12	12	13	13	28	28
	5	6	16	27	N	N	N	N	8	8	25	33	N	N	N	N	3	3	12	12	13	13	28	28
04JUL83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	N	N	N	3	3	12	12	13	13	28	28
	5	5	16	26	N	N	N	N	8	8	25	33	N	N	N	N	3	3	12	12	13	13	28	28

N -- STRATUM NOT SAMPLED

TABLE B-99 (CONTINUED).

YOLK-SAC LARVAE

STRIPED BASS

WEEK
BEGINNING
MONDAY

WEEK BEGINNING MONDAY	POUGHKEEPSIE						HYDE PARK			KINGSTON		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS
02MAY83	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	N	9	10	19	N	10	11	21	N	6	7	13
09MAY83	N	0.93	0.00	0.21	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	N	0.47	0.00	0.11	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	N	10	10	20	N	10	10	20	N	6	7	13
16MAY83	N	0.89	1.60	1.44	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	N	0.63	0.91	0.72	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	N	10	10	20	N	8	11	19	N	6	7	13
23MAY83	N	3.00	4.85	4.42	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	N	1.48	1.69	1.34	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	N	16	22	38	N	7	12	19	N	4	6	10
30MAY83	N	107.19	21.65	41.50	N	39.97	28.42	30.81	N	51.52	1.48	18.38
	N	52.42	8.43	13.78	N	18.94	12.90	10.96	N	23.32	0.98	7.91
	N	16	22	38	N	7	12	19	N	5	5	10
06JUN83	N	168.08	108.96	122.68	N	4.34	5.65	5.38	N	12.80	0.95	4.95
	N	63.45	37.48	32.33	N	2.01	2.14	1.75	N	12.80	0.95	4.37
	N	16	22	38	N	7	12	19	N	4	6	10
13JUN83	N	1516.83	257.72	549.90	N	68.82	30.06	38.10	N	103.16	25.07	51.45
	N	411.05	162.04	156.79	N	20.44	17.91	14.81	N	45.97	16.64	19.04
	N	7	15	22	N	5	9	14	N	5	5	10
20JUN83	N	28.26	22.33	23.71	N	21.08	13.79	15.30	N	1.22	1.78	1.59
	N	16.04	6.78	6.40	N	10.22	5.56	4.89	N	0.75	1.19	0.83
	N	8	14	22	N	5	9	14	N	5	6	11
27JUN83	N	1.77	4.59	3.94	N	1.80	0.31	0.62	N	0.00	1.81	1.20
	N	0.91	1.35	1.06	N	0.74	0.31	0.29	N	0.00	0.81	0.54
	N	7	15	22	N	5	9	14	N	4	6	10
04JUL83	N	0.00	0.18	0.14	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	N	0.00	0.18	0.14	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	N	7	15	22	N	5	9	14	N	4	6	10

N -- STRATUM NOT SAMPLED

TABLE B-99 (CONTINUED).

WEEK BEGINNING MONDAY	STRIPED BASS						YOLK-SAC LARVAE					
	SAUGERTIES			CATSKILL			SAUGERTIES			CATSKILL		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	3	3	6	N	3	3	N	3	3	6
09MAY83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	3	3	6	N	3	3	N	3	3	6
16MAY83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	4	3	7	N	3	3	N	3	3	6
23MAY83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	3	3	N	3	3	6
30MAY83	DENSITY	N	3.62	0.00	1.30	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	2.22	0.00	0.79	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	3	3	N	3	3	6
06JUN83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	3	3	N	3	3	6
13JUN83	DENSITY	N	67.83	17.97	35.83	N	23.49	0.96	N	11.73	0.96	11.73
	S.E.	N	26.43	4.71	9.94	N	9.17	0.96	N	4.41	0.96	4.41
	NO. TOWS	N	4	2	6	N	3	3	N	3	3	6
20JUN83	DENSITY	N	15.05	17.40	16.56	N	4.28	9.82	N	7.17	9.82	7.17
	S.E.	N	10.89	17.40	11.83	N	4.28	3.25	N	2.66	3.25	2.66
	NO. TOWS	N	3	2	5	N	3	3	N	3	3	6
27JUN83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	4	2	6	N	3	3	N	3	3	6
04JUL83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	4	2	6	N	3	3	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-99 (CONTINUED).

WEEK BEGINNING MONDAY	STRIPED BASS			ALBANY			YOLK-SAC LARVAE		
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	0.00 0.00 5	N N N	0.00 0.00 5	N N 5	0.00 0.00 5	0.00 0.00 21	0.00 0.00 66	0.00 0.00 107	0.00 0.00 194
09MAY83	0.00 0.00 5	N N N	0.00 0.43 21	N N 5	0.00 0.00 5	0.71 0.43 21	0.17 0.07 69	0.44 0.09 104	0.40 0.08 194
16MAY83	0.00 0.00 5	N N N	0.00 9.94 21	N N 5	0.00 0.00 5	27.22 9.94 21	0.85 0.24 67	9.34 2.01 106	9.02 1.64 194
23MAY83	1.09 1.09 3	N N N	1.09 73.43 19	N N 3	1.09 1.09 3	167.96 73.43 19	24.54 9.83 68	19.06 4.63 99	35.04 8.20 186
30MAY83	0.00 0.00 3	N N N	0.00 7.92 19	N N 3	0.00 0.00 3	21.98 7.92 19	50.37 11.15 68	33.74 5.29 99	36.66 4.49 186
06JUN83	0.00 0.00 3	N N N	0.00 2.55 19	N N 3	0.00 0.00 3	10.20 2.55 19	65.11 13.46 68	41.78 7.22 99	44.39 5.78 186
13JUN83	0.00 0.00 3	N N N	0.00 30.99 16	N N 3	0.00 0.00 3	84.81 30.99 16	336.24 62.31 63	135.65 28.97 108	179.81 24.58 187
20JUN83	0.86 0.86 3	N N N	0.57 0.37 16	N N 3	0.86 0.86 3	0.57 0.37 16	15.82 3.37 63	13.67 2.09 108	12.91 1.60 187
27JUN83	0.00 0.00 3	N N N	0.00 0.00 16	N N 3	0.00 0.00 3	0.00 0.00 16	1.02 0.24 62	2.08 0.34 109	1.62 0.23 187
04JUL83	0.00 0.00 3	N N N	0.00 0.00 16	N N 3	0.00 0.00 3	0.00 0.00 16	0.00 0.00 62	0.03 0.03 109	0.02 0.02 187

N -- STRATUM NOT SAMPLED

TABLE B-100
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	POST YOLK-SAC LARVAE														
	STRIPED BASS						CROTON-HAVERSTRAW								
	YONKERS			TAPPAN ZEE			SHOAL			CHANNEL					
	DENSITY	S.E.	NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	0.00	0.00	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				6	3	4	10	6	3	3	10	6	3	6	15
09MAY83	0.00	0.00	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				6	3	4	10	6	3	3	10	6	3	6	15
16MAY83	0.00	0.00	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				6	3	4	10	6	3	3	10	6	3	6	15
23MAY83	0.00	0.00	3	16.87	20.91	10.10	14.75	4.86	3.92	1.67	14.32	1.44	20.94	5.41	7.38
	0.00	0.00	3	4.88	8.95	5.14	3.36	3.25	3.92	1.67	4.58	1.44	16.16	3.77	3.92
				6	4	4	11	5	4	4	11	5	4	3	13
30MAY83	44.25	2.40	3	13.74	7.17	18.05	14.32	1.44	20.94	5.41	14.32	1.44	20.94	5.41	7.38
	23.25	2.40	3	5.35	1.68	9.56	4.58	1.44	16.16	3.77	4.58	1.44	16.16	3.77	3.92
				6	3	4	10	5	5	3	10	5	5	3	13
06JUN83	0.00	3.85	3	2.94	68.15	0.73	14.58	10.19	220.40	26.37	14.58	10.19	220.40	26.37	63.16
	0.00	2.44	3	2.94	27.07	0.73	5.35	5.40	101.68	24.43	5.35	5.40	101.68	24.43	24.64
				6	4	4	11	4	4	4	11	4	4	4	12
13JUN83	0.00	1.09	1	315.50	153.32	304.55	279.51	124.91	299.29	492.01	279.51	124.91	299.29	492.01	315.64
	0.00	0.77	8	179.36	64.01	183.83	104.73	39.68	130.41	207.17	104.73	39.68	130.41	207.17	91.79
				3	5	6	14	4	6	6	14	4	6	6	16
20JUN83	6.03	1.61	1	84.38	68.56	119.53	96.40	1096.96	547.50	410.46	96.40	1096.96	547.50	410.46	691.14
	0.00	0.61	8	36.32	22.02	79.22	36.89	704.79	195.95	75.75	36.89	704.79	195.95	75.75	262.68
				3	5	6	14	4	6	6	14	4	6	6	15
27JUN83	0.00	0.00	1	23.33	7.73	36.99	26.17	78.22	74.13	66.12	26.17	78.22	74.13	66.12	72.30
	0.00	0.00	1	13.62	3.15	11.96	7.29	20.18	24.37	9.54	7.29	20.18	24.37	9.54	9.93
				3	4	6	13	4	6	6	13	4	6	6	16
04JUL83	0.00	0.00	1	5.46	1.45	1.86	3.14	9.73	1.85	37.69	3.14	9.73	1.85	37.69	19.60
	0.00	0.00	8	4.12	0.90	0.91	1.61	1.43	1.27	26.11	1.61	1.43	1.27	26.11	10.85
				3	5	6	14	4	6	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-100 (CONTINUED).

WEEK BEGINNING MONDAY	STRIPED BASS										POST YOLK-SAC LARVAE								
	INDIAN POINT					WEST POINT					CORNWALL								
	DENSITY S.E. NO. TOWS	SHOAL BOTTOM	CHANNEL	REGION	SHOAL	DENSITY S.E. NO. TOWS	SHOAL BOTTOM	CHANNEL	REGION	SHOAL	DENSITY S.E. NO. TOWS	SHOAL BOTTOM	CHANNEL	REGION	DENSITY S.E. NO. TOWS	SHOAL BOTTOM	CHANNEL	REGION	
02MAY83	0.00 0.00 4	0.00 0.00 7	0.00 0.00 25	0.00 0.00 36	N	0.00 0.00 4	0.00 0.00 30	0.00 0.00 34	0.00 0.00 34	0.00 0.00 5	0.00 0.00 12	0.00 0.00 6	0.00 0.00 23	0.00 0.00 23	0.00 0.00 4	0.00 0.00 7	0.00 0.00 25	0.00 0.00 36	N
09MAY83	0.00 0.00 4	0.00 0.00 8	0.00 0.00 24	0.00 0.00 36	N	0.00 0.00 4	0.00 0.00 30	0.00 0.00 34	0.00 0.00 34	0.00 0.00 5	0.00 0.00 13	0.00 0.00 5	0.00 0.00 23	0.00 0.00 23	0.00 0.00 4	0.00 0.00 7	0.00 0.00 25	0.00 0.00 36	N
16MAY83	0.00 0.00 4	0.00 0.00 7	0.00 0.00 25	0.00 0.00 36	N	0.00 0.00 7	0.00 0.00 30	0.00 0.00 37	0.00 0.00 37	0.00 0.00 5	0.00 0.00 10	0.00 0.00 5	0.00 0.00 20	0.00 0.00 20	0.00 0.00 4	0.00 0.00 7	0.00 0.00 25	0.00 0.00 36	N
23MAY83	1.14 1.14 3	0.67 0.67 6	0.00 0.00 13	0.18 0.13 22	N	0.51 0.51 7	0.81 0.40 23	0.77 0.35 30	0.77 0.35 30	0.00 0.00 5	0.00 0.00 9	0.00 0.00 6	0.00 0.00 20	0.00 0.00 20	0.00 0.00 3	0.00 0.00 7	0.00 0.00 25	0.18 0.13 22	N
30MAY83	7.17 3.60 3	0.00 0.00 6	4.17 1.49 15	3.68 1.18 24	N	0.49 0.49 6	1.67 0.54 23	1.51 0.47 29	1.51 0.47 29	0.00 0.00 5	1.88 1.22 9	0.00 0.00 6	0.49 0.32 20	0.49 0.32 20	0.00 0.00 3	0.00 0.00 7	0.00 0.00 25	3.68 1.18 24	N
06JUN83	18.04 13.00 4	174.64 72.31 6	57.77 21.48 14	74.11 20.37 24	N	33.71 9.66 7	22.87 4.99 23	24.37 4.50 30	24.37 4.50 30	0.72 0.72 5	7.32 5.12 9	0.00 0.00 5	1.97 1.35 19	1.97 1.35 19	0.00 0.00 4	0.00 0.00 7	0.00 0.00 25	74.11 20.37 24	N
13JUN83	312.92 180.61 5	827.07 275.58 5	505.52 87.08 16	545.43 81.70 26	N	803.42 280.09 8	400.40 73.96 25	455.98 74.55 33	455.98 74.55 33	184.51 140.53 3	388.81 104.14 12	383.06 154.12 13	373.07 108.46 28	373.07 108.46 28	0.00 0.00 5	0.00 0.00 7	0.00 0.00 25	545.43 81.70 26	N
20JUN83	738.18 92.62 5	801.41 106.10 5	812.84 90.44 17	806.49 72.71 27	N	721.82 343.61 8	509.04 51.92 25	538.38 65.18 33	538.38 65.18 33	444.85 75.84 3	272.40 36.05 12	251.94 56.07 13	268.50 39.47 28	268.50 39.47 28	0.00 0.00 5	0.00 0.00 7	0.00 0.00 25	806.49 72.71 27	N
27JUN83	438.01 269.49 5	377.39 158.97 6	382.41 101.00 16	384.97 84.31 27	N	119.09 12.23 8	131.69 8.11 25	129.95 7.19 33	129.95 7.19 33	40.06 17.22 3	161.15 32.04 12	164.98 59.22 13	156.73 41.09 28	156.73 41.09 28	0.00 0.00 5	0.00 0.00 7	0.00 0.00 25	384.97 84.31 27	N
04JUL83	42.84 15.20 5	16.19 7.12 5	56.98 16.02 16	49.59 12.57 26	N	242.65 82.84 8	80.83 9.04 25	103.14 13.83 33	103.14 13.83 33	28.26 13.66 3	72.96 29.82 12	14.74 3.65 13	30.85 8.27 28	30.85 8.27 28	0.00 0.00 5	0.00 0.00 7	0.00 0.00 25	49.59 12.57 26	N

N -- STRATUM NOT SAMPLED

TABLE B-100 (CONTINUED).

WEEK BEGINNING MONDAY	STRIPED BASS						POST YOLK-SAC LARVAE					
	POUGHKEEPSIE			HYDE PARK			KINGSTON			KINGSTON		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	9	10	19	N	10	11	21	N	6	7	13
09MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	10	10	20	N	10	10	20	N	6	7	13
16MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	10	10	20	N	8	11	19	N	6	7	13
23MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10
30MAY83	DENSITY	0.50	0.00	0.12	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.50	0.00	0.12	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	16	22	38	N	7	12	19	N	5	5	10
06JUN83	DENSITY	3.21	0.53	1.16	N	0.45	0.00	0.09	N	0.00	0.00	0.00
	S.E.	1.38	0.32	0.40	N	0.45	0.00	0.09	N	0.00	0.00	0.00
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10
13JUN83	DENSITY	571.22	29.31	155.07	N	8.71	2.29	3.62	N	0.00	1.23	0.82
	S.E.	295.11	12.43	69.15	N	2.99	1.06	1.05	N	0.00	0.76	0.50
	NO. TOWS	7	15	22	N	5	9	14	N	5	5	10
20JUN83	DENSITY	165.24	305.41	272.88	N	68.88	83.08	80.14	N	15.17	16.22	15.86
	S.E.	41.20	97.74	75.66	N	16.34	10.65	9.10	N	5.23	4.77	3.62
	NO. TOWS	8	14	22	N	5	9	14	N	5	6	11
27JUN83	DENSITY	39.13	39.43	39.36	N	14.48	8.98	10.12	N	3.77	6.90	5.85
	S.E.	5.41	11.11	8.63	N	4.99	4.84	3.98	N	2.25	3.36	2.35
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10
04JUL83	DENSITY	6.12	14.39	12.47	N	15.05	6.55	8.32	N	5.73	0.00	1.94
	S.E.	2.29	3.56	2.79	N	2.51	1.18	1.07	N	3.37	0.00	1.14
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10

N -- STRATUM NOT SAMPLED

TABLE B-100 (CONTINUED).

WEEK BEGINNING MONDAY	STRIPED BASS			SAUGERTIES			POST YOLK-SAC LARVAE			CATSKILL			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	REGION
02HAY83	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	N	3	3	N	3	3	N	3	3	N	3	3	6
09MAY83	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	N	3	3	N	3	3	N	3	3	N	3	3	6
16MAY83	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	N	4	3	N	4	3	N	3	3	N	3	3	6
23MAY83	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	N	5	3	N	5	3	N	3	3	N	3	3	6
30MAY83	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	N	5	3	N	5	3	N	3	3	N	3	3	6
06JUN83	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	N	5	3	N	5	3	N	3	3	N	3	3	6
13JUN83	N	1.64	0.00	N	1.64	0.00	N	0.59	0.59	N	0.00	0.00	0.00
	N	0.95	0.00	N	0.95	0.00	N	0.34	0.34	N	0.00	0.00	0.00
	N	4	2	N	4	2	N	6	6	N	3	3	6
20JUN83	N	39.55	32.11	N	39.55	32.11	N	34.77	34.77	N	0.00	6.67	3.48
	N	10.25	28.63	N	10.25	28.63	N	18.74	18.74	N	0.00	3.77	1.97
	N	3	2	N	3	2	N	5	5	N	3	3	6
27JUN83	N	5.30	0.00	N	5.30	0.00	N	1.90	1.90	N	1.08	0.00	0.51
	N	2.64	0.00	N	2.64	0.00	N	0.95	0.95	N	1.08	0.00	0.51
	N	4	2	N	4	2	N	6	6	N	3	3	6
04JUL83	N	0.00	1.53	N	0.00	1.53	N	0.98	0.98	N	5.16	0.00	2.47
	N	0.00	1.53	N	0.00	1.53	N	0.98	0.98	N	5.16	0.00	2.47
	N	4	2	N	4	2	N	6	6	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-100 (CONTINUED).

WEEK BEGINNING MONDAY	STRIPED BASS			ALBANY			POST YOLK-SAC LARVAE			
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
		N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
02MAY83		N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
		N	5	N	5	N	5	21	66	107
09MAY83		N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
		N	5	N	5	N	5	21	69	104
16MAY83		N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
		N	5	N	5	N	5	21	67	106
23MAY83		N	0.00	N	0.00	N	0.00	10.45	2.63	1.10
		N	0.00	N	0.00	N	0.00	2.78	1.03	0.48
		N	3	N	3	N	3	19	68	99
30MAY83		N	0.00	N	0.00	N	0.00	13.53	2.24	2.88
		N	0.00	N	0.00	N	0.00	4.05	0.97	0.97
		N	3	N	3	N	3	19	68	99
06JUN83		N	0.00	N	0.00	N	0.00	5.11	33.65	10.80
		N	0.00	N	0.00	N	0.00	2.19	7.99	2.64
		N	3	N	3	N	3	19	68	99
13JUN83		N	0.00	N	0.00	N	0.00	226.86	223.30	181.02
		N	0.00	N	0.00	N	0.00	99.06	44.61	25.14
		N	3	N	3	N	3	16	63	108
20JUN83		N	0.00	N	0.00	N	0.00	369.94	173.66	252.12
		N	0.00	N	0.00	N	0.00	171.68	22.92	21.08
		N	3	N	3	N	3	16	63	108
27JUN83		N	0.00	N	0.00	N	0.00	57.87	51.52	81.46
		N	0.00	N	0.00	N	0.00	17.65	9.95	11.87
		N	3	N	3	N	3	16	62	109
04JUL83		N	0.00	N	0.00	N	0.00	8.78	21.46	21.49
		N	0.00	N	0.00	N	0.00	2.48	4.79	2.40
		N	3	N	3	N	3	16	62	109

N -- STRATUM NOT SAMPLED

TABLE B-101
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	YOUNG-OF-THE-YEAR											
	STRIPED BASS				YONKERS				CROTON-HAVERSTRAW			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	4	10	6	3	6	15
09MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	3	10	6	3	6	15
16MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	4	10	6	3	6	15
23MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	4	11	5	4	13	
30MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	3	10	5	5	13	
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	4	11	4	4	12	
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	9	3	5	14	4	6	16	
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	9	3	5	14	4	6	15	
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	9	3	4	13	4	6	16	
04JUL83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	9	3	5	14	4	6	16	

N -- STRATUM NOT SAMPLED

TABLE B-101 (CONTINUED).

STRIPED BASS YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY	INDIAN POINT			WEST POINT			CORNWALL					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 4	0.00 7	0.00 25	0.00 36	0.00 4	0.00 30	0.00 34	0.00 5	0.00 12	0.00 6	0.00 23
09MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 4	0.00 8	0.00 24	0.00 36	0.00 4	0.00 30	0.00 34	0.00 5	0.00 13	0.00 5	0.00 23
16MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 4	0.00 7	0.00 25	0.00 36	0.00 7	0.00 30	0.00 37	0.00 5	0.00 10	0.00 5	0.00 20
23MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 3	0.00 6	0.00 13	0.00 22	0.00 7	0.00 23	0.00 30	0.00 5	0.00 9	0.00 6	0.00 20
30MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 3	0.00 6	0.00 15	0.00 24	0.00 6	0.00 23	0.00 29	0.00 5	0.00 9	0.00 6	0.00 20
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 4	0.00 6	0.00 14	0.00 24	0.00 7	0.00 23	0.00 30	0.00 5	0.00 9	0.00 5	0.00 19
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 5	0.00 5	0.00 16	0.00 26	0.00 8	0.00 25	0.00 33	0.00 3	0.00 12	0.00 13	0.00 28
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 5	0.00 5	0.00 17	0.00 27	0.00 8	0.00 25	0.00 33	0.00 3	0.00 12	0.00 13	0.00 28
27JUN83	DENSITY	0.00	0.00	0.20	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 5	0.00 6	0.20 16	0.16 27	0.00 8	0.00 25	0.00 33	0.00 3	0.00 12	0.00 13	0.00 28
04JUL83	DENSITY	48.01	5.24	2.04	5.33	0.00	0.35	0.30	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	22.08 5	2.46 5	1.21 16	1.68 26	0.00 8	0.20 25	0.17 33	0.00 3	0.00 12	0.00 13	0.00 28

N -- STRATUM NOT SAMPLED

TABLE B-102 (CONTINUED).

YOUNG-OF-THE-YEAR

STRIPED BASS

WEEK
BEGINNING
MONDAY

	POUGHKEEPSIE			HYDE PARK			KINGSTON					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	2.86	0.00	0.66	N	0.76	0.00	0.16	N	0.79	0.00	0.27
	S.E.	1.66	0.00	0.38	N	0.76	0.00	0.16	N	0.56	0.00	0.19
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
22AUG83	DENSITY	0.97	0.00	0.23	N	0.00	0.00	0.00	N	2.45	0.00	0.83
	S.E.	0.97	0.00	0.23	N	0.00	0.00	0.00	N	1.43	0.00	0.48
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
05SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	1.28	0.00	0.43
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.68	0.00	0.23
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
19SEP83	DENSITY	0.49	0.00	0.11	N	0.38	0.00	0.08	N	2.03	0.00	0.69
	S.E.	0.49	0.00	0.11	N	0.38	0.00	0.08	N	0.60	0.00	0.20
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
03OCT83	DENSITY	0.00	0.00	0.00	N	0.40	0.00	0.08	N	0.34	0.00	0.12
	S.E.	0.00	0.00	0.00	N	0.40	0.00	0.08	N	0.34	0.00	0.12
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
17OCT83	DENSITY	2.26	0.00	0.52	N	0.86	0.00	0.18	N	0.00	0.00	0.00
	S.E.	1.22	0.00	0.28	N	0.86	0.00	0.18	N	0.00	0.00	0.00
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15

N -- STRATUM NOT SAMPLED

TABLE B-102 (CONTINUED).

WEEK BEGINNING MONDAY	STRIPED BASS			YOUNG-OF-THE-YEAR			
	SAUGERTIES			CATSKILL			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	6.33	0.00	2.27	5.04	0.00	2.41
	S.E.	2.16	0.00	0.77	3.10	0.00	1.48
	NO. TOWS	12	6	18	15	6	21
22AUG83	DENSITY	1.86	0.00	0.67	0.41	0.00	0.19
	S.E.	1.33	0.00	0.48	0.28	0.00	0.13
	NO. TOWS	12	6	18	15	6	21
05SEP83	DENSITY	0.42	0.00	0.15	0.52	0.00	0.25
	S.E.	0.29	0.00	0.10	0.52	0.00	0.25
	NO. TOWS	12	6	18	15	6	21
19SEP83	DENSITY	0.80	0.00	0.28	0.00	0.00	0.00
	S.E.	0.45	0.00	0.16	0.00	0.00	0.00
	NO. TOWS	12	6	18	15	6	21
03OCT83	DENSITY	1.79	0.00	0.64	0.00	0.00	0.00
	S.E.	0.60	0.00	0.21	0.00	0.00	0.00
	NO. TOWS	12	6	18	15	6	21
17OCT83	DENSITY	0.33	0.00	0.12	0.00	0.00	0.00
	S.E.	0.22	0.00	0.08	0.00	0.00	0.00
	NO. TOWS	13	6	19	14	6	20

N -- STRATUM NOT SAMPLED

TABLE B-103
 CATCH PER UNIT EFFORT (NUMBER PER HAUL) BY WEEK AND REGION,
 BEACH SEINE SURVEY, HUDSON RIVER ESTUARY, 1983.

STRIPED BASS YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY	YK	TZ	CH	IP	WP	REGIONS				CS	AL	COMBINED	
						CW	PK	HP	KG				SG
01AUG83	CPUE	14.00	5.79	11.20	16.40	15.17	8.80	14.00	8.00	7.11	13.30	5.71	8.66
	S.E. NO. HAULS	8.83 5	1.42 14	4.02 5	7.26 5	6.27 6	4.61 5	7.54 5	5.41 5	2.38 9	6.87 10	2.18 7	1.16 100
15AUG83	CPUE	15.40	10.57	3.20	2.80	5.50	0.20	5.60	5.80	2.67	6.30	1.86	6.12
	S.E. NO. HAULS	4.01 5	3.35 14	1.36 5	0.97 5	2.32 6	0.20 5	4.08 5	4.86 5	1.34 9	3.68 10	0.67 7	0.89 100
29AUG83	CPUE	4.60	6.86	3.80	9.00	18.50	2.40	5.00	1.20	2.00	4.20	1.14	12.16
	S.E. NO. HAULS	1.89 5	2.31 14	1.74 5	4.63 5	5.32 6	1.50 5	3.79 5	0.80 5	0.93 9	1.95 10	0.99 7	1.94 100
12SEP83	CPUE	3.60	18.64	15.00	10.40	12.17	0.20	0.00	2.80	3.56	5.00	0.71	23.87
	S.E. NO. HAULS	1.94 5	5.39 14	7.45 5	7.10 5	4.83 6	0.20 5	0.00 5	1.53 5	2.35 9	3.61 10	0.47 7	6.16 100
26SEP83	CPUE	0.40	9.43	12.40	0.40	6.57	1.20	0.00	0.20	0.89	2.60	0.29	5.29
	S.E. NO. HAULS	0.24 5	3.34 14	5.98 5	0.40 5	1.76 7	0.97 5	0.00 5	0.20 5	0.45 9	1.92 10	0.18 7	1.19 101
10OCT83	CPUE	0.00	5.93	1.29	5.80	4.83	0.40	0.00	0.17	0.33	1.30	0.00	1.83
	S.E. NO. HAULS	0.00 5	1.98 14	0.99 7	5.31 5	1.66 6	0.40 5	0.00 4	0.17 6	0.24 9	0.98 10	0.00 7	0.38 102

TABLE B-104
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	STRIPED BASS												YEARLING			
	YONKERS						TAPPAN ZEE						CROTON-HAVERSTRAW		REGION	
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM		CHANNEL
02MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 3	N	0.00 0.00 3	0.00 0.00 6	0.00 0.00 3	0.00 0.00 10	0.00 0.00 6	0.00 0.00 3	0.00 0.00 6	0.00 0.00 6	0.00 0.00 15	0.00 0.00 6	0.00 0.00 6	0.00 0.00 15	0.00 0.00 15
09MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 3	N	0.00 0.00 3	0.00 0.00 6	0.00 0.00 3	0.00 0.00 10	0.00 0.00 6	0.00 0.00 4	0.00 0.00 6	0.00 0.00 6	0.00 0.00 15	0.00 0.00 6	0.00 0.00 6	0.00 0.00 15	0.00 0.00 15
16MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 3	N	0.00 0.00 3	0.00 0.00 6	0.00 0.00 3	0.00 0.00 10	0.55 0.55 6	1.31 1.31 3	0.00 0.00 6	0.00 0.00 6	0.00 0.00 15	0.00 0.00 6	0.00 0.00 6	0.00 0.00 15	0.49 0.35 15
23MAY83	DENSITY S.E. NO. TOWS	1.49 1.49 3	N	0.00 0.00 3	0.17 0.17 6	0.00 0.00 3	0.00 0.00 11	0.00 0.00 5	0.00 0.00 4	0.00 0.00 4	0.00 0.00 4	0.00 0.00 13	0.00 0.00 4	0.00 0.00 4	0.00 0.00 13	0.00 0.00 13
30MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 3	N	0.00 0.00 3	0.00 0.00 6	0.00 0.00 3	0.00 0.00 10	0.00 0.00 5	0.00 0.00 3	0.00 0.00 3	0.00 0.00 3	0.00 0.00 13	0.00 0.00 3	0.00 0.00 3	0.00 0.00 13	0.00 0.00 13
06JUN83	DENSITY S.E. NO. TOWS	0.00 0.00 3	N	0.00 0.00 3	0.00 0.00 6	0.98 0.98 3	0.37 0.37 11	0.00 0.00 4	0.00 0.00 4	0.00 0.00 4	0.00 0.00 4	0.00 0.00 12	0.00 0.00 4	0.00 0.00 4	0.00 0.00 12	0.00 0.00 12
13JUN83	DENSITY S.E. NO. TOWS	0.00 0.00 1	N	0.00 0.00 8	0.00 0.00 9	0.00 0.00 3	0.00 0.00 14	0.00 0.00 4	0.00 0.00 5	0.00 0.00 6	0.00 0.00 6	0.24 0.24 16	0.00 0.00 6	0.00 0.00 6	0.00 0.00 16	0.24 0.24 16
20JUN83	DENSITY S.E. NO. TOWS	0.00 0.00 1	N	0.00 0.00 8	0.00 0.00 9	1.31 1.31 3	0.49 0.49 14	0.00 0.00 4	0.00 0.00 5	0.00 0.00 6	0.00 0.00 6	0.00 0.00 15	0.00 0.00 5	0.00 0.00 5	0.00 0.00 15	0.00 0.00 15
27JUN83	DENSITY S.E. NO. TOWS	0.00 0.00 1	N	0.00 0.00 8	0.00 0.00 9	1.11 1.11 3	0.65 0.48 13	0.80 0.80 4	0.00 0.00 4	0.00 0.00 6	0.52 0.52 6	0.50 0.36 16	0.97 0.97 6	0.00 0.00 6	0.00 0.00 6	0.50 0.36 16
04JUL83	DENSITY S.E. NO. TOWS	0.00 0.00 1	N	0.36 0.36 8	0.32 0.32 9	3.02 1.65 3	1.29 0.64 14	0.00 0.00 6	0.74 0.74 5	0.00 0.00 6	0.00 0.00 6	0.28 0.28 16	1.26 1.26 6	0.00 0.00 6	0.00 0.00 6	0.28 0.28 16

N -- STRATUM NOT SAMPLED

TABLE B-104 (CONTINUED).

WEEK BEGINNING MONDAY	STRIPED BASS											
	POUGHKEEPSIE				HYDE PARK				YEARLING			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00
	NO. TOWS	9	10	19	N	10	11	21	N	6	7	13
09MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00
	NO. TOWS	10	10	20	N	10	10	20	N	6	7	13
16MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00
	NO. TOWS	10	10	20	N	8	11	19	N	6	7	13
23MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10
30MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00
	NO. TOWS	16	22	38	N	7	12	19	N	5	5	10
06JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10
13JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00
	NO. TOWS	7	15	22	N	5	9	14	N	5	5	10
20JUN83	DENSITY	0.00	0.19	0.15	N	0.00	0.00	0.00	0.00	N	0.00	0.00
	S.E.	0.00	0.19	0.15	N	0.00	0.00	0.00	0.00	N	0.00	0.00
	NO. TOWS	8	14	22	N	5	9	14	N	5	6	11
27JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10
04JUL83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10

N -- STRATUM NOT SAMPLED

TABLE B-104 (CONTINUED).

WEEK BEGINNING MONDAY	STRIPED BASS			SAUGERTIES			YEARLING			CATSKILL			
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM CHANNEL	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM CHANNEL	REGION	SHOAL	BOTTOM CHANNEL	REGION	SHOAL	BOTTOM CHANNEL	REGION
02MAY83	0.00 0.00 3	N	0.00 0.00 3	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6
09MAY83	0.00 0.00 3	N	0.00 0.00 3	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6
16MAY83	0.00 0.00 4	N	0.00 0.00 3	0.00 0.00 7	N	0.00 0.00 3	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6
23MAY83	0.00 0.00 5	N	0.00 0.00 3	0.00 0.00 8	N	0.00 0.00 3	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6
30MAY83	0.00 0.00 5	N	0.00 0.00 3	0.00 0.00 8	N	0.00 0.00 3	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6
06JUN83	0.00 0.00 5	N	0.00 0.00 3	0.00 0.00 8	N	0.00 0.00 3	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6
13JUN83	0.00 0.00 4	N	0.00 0.00 2	0.00 0.00 6	N	0.00 0.00 4	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6
20JUN83	0.00 0.00 3	N	0.00 0.00 2	0.00 0.00 5	N	0.00 0.00 3	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6
27JUN83	0.00 0.00 4	N	0.00 0.00 2	0.00 0.00 6	N	0.00 0.00 4	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6
04JUL83	0.00 0.00 4	N	0.00 0.00 2	0.00 0.00 6	N	0.00 0.00 4	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6

N -- STRATUM NOT SAMPLED

TABLE B-104 (CONTINUED).

WEEK BEGINNING MONDAY	STRIPED BASS			YEARLING				
	ALBANY			COMBINED				
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	N	5	21	66	107	194
09MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	N	5	21	69	104	194
16MAY83	DENSITY	0.00	N	0.00	0.13	0.08	0.00	0.03
	S.E.	0.00	N	0.00	0.13	0.08	0.00	0.02
	NO. TOWS	5	N	5	21	67	106	194
23MAY83	DENSITY	0.00	N	0.00	0.18	0.00	0.00	0.02
	S.E.	0.00	N	0.00	0.18	0.00	0.00	0.02
	NO. TOWS	3	N	3	19	68	99	186
30MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	N	3	19	68	99	186
06JUN83	DENSITY	0.00	N	0.00	0.53	0.00	0.00	0.05
	S.E.	0.00	N	0.00	0.53	0.00	0.00	0.05
	NO. TOWS	3	N	3	19	68	99	186
13JUN83	DENSITY	0.00	N	0.00	0.00	0.07	0.00	0.02
	S.E.	0.00	N	0.00	0.00	0.07	0.00	0.02
	NO. TOWS	3	N	3	16	63	108	187
20JUN83	DENSITY	0.00	N	0.00	0.71	0.00	0.03	0.09
	S.E.	0.00	N	0.00	0.71	0.00	0.03	0.07
	NO. TOWS	3	N	3	16	63	108	187
27JUN83	DENSITY	0.00	N	0.00	0.84	0.06	0.08	0.15
	S.E.	0.00	N	0.00	0.64	0.06	0.05	0.07
	NO. TOWS	3	N	3	16	62	109	187
04JUL83	DENSITY	0.00	N	0.00	1.69	0.16	0.08	0.26
	S.E.	0.00	N	0.00	0.90	0.11	0.05	0.10
	NO. TOWS	3	N	3	16	62	109	187

N -- STRATUM NOT SAMPLED

TABLE B-105
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	STRIPED BASS											
	YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.06
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.06
	NO. TOWS	7	5	12	32	7	7	46	16	8	3	27
22AUG83	DENSITY	1.79	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	1.79	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	29	9	8	46	16	8	3	27
05SEP83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	29	8	8	45	16	8	2	26
19SEP83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	11	31	8	8	47	15	8	3	26
03OCT83	DENSITY	0.00	0.00	0.00	0.16	0.00	0.00	0.06	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.16	0.00	0.00	0.06	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	11	31	7	8	46	17	8	3	28
17OCT83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	30	8	8	46	16	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-105 (CONTINUED).

WEEK BEGINNING MONDAY	STRIPED BASS															
	INDIAN POINT						WEST POINT						YEARLING			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
018AUG83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	4	3	7	N	4	3	5	5	6	3	14
22AUG83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	2	14	5	3	8	N	5	3	5	5	5	3	13
05SEP83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	6	3	15	5	3	8	N	5	3	5	5	5	3	13
19SEP83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	5	3	8	N	5	3	6	5	2	13	13
03OCT83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	4	2	6	N	4	2	5	6	6	4	15
17OCT83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	6	3	15	5	3	8	N	5	3	5	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-105 (CONTINUED).

WEEK BEGINNING MONDAY	STRIPED BASS											
	POUGHKEEPSIE				HYDE PARK				KINGSTON			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
22AUG83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.65	0.00	0.22
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.65	0.00	0.22
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
05SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
19SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
03OCT83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
17OCT83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15

N -- STRATUM NOT SAMPLED

TABLE B-105 (CONTINUED).

WEEK BEGINNING MONDAY	STRIPED BASS			SAUGERTIES			YEARLING			CATSKILL			
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	0.00 0.00 6	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	0.00 0.00 6	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	0.00 0.00 6	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
22AUG83	0.00 0.00 6	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	0.00 0.00 6	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	0.00 0.00 6	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
05SEP83	0.20 0.20 6	N	0.07	0.07	0.07	N	0.16	0.16	0.08	N	0.16	0.00	0.08
	0.20 0.20 6	N	0.07	0.07	0.07	N	0.16	0.16	0.08	N	0.16	0.00	0.08
	0.20 0.20 6	N	0.07	0.07	0.07	N	0.16	0.16	0.08	N	0.16	0.00	0.08
19SEP83	0.00 0.00 6	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	0.00 0.00 6	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	0.00 0.00 6	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
03OCT83	0.00 0.00 6	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	0.00 0.00 6	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	0.00 0.00 6	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
17OCT83	0.00 0.00 6	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	0.00 0.00 6	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	0.00 0.00 6	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00

N -- STRATUM NOT SAMPLED

TABLE B-105 (CONTINUED).

WEEK BEGINNING MO/DA	STRIPED BASS			ALBANY			YEARLING		
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83		N	0.00	N	0.00	0.00	0.02	0.00	0.00
		N	0.00	N	0.00	0.00	0.02	0.00	0.00
		N	8	N	8	66	85	49	200
22AUG83		N	1.45	N	1.45	0.21	0.24	0.00	0.08
		N	1.45	N	1.45	0.21	0.19	0.00	0.05
		N	8	N	8	64	87	49	200
05SEP83		N	0.00	N	0.00	0.00	0.04	0.00	0.01
		N	0.00	N	0.00	0.00	0.03	0.00	0.01
		N	8	N	8	63	87	49	199
19SEP83		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	8	N	8	64	86	49	199
03OCT83		N	0.00	N	0.00	0.09	0.00	0.00	0.01
		N	0.00	N	0.00	0.09	0.00	0.00	0.01
		N	8	N	8	65	85	50	200
17OCT83		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	8	N	8	64	86	50	200

N -- STRATUM NOT SAMPLED

TABLE B-106
 CATCH PER UNIT EFFORT (NUMBER PER HAUL) BY WEEK AND REGION,
 BEACH SEINE SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	STRIPED BASS										AL	COMBINED			
	YEARLING														
	YK	TZ	CH	IP	WP	REGIONS			HP	KG	SG	CS			
						CW	PK								
01AUG83	CPUE	0.20	0.92	0.50	0.40	0.00	0.00	0.20	0.00	0.20	0.00	0.00	0.10	0.14	0.44
	S.E. NO. HAULS	0.20 5	0.45 24	0.50 14	0.40 5	0.00 5	1.00 6	0.00 5	0.00 6	0.20 5	0.00 5	0.00 9	0.10 10	0.14 7	1.86 100
15AUG83	CPUE	0.00	0.00	0.00	0.00	1.50	0.20	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.12
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 5	0.20 5	1.50 6	0.20 5	0.00 6	0.00 5	0.11 9	0.00 10	0.00 7	0.00 7	1.42 100
29AUG83	CPUE	0.80	0.00	0.07	0.20	0.00	0.00	0.00	0.00	0.00	0.78	0.00	0.00	1.71	0.27
	S.E. NO. HAULS	0.80 5	0.00 24	0.07 14	0.20 5	0.00 5	0.00 6	0.00 5	0.00 6	0.00 5	0.78 9	0.00 10	0.00 7	1.71 7	1.89 100
12SEP83	CPUE	0.00	0.13	0.07	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11
	S.E. NO. HAULS	0.00 5	0.09 24	0.07 14	0.00 5	0.20 5	0.82 6	0.00 5	0.00 6	0.00 5	0.00 9	0.00 10	0.00 7	0.00 7	1.18 100
26SEP83	CPUE	0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 5	0.00 5	0.43 7	0.00 5	0.00 7	0.00 5	0.00 9	0.00 10	0.00 7	0.00 7	0.65 101
10OCT83	CPUE	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 7	0.00 5	0.17 6	0.00 5	0.00 6	0.00 4	0.00 9	0.00 10	0.00 7	0.00 7	0.41 102

TABLE B-107
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	STRIPED BASS						OLDER					
	YONKERS			TAPPAN ZEE			CROTON-HAVERSTRAY			REGION		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	4	10	6	3	6	15
09MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	4	10	6	3	6	15
16MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	4	10	6	3	6	15
23MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	4	11	5	4	4	13
30MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	3	10	5	5	3	13
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	4	11	4	4	4	12
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.59	0.00	0.11	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.59	0.00	0.11	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	9	3	5	14	4	6	6	16
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.96	0.41	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.61	0.26	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	9	3	5	14	4	6	5	15
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51	0.21
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51	0.21
	NO. TOWS	1	8	9	9	3	4	13	4	6	6	16
04JUL83	DENSITY	0.00	0.00	0.00	0.00	1.08	0.00	0.41	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	1.08	0.00	0.41	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	9	3	5	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-107 (CONTINUED).

WEEK BEGINNING MONDAY	STRIPED BASS												OLDER			
	INDIAN POINT				WEST POINT				CORNWALL				REGION			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 4	0.00 7	0.00 25	0.00 36	0.00 4	0.00 30	0.00 34	0.00 5	0.00 12	0.00 6	0.00 23	0.00 5	0.00 12	0.00 6	0.00 23
09MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 4	0.00 8	0.00 24	0.00 36	0.00 4	0.00 30	0.00 34	0.00 5	0.00 13	0.00 5	0.00 23	0.00 5	0.00 13	0.00 5	0.00 23
16MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 4	0.00 7	0.00 25	0.00 36	0.00 7	0.00 30	0.00 37	0.00 5	0.00 10	0.00 5	0.00 20	0.00 5	0.00 10	0.00 5	0.00 20
23MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 3	0.00 6	0.00 13	0.00 22	0.00 7	0.00 23	0.00 30	0.00 5	0.00 9	0.00 6	0.00 20	0.00 5	0.00 9	0.00 6	0.00 20
30MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 3	0.00 6	0.00 15	0.00 24	0.00 6	0.00 23	0.00 29	0.00 5	0.00 9	0.00 6	0.00 20	0.00 5	0.00 9	0.00 6	0.00 20
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 4	0.00 6	0.00 14	0.00 24	0.00 7	0.00 23	0.00 30	0.00 5	0.00 9	0.00 5	0.00 19	0.00 5	0.00 9	0.00 5	0.00 19
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 5	0.00 5	0.00 16	0.00 26	0.00 8	0.00 25	0.00 33	0.00 3	0.00 12	0.00 13	0.00 28	0.00 3	0.00 12	0.00 13	0.00 28
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 5	0.00 5	0.00 17	0.00 27	0.00 8	0.00 25	0.00 33	0.00 3	0.00 12	0.00 13	0.00 28	0.00 3	0.00 12	0.00 13	0.00 28
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 5	0.00 6	0.00 16	0.00 27	0.00 8	0.00 25	0.00 33	0.00 3	0.00 12	0.00 13	0.00 28	0.00 3	0.00 12	0.00 13	0.00 28
04JUL83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 5	0.00 5	0.00 16	0.00 26	0.00 8	0.00 25	0.00 33	0.00 3	0.00 12	0.00 13	0.00 28	0.00 3	0.00 12	0.00 13	0.00 28

N -- STRATUM NOT SAMPLED

TABLE B-107 (CONTINUED).

WEEK BEGINNING MONDAY	POUGHKEEPSIE						HYDE PARK						OLDER					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION		
02MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00		
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00		
	NO. TOWS	9	10	19	N	10	11	21	N	6	7	13	N	6	7	13		
09MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00		
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00		
	NO. TOWS	10	10	20	N	10	10	20	N	6	7	13	N	6	7	13		
16MAY83	DENSITY	0.00	0.00	0.00	N	0.38	0.00	0.08	N	0.00	0.00	0.00	N	0.00	0.00	0.00		
	S.E.	0.00	0.00	0.00	N	0.38	0.00	0.08	N	0.00	0.00	0.00	N	0.00	0.00	0.00		
	NO. TOWS	10	10	20	N	8	11	19	N	6	7	13	N	6	7	13		
23MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00		
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00		
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10	N	4	6	10		
30MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00		
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00		
	NO. TOWS	16	22	38	N	7	12	19	N	5	5	10	N	5	5	10		
06JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00		
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00		
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10	N	4	6	10		
13JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00		
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00		
	NO. TOWS	7	15	22	N	5	9	14	N	5	5	10	N	5	5	10		
20JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00		
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00		
	NO. TOWS	8	14	22	N	5	9	14	N	5	6	11	N	5	6	11		
27JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00		
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00		
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10	N	4	6	10		
04JUL83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00		
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00		
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10	N	4	6	10		

N -- STRATUM NOT SAMPLED

TABLE B-107 (CONTINUED).

WEEK BEGINNING MONDAY	STRIPED BASS			SAUGERTIES			OLDER			
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM CHANNEL	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM CHANNEL	REGION	SHOAL	BOTTOM CHANNEL	REGION
02MAY83	0.00 0.00 3	N	0.00 0.00 3	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6
09MAY83	0.00 0.00 3	N	0.00 0.00 3	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6
16MAY83	0.00 0.00 4	N	0.00 0.00 3	0.00 0.00 7	N	0.00 0.00 3	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6
23MAY83	0.00 0.00 5	N	0.00 0.00 3	0.00 0.00 8	N	0.00 0.00 3	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6
30MAY83	0.00 0.00 5	N	0.00 0.00 3	0.00 0.00 8	N	0.00 0.00 3	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6
06JUN83	0.00 0.00 5	N	0.00 0.00 3	0.00 0.00 8	N	0.00 0.00 3	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6
13JUN83	0.00 0.00 4	N	0.00 0.00 2	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6
20JUN83	0.00 0.00 3	N	0.00 0.00 2	0.00 0.00 5	N	0.00 0.00 3	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6
27JUN83	0.00 0.00 4	N	0.00 0.00 2	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6
04JUL83	0.00 0.00 4	N	0.00 0.00 2	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 6

N -- STRATUM NOT SAMPLED

TABLE B-107 (CONTINUED).

WEEK BEGINNING MONDAY	STRIPED BASS			ALBANY			OLDER			COMBINED			REGION
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	
		N	0.00	N	0.00	0.00	0.00	0.00					
02MAY83		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		N	5	N	5	N	5	N	21	66	107	194	194
09MAY83		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		N	5	N	5	N	5	N	21	69	104	194	194
16MAY83		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.01
		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.01
		N	5	N	5	N	5	N	21	67	106	194	194
23MAY83		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		N	3	N	3	N	3	N	19	68	99	186	186
30MAY83		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		N	3	N	3	N	3	N	19	68	99	186	186
06JUN83		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		N	3	N	3	N	3	N	19	68	99	186	186
13JUN83		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.02
		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.02
		N	3	N	3	N	3	N	16	63	108	187	187
20JUN83		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.06
		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.04
		N	3	N	3	N	3	N	16	63	108	187	187
27JUN83		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.01
		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.01
		N	3	N	3	N	3	N	16	62	109	187	187
04JUL83		N	0.00	N	0.00	0.00	0.00	0.00	0.59	0.00	0.00	0.00	0.06
		N	0.00	N	0.00	0.00	0.00	0.00	0.59	0.00	0.00	0.00	0.06
		N	3	N	3	N	3	N	16	62	109	187	187

N -- STRATUM NOT SAMPLED

TABLE B-108
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	STRIPED BASS						OLDER					
	YONKERS			TAPPAN ZEE			CROTON-HAVERSTRAM			CROTON-HAVERSTRAM		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	32	7	7	46	16	8	3	27
22AUG83	DENSITY	0.36	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.36	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	29	9	8	46	16	8	3	27
05SEP83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	29	8	8	45	16	8	2	26
19SEP83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	11	31	8	8	47	15	8	3	26
03OCT83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	11	31	7	8	46	17	8	3	28
17OCT83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	30	8	8	46	16	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-108 (CONTINUED).

WEEK BEGINNING MONDAY	STRIPED BASS											
	INDIAN POINT				WEST POINT				OLDER			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	4	3	7	5	6	3	14
22AUG83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	2	14	5	3	8	5	5	3	13
05SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	6	3	15	5	3	8	5	5	3	13
19SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	5	3	8	6	5	2	13
03OCT83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	4	2	6	5	6	4	15
17OCT83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	6	3	15	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-108 (CONTINUED).

STRIPED BASS

WEEK
BEGINNING
MONDAY

WEEK BEGINNING MONDAY	POUGHKEEPSIE						HYDE PARK			KINGSTON			
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83		N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N	5	3	8	N	6	4	10	N	9	6	15
22AUG83		N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N	5	3	8	N	6	4	10	N	9	6	15
05SEP83		N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N	5	3	8	N	6	4	10	N	9	6	15
19SEP83		N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N	5	3	8	N	6	4	10	N	9	6	15
03OCT83		N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N	5	3	8	N	6	4	10	N	9	6	15
17OCT83		N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N	5	3	8	N	6	4	10	N	9	6	15

N -- STRATIUM NOT SAMPLED

TABLE B-108 (CONTINUED).

WEEK BEGINNING MONDAY	STRIPED BASS						OJDER		
	SAUGERTIES			CATSKILL			SHOAL	REGION	CHANNEL
	SHOAL	BOTTOM	CHANNEL	BOTTOM	CHANNEL	REGION			
08AUG83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	12	6	6	N	18	15	21
22AUG83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	12	6	6	N	18	15	21
05SEP83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.17	0.08
	S.E.	N	0.00	0.00	0.00	N	0.00	0.17	0.08
	NO. TOWS	N	12	6	6	N	18	15	21
19SEP83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	12	6	6	N	18	15	21
03OCT83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	12	6	6	N	18	15	21
17OCT83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	13	6	6	N	19	14	20

N -- STRATUM NOT SAMPLED

TABLE B-108 (CONTINUED).

WEEK BEGINNING MONDAY	STRIPED BASS			ALBANY			OLDER		
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	8	N	8	8	66	49	200
22AUG83	DENSITY	N	0.00	N	0.00	0.04	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.04	0.00	0.00	0.00
	NO. TOWS	N	8	N	8	64	87	49	200
05SEP83	DENSITY	N	0.00	N	0.00	0.00	0.02	0.00	0.01
	S.E.	N	0.00	N	0.00	0.00	0.02	0.00	0.01
	NO. TOWS	N	8	N	8	63	87	49	199
19SEP83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	8	N	8	64	86	49	199
03OCT83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	8	N	8	65	85	50	200
17OCT83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	8	N	8	64	86	50	200

N -- STRATUM NOT SAMPLED

TABLE B-109
 CATCH PER UNIT EFFORT (NUMBER PER HAUL) BY WEEK AND REGION,
 BEACH SEINE SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	STRIPED BASS										OLDER			
	YK	TZ	CH	IP	WP	REGIONS			HP	KG	SG	CS	AL	COMBINED
						CW	PK							
01AUG83	CPUE S.E. NO. HAULS	0.00 0.00 24	0.00 0.00 14	0.00 0.00 5	0.00 0.00 5	0.00 0.00 6	0.00 0.00 5	0.00 0.00 5	0.00 0.00 5	0.00 0.00 9	0.00 0.00 10	0.00 0.00 7	0.00 0.00 100	
15AUG83	CPUE S.E. NO. HAULS	0.00 0.00 24	0.00 0.00 14	0.00 0.00 5	0.00 0.00 5	0.00 0.00 6	0.00 0.00 5	0.00 0.00 5	0.00 0.00 5	0.00 0.00 9	0.00 0.00 10	0.00 0.00 7	0.00 0.00 100	
29AUG83	CPUE S.E. NO. HAULS	0.00 0.00 24	0.00 0.00 14	0.00 0.00 5	0.00 0.00 5	0.00 0.00 6	0.00 0.00 5	0.00 0.00 5	0.00 0.00 5	0.00 0.00 9	0.00 0.00 10	0.00 0.00 7	0.00 0.00 100	
12SEP83	CPUE S.E. NO. HAULS	0.00 0.00 24	0.00 0.00 14	0.00 0.00 5	0.00 0.00 5	0.00 0.00 6	0.00 0.00 5	0.00 0.00 5	0.00 0.00 5	0.00 0.00 9	0.00 0.00 10	0.00 0.00 7	0.00 0.00 100	
26SEP83	CPUE S.E. NO. HAULS	0.00 0.00 24	0.00 0.00 14	0.00 0.00 5	0.00 0.00 5	0.00 0.00 7	0.00 0.00 5	0.00 0.00 5	0.00 0.00 5	0.00 0.00 9	0.00 0.00 10	0.00 0.00 7	0.00 0.00 101	
10OCT83	CPUE S.E. NO. HAULS	0.00 0.00 24	0.00 0.00 14	0.00 0.00 7	0.00 0.00 5	0.00 0.00 6	0.00 0.00 5	0.00 0.00 4	0.00 0.00 6	0.00 0.00 9	0.00 0.00 10	0.00 0.00 7	0.00 0.00 102	

TABLE B-110
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	EGGS																
	WHITE PERCH				YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW				
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.92	0.00	0.00	3.99
	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.92	0.00	0.00	3.99
			N	3	6	3	4	3	10	3	6	3	10	6	3	6	15
09MAY83	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.09	0.00	0.00	7.70
	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.09	0.00	0.00	7.70
			N	3	6	3	4	3	10	3	6	3	10	6	3	6	15
16MAY83	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	2.77	0.00	0.82
	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	1.39	0.00	0.37
			N	3	6	3	4	3	10	3	6	3	10	6	3	6	15
23MAY83	0.00	0.00	N	0.00	0.00	0.00	3.03	0.00	0.58	0.00	3.03	0.00	0.58	8.95	0.00	0.00	3.27
	0.00	0.00	N	0.00	0.00	0.00	3.03	0.00	0.58	0.00	3.03	0.00	0.58	8.95	0.00	0.00	3.27
			N	3	6	3	4	4	11	4	4	4	11	5	4	4	13
30MAY83	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.29
	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.00	0.18
			N	3	6	3	3	4	10	3	4	4	10	5	5	3	13
06JUN83	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	185.85	0.00	0.00	0.00	185.85	13.12	0.00	0.00	4.79
	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	185.85	0.00	0.00	0.00	185.85	5.88	0.00	0.00	2.15
			N	3	6	3	4	4	11	4	4	4	11	4	4	4	12
13JUN83	0.00	0.00	N	0.00	0.00	0.00	1.22	0.00	38.16	100.29	1.22	0.00	38.16	10.35	4.11	0.00	4.68
	0.00	0.00	N	0.00	0.00	0.00	1.22	0.00	37.93	100.29	1.22	0.00	37.93	9.23	4.11	0.00	3.49
			N	8	9	3	5	6	14	3	5	6	14	4	6	6	16
20JUN83	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	1.98	5.22	0.00	0.00	1.98	1.75	5.39	0.00	1.82
	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	1.98	5.22	0.00	0.00	1.98	1.75	3.42	0.00	0.99
			N	1	9	3	5	6	14	3	5	6	14	4	6	5	15
27JUN83	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			N	8	9	3	4	6	13	3	4	6	13	4	6	6	16
04JUL83	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			N	1	9	3	5	6	14	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-110 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE PERCH												EGGS																								
	INDIAN POINT				WEST POINT				CORNWALL				REGION	CHANNEL	REGION																						
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION																									
02MAY83	DENSITY	0.95	3.00	0.30	0.77	N	15.98	3.88	5.55	2.15	3.78	1.28	1.99	S.E.	0.95	3.00	0.21	0.51	N	9.88	1.64	1.96	1.28	1.02	NO. TOWS	4	7	25	36	N	4	4	30	34	5	6	23
09MAY83	DENSITY	0.92	0.89	1.02	0.99	N	112.68	4.32	19.26	2.66	87.49	0.00	23.18	S.E.	0.92	0.59	0.53	0.43	N	57.54	1.57	8.05	0.00	6.93	NO. TOWS	4	8	24	36	N	4	4	30	34	5	5	23
16MAY83	DENSITY	0.83	13.41	1.87	3.66	N	33.77	3.80	7.93	33.81	405.39	4.78	111.92	S.E.	0.83	5.39	0.96	1.14	N	17.17	1.34	2.63	3.50	57.28	NO. TOWS	4	7	25	36	N	7	7	30	37	5	5	20
23MAY83	DENSITY	113.98	27.10	4.58	14.80	N	67.50	16.18	23.26	30.12	217.06	0.44	59.18	S.E.	113.98	15.29	2.55	7.58	N	28.59	6.86	7.11	0.44	46.51	NO. TOWS	3	6	13	22	N	7	7	23	30	5	6	20
30MAY83	DENSITY	0.00	2.61	0.63	0.91	N	1094.16	142.95	274.12	20.86	135.52	160.61	145.90	S.E.	0.00	2.61	0.34	0.49	N	892.03	70.25	137.11	152.77	104.06	NO. TOWS	3	6	15	24	N	6	6	23	29	5	6	20
06JUN83	DENSITY	376.30	119.39	19.98	57.47	N	369.34	7.41	57.32	111.21	560.88	1.66	155.21	S.E.	376.30	55.96	8.59	22.18	N	358.79	2.44	49.52	1.66	111.19	NO. TOWS	4	6	14	24	N	7	7	23	30	5	5	19
13JUN83	DENSITY	11.40	29.89	11.02	14.07	N	335.56	15.30	59.46	2.80	1160.04	11.74	313.49	S.E.	4.85	29.02	5.23	6.19	N	170.86	4.48	23.88	9.95	185.58	NO. TOWS	5	5	16	26	N	8	8	25	33	3	13	28
20JUN83	DENSITY	0.00	6.40	2.55	3.02	N	2.52	3.80	3.62	0.00	0.00	0.52	0.36	S.E.	0.00	3.33	1.21	1.08	N	1.04	2.52	2.18	0.52	0.36	NO. TOWS	5	5	17	27	N	8	8	25	33	3	13	28
27JUN83	DENSITY	0.00	0.00	0.00	0.00	N	1.01	0.00	0.14	0.00	0.00	0.00	0.00	S.E.	0.00	0.00	0.00	0.00	N	0.69	0.00	0.10	0.00	0.00	NO. TOWS	5	6	16	27	N	8	8	25	33	3	13	28
04JUL83	DENSITY	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	S.E.	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	NO. TOWS	5	5	16	26	N	8	8	25	33	3	13	28

N -- STRATUM NOT SAMPLED

TABLE B-110 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE PERCH												EGGS
	POUGHKEEPSIE				HYDE PARK				KINGSTON				
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	
02MAY83	DENSITY	2.11	0.00	0.49	N	383.17	8.32	86.01	N	37.26	17.38	24.09	
	S.E.	1.08	0.00	0.25	N	175.85	7.30	36.90	N	19.05	10.54	9.49	
	NO. TOWS	9	10	19	N	10	11	21	N	6	7	13	
09MAY83	DENSITY	1336.69	5.82	314.66	N	473.19	1.84	99.53	N	1455.76	0.00	491.77	
	S.E.	558.90	1.96	129.71	N	229.10	0.85	47.49	N	1126.33	0.00	380.48	
	NO. TOWS	10	10	20	N	10	10	20	N	6	7	13	
16MAY83	DENSITY	982.99	6.65	233.22	N	540.40	9.01	119.14	N	2035.56	24.23	703.67	
	S.E.	422.22	6.06	98.09	N	130.08	4.37	27.18	N	1005.11	20.45	339.81	
	NO. TOWS	10	10	20	N	8	11	19	N	6	7	13	
23MAY83	DENSITY	590.12	24.33	155.63	N	237.66	8.32	55.85	N	1110.08	58.49	413.73	
	S.E.	221.15	14.75	52.55	N	78.44	3.86	16.54	N	1056.60	56.44	358.88	
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10	
30MAY83	DENSITY	1191.52	7.30	282.11	N	247.88	114.42	142.08	N	292.61	11.60	106.53	
	S.E.	1160.47	3.18	269.31	N	1175.16	97.59	85.46	N	231.02	8.45	78.24	
	NO. TOWS	16	22	38	N	7	12	19	N	5	5	10	
06JUN83	DENSITY	118.19	10.35	35.37	N	448.65	48.03	131.06	N	14.54	0.50	5.25	
	S.E.	73.96	6.07	17.79	N	298.71	34.32	67.62	N	13.52	0.50	4.58	
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10	
13JUN83	DENSITY	102.79	3.82	26.79	N	0.00	0.00	0.00	N	1030.03	36.42	372.07	
	S.E.	33.15	2.40	7.91	N	0.00	0.00	0.00	N	680.88	16.19	230.26	
	NO. TOWS	7	15	22	N	5	9	14	N	5	5	10	
20JUN83	DENSITY	21.32	0.00	4.95	N	2.28	0.00	0.47	N	0.00	0.00	0.00	
	S.E.	20.50	0.00	4.76	N	1.40	0.00	0.29	N	0.00	0.00	0.00	
	NO. TOWS	8	14	22	N	5	9	14	N	5	6	11	
27JUN83	DENSITY	0.00	0.00	0.00	N	0.61	0.00	0.13	N	0.00	0.00	0.00	
	S.E.	0.00	0.00	0.00	N	0.61	0.00	0.13	N	0.00	0.00	0.00	
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10	
04JUL83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10	

N -- STRATUM NOT SAMPLED

TABLE B-110 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE PERCH			SAUGERTIES			EGGS			CATSKILL			
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83		N	210.39	2.25	76.79	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N	166.43	2.25	59.62	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N		3	6	N		3		N		3	6
09MAY83		N	1501.65	6.24	541.77	N	5224.00	66.23	2531.17	N	5224.00	66.23	2531.17
		N	1501.65	6.24	537.78	N	267.67	30.54	128.91	N	267.67	30.54	128.91
		N		3	6	N		3	6	N		3	6
16MAY83		N	2929.35	78.00	1099.11	N	386.34	2.56	185.97	N	386.34	2.56	185.97
		N	2778.14	76.26	996.10	N	192.20	1.34	91.86	N	192.20	1.34	91.86
		N		3	7	N		3	6	N		3	6
23MAY83		N	523.70	0.00	187.54	N	718.88	39.84	364.36	N	718.88	39.84	364.36
		N	123.22	0.00	44.13	N	629.15	33.77	301.19	N	629.15	33.77	301.19
		N		5	8	N		3	6	N		3	6
30MAY83		N	318.25	3.22	116.04	N	1676.43	454.77	1038.61	N	1676.43	454.77	1038.61
		N	176.19	1.86	63.11	N	272.37	56.27	133.44	N	272.37	56.27	133.44
		N		5	8	N		3	6	N		3	6
06JUN83		N	462.12	22.30	179.81	N	2108.17	76.36	1047.38	N	2108.17	76.36	1047.38
		N	137.66	12.55	49.95	N	968.24	57.78	463.72	N	968.24	57.78	463.72
		N		5	8	N		3	6	N		3	6
13JUN83		N	64.47	0.00	23.09	N	3304.98	123.88	1644.16	N	3304.98	123.88	1644.16
		N	21.88	0.00	7.84	N	1309.63	62.12	626.72	N	1309.63	62.12	626.72
		N		2	6	N		3	6	N		3	6
20JUN83		N	2.98	0.00	1.07	N	231.31	13.41	117.55	N	231.31	13.41	117.55
		N	2.98	0.00	1.07	N	31.86	13.41	16.76	N	31.86	13.41	16.76
		N		2	5	N		3	6	N		3	6
27JUN83		N	0.00	0.00	0.00	N	5.31	0.00	2.54	N	5.31	0.00	2.54
		N	0.00	0.00	0.00	N	3.90	0.00	1.86	N	3.90	0.00	1.86
		N		2	6	N		3	6	N		3	6
04JUL83		N	2.12	0.00	0.76	N	6.32	2.12	4.13	N	6.32	2.12	4.13
		N	1.34	0.00	0.48	N	3.16	1.07	1.61	N	3.16	1.07	1.61
		N		2	6	N		3	6	N		3	6

N -- STRATUM NOT SAMPLED

TABLE B-110 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE PERCH			ALBANY			EGGS		
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83		N	344.72	N	344.72	2.77	96.37	2.58	25.58
		N	63.98	N	63.98	2.64	23.35	0.96	5.76
		N	5	N	5	21	66	107	194
09MAY83		N	16.99	N	16.99	5.25	1227.19	5.89	305.14
		N	10.40	N	10.40	5.10	211.87	1.82	51.94
		N	5	N	5	21	69	104	194
16MAY83		N	4245.63	N	4245.63	1.42	1289.65	10.38	323.01
		N	416.83	N	416.83	0.56	337.01	6.03	82.69
		N	5	N	5	21	67	106	194
23MAY83		N	386.44	N	386.44	9.70	411.72	12.87	110.31
		N	181.39	N	181.39	6.87	132.20	4.72	32.55
		N	3	N	3	19	68	99	186
30MAY83		N	1560.46	N	1560.46	0.76	721.85	65.28	219.84
		N	200.07	N	200.07	0.31	161.18	15.83	40.85
		N	3	N	3	19	68	99	186
06JUN83		N	178.17	N	178.17	296.80	473.62	15.03	155.11
		N	35.42	N	35.42	268.94	140.46	4.74	43.52
		N	3	N	3	19	68	99	186
13JUN83		N	1747.93	N	1747.93	58.01	885.39	13.65	231.65
		N	1395.80	N	1395.80	54.80	265.26	3.80	65.28
		N	3	N	3	16	63	108	187
20JUN83		N	332.97	N	332.97	3.27	78.53	1.52	20.57
		N	313.06	N	313.06	2.88	40.38	0.83	9.91
		N	3	N	3	16	63	108	187
27JUN83		N	0.00	N	0.00	0.00	0.82	0.00	0.20
		N	0.00	N	0.00	0.00	0.54	0.00	0.13
		N	3	N	3	16	62	109	187
04JUL83		N	0.00	N	0.00	0.00	1.11	0.12	0.35
		N	0.00	N	0.00	0.00	0.46	0.06	0.12
		N	3	N	3	16	62	109	187

N -- STRATUM NOT SAMPLED

TABLE B-111
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	WHITE PERCH											
	YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	3.27	1.40	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	3.27	1.40	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	3	6	3	3	10	6	3	6	15
09MAY83	DENSITY	27.29	3.04	5.85	28.60	0.00	3.24	12.21	223.60	1.10	19.06	89.75
	S.E.	13.77	3.04	3.13	14.33	0.00	3.24	5.59	36.85	1.10	12.32	14.39
	NO. TOWS	3	3	6	3	4	3	10	6	3	6	15
16MAY83	DENSITY	13.71	11.51	11.76	23.00	2.97	34.56	24.09	85.40	18.78	113.64	82.46
	S.E.	12.01	11.51	10.27	10.87	2.97	24.03	11.11	24.07	12.76	21.07	12.71
	NO. TOWS	3	3	6	3	4	3	10	6	3	6	15
23MAY83	DENSITY	0.00	0.00	0.00	115.70	40.34	15.31	58.11	26.21	71.68	31.58	38.45
	S.E.	0.00	0.00	0.00	71.14	20.04	5.57	27.29	8.55	24.83	9.61	7.45
	NO. TOWS	3	3	6	3	4	4	11	5	4	4	13
30MAY83	DENSITY	0.00	0.00	0.00	31.44	3.22	5.14	14.72	61.53	26.13	32.76	41.80
	S.E.	0.00	0.00	0.00	19.43	3.22	5.14	7.70	12.52	10.09	16.18	8.42
	NO. TOWS	3	3	6	3	3	4	10	5	5	3	13
06JUN83	DENSITY	0.00	4.24	3.75	18.11	22.90	7.34	14.41	104.44	98.11	3.82	61.29
	S.E.	0.00	4.24	3.75	7.66	4.11	6.36	4.06	56.91	48.44	2.31	23.36
	NO. TOWS	3	3	6	3	4	4	11	4	4	4	12
13JUN83	DENSITY	0.00	0.00	0.00	229.43	70.89	42.09	118.50	32.19	15.51	14.45	21.16
	S.E.	0.00	0.00	0.00	122.05	40.94	27.04	48.24	13.04	4.97	7.55	5.80
	NO. TOWS	1	8	9	3	5	6	14	4	6	6	16
20JUN83	DENSITY	0.00	0.40	0.36	0.00	2.22	1.56	1.10	0.87	7.11	2.54	2.94
	S.E.	0.00	0.40	0.36	0.00	2.22	1.05	0.62	0.87	5.09	1.22	1.27
	NO. TOWS	1	8	9	3	5	6	14	4	6	5	15
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	4	6	13	4	6	6	16
04JUL83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-111 (CONTINUED).

YOLK-SAC LARVAE

WHITE PERCH

WEEK
BEGINNING
MONDAY

WEEK BEGINNING MONDAY	YOLK-SAC LARVAE											
	INDIAN POINT				WEST POINT				CORNWALL			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	3.69	0.29	0.82	3.49	8.21	7.56	23.13	23.99	14.28	17.35
	S.E.	0.00	2.38	0.20	0.41	3.49	3.44	3.00	15.84	9.48	6.17	4.96
	NO. TOWS	4	7	25	36	4	30	34	5	12	6	23
09MAY83	DENSITY	77.76	15.86	16.83	20.36	161.69	239.90	229.11	113.69	573.15	8.85	163.46
	S.E.	38.28	10.39	3.82	4.12	53.44	28.27	25.46	64.27	165.76	3.55	43.86
	NO. TOWS	4	8	24	36	4	30	34	5	13	5	23
16MAY83	DENSITY	187.84	87.20	259.44	227.49	301.25	516.20	486.56	781.35	1279.73	428.11	672.75
	S.E.	80.98	53.31	47.35	38.18	84.03	58.22	51.51	217.08	648.83	298.97	265.55
	NO. TOWS	4	7	25	36	7	30	37	5	10	5	20
23MAY83	DENSITY	75.03	29.18	48.69	47.15	16.73	87.77	77.97	573.15	645.46	150.74	305.44
	S.E.	18.62	16.03	15.54	12.43	7.08	19.61	16.93	466.09	232.51	77.95	85.29
	NO. TOWS	3	6	13	22	7	23	30	5	9	6	20
30MAY83	DENSITY	19.22	66.47	107.55	95.62	62.00	70.58	69.39	92.60	94.91	13.29	39.37
	S.E.	5.85	45.29	17.34	15.34	57.07	11.91	12.93	43.26	29.17	6.42	9.18
	NO. TOWS	3	6	15	24	6	23	29	5	9	6	20
06JUN83	DENSITY	56.17	40.79	41.04	41.91	26.93	33.07	32.23	41.16	21.08	6.83	12.57
	S.E.	17.42	18.22	8.88	7.59	11.68	7.53	6.69	22.74	12.26	3.63	4.27
	NO. TOWS	4	6	14	24	7	23	30	5	9	5	19
13JUN83	DENSITY	35.19	7.03	23.03	21.20	0.00	13.68	11.80	24.58	9.60	1.33	4.86
	S.E.	9.74	6.18	5.22	4.23	0.00	3.11	2.69	21.35	3.25	0.65	1.57
	NO. TOWS	5	5	16	26	8	25	33	3	12	13	28
20JUN83	DENSITY	1.92	4.96	2.17	2.60	2.32	3.10	3.00	6.45	5.32	0.18	1.89
	S.E.	1.92	2.64	0.74	0.73	1.50	0.71	0.64	6.45	2.26	0.18	0.71
	NO. TOWS	5	5	17	27	8	25	33	3	12	13	28
27JUN83	DENSITY	3.27	0.56	0.00	0.29	0.75	0.50	0.53	0.00	0.25	0.22	0.22
	S.E.	3.27	0.56	0.00	0.22	0.49	0.23	0.21	0.00	0.25	0.22	0.16
	NO. TOWS	5	6	16	27	8	25	33	3	12	13	28
04JUL83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	16	26	8	25	33	3	12	13	28

N -- STRATUM NOT SAMPLED

TABLE B-111 (CONTINUED).

YOLK-SAC LARVAE

WHITE PERCH

WEEK
BEGINNING
MONDAY

WEEK BEGINNING MONDAY	POUGHKEEPSIE			HYDE PARK			KINGSTON					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	15.85	1.58	4.89	N	42.09	18.15	23.11	N	6.87	3.65	4.74
	S.E.	4.75	1.58	1.64	N	10.39	6.82	5.82	N	3.11	1.49	1.44
	NO. TOWS	9	10	19	N	10	11	21	N	6	7	13
09MAY83	DENSITY	877.84	232.05	381.91	N	404.27	67.21	137.06	N	329.36	63.23	153.13
	S.E.	283.73	90.62	95.80	N	160.70	14.48	35.23	N	64.84	21.38	26.08
	NO. TOWS	10	10	20	N	10	10	20	N	6	7	13
16MAY83	DENSITY	797.92	253.52	379.85	N	513.55	112.23	195.40	N	117.89	109.55	112.37
	S.E.	258.36	122.06	111.27	N	148.77	37.42	42.78	N	45.26	44.32	33.10
	NO. TOWS	10	10	20	N	8	11	19	N	6	7	13
23MAY83	DENSITY	490.38	126.17	210.69	N	678.70	157.97	265.89	N	1614.41	202.70	679.59
	S.E.	131.57	28.52	37.58	N	313.42	49.97	76.08	N	1003.89	110.09	346.87
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10
30MAY83	DENSITY	121.23	10.80	36.43	N	116.86	30.17	48.14	N	308.83	28.82	123.41
	S.E.	28.50	2.89	6.98	N	54.70	8.81	13.32	N	109.75	13.72	38.17
	NO. TOWS	16	22	38	N	7	12	19	N	5	5	10
06JUN83	DENSITY	40.20	13.09	19.38	N	98.05	19.26	35.58	N	176.67	12.39	67.89
	S.E.	7.62	3.24	3.05	N	41.36	7.52	10.44	N	110.22	3.62	37.31
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10
13JUN83	DENSITY	29.39	4.08	9.96	N	6.60	18.86	16.32	N	65.87	58.67	61.10
	S.E.	13.63	2.05	3.53	N	3.08	9.91	7.88	N	23.34	26.30	19.12
	NO. TOWS	7	15	22	N	5	9	14	N	5	5	10
20JUN83	DENSITY	3.29	0.48	1.13	N	10.36	2.41	4.05	N	3.64	4.75	4.38
	S.E.	1.59	0.48	0.52	N	5.61	0.88	1.36	N	1.76	2.20	1.57
	NO. TOWS	8	14	22	N	5	9	14	N	5	6	11
27JUN83	DENSITY	0.83	0.00	0.19	N	0.00	0.00	0.00	N	1.53	0.00	0.52
	S.E.	0.53	0.00	0.12	N	0.00	0.00	0.00	N	1.53	0.00	0.52
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10
04JUL83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.91	0.43	0.59
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.91	0.43	0.42
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10

N -- STRATUM NOT SAMPLED

TABLE B-111 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE PERCH			YOLK-SAC LARVAE			CATSKILL			REGION	
	SAUGERTIES			SHOAL			BOTTOM				CHANNEL
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION			
02MAY83	DENSITY	11.59	2.26	5.60	N	10.19	2.04	5.93			
	S.E.	3.28	1.13	1.38	N	10.19	2.04	4.98			
	NO. TOWS	3	3	6	N	3	3	6			
09MAY83	DENSITY	85.42	77.12	80.09	N	22.65	22.87	22.76			
	S.E.	36.14	47.24	32.97	N	9.85	4.19	5.19			
	NO. TOWS	3	3	6	N	3	3	6			
16MAY83	DENSITY	841.35	158.80	403.23	N	159.55	24.37	88.97			
	S.E.	433.01	53.27	158.79	N	54.10	4.33	25.95			
	NO. TOWS	4	3	7	N	3	3	6			
23MAY83	DENSITY	643.72	110.02	301.15	N	562.59	112.81	327.76			
	S.E.	139.64	76.01	69.86	N	213.63	15.74	102.42			
	NO. TOWS	5	3	8	N	3	3	6			
30MAY83	DENSITY	82.89	7.54	34.52	N	108.87	37.66	71.69			
	S.E.	42.53	4.70	15.53	N	36.28	7.72	17.80			
	NO. TOWS	5	3	8	N	3	3	6			
06JUN83	DENSITY	140.15	59.67	88.49	N	473.69	16.96	235.23			
	S.E.	101.83	44.62	46.37	N	389.21	12.13	186.11			
	NO. TOWS	5	3	8	N	3	3	6			
13JUN83	DENSITY	52.23	51.86	52.00	N	367.52	189.32	274.48			
	S.E.	19.21	6.49	8.04	N	136.24	94.20	81.60			
	NO. TOWS	4	2	6	N	3	3	6			
20JUN83	DENSITY	7.03	13.60	11.25	N	64.13	18.79	40.46			
	S.E.	5.60	6.64	4.71	N	31.72	4.59	15.35			
	NO. TOWS	3	2	5	N	3	3	6			
27JUN83	DENSITY	0.00	0.00	0.00	N	0.00	4.93	2.58			
	S.E.	0.00	0.00	0.00	N	0.00	4.93	2.58			
	NO. TOWS	4	2	6	N	3	3	6			
04JUL83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00			
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00			
	NO. TOWS	4	2	6	N	3	3	6			

N -- STRATUM NOT SAMPLED

TABLE B-111 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE PERCH			YOLK-SAC LARVAE			
	ALBANY			COMBINED			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	0.00	N	0.00	0.84	5.52
	S.E.	N	0.00	N	0.00	0.58	0.76
	NO. TOWS	N	5	N	5	21	194
09MAY83	DENSITY	N	11.24	N	11.24	81.47	119.05
	S.E.	N	5.37	N	5.37	12.39	13.76
	NO. TOWS	N	5	N	5	21	194
16MAY83	DENSITY	N	23.04	N	23.04	73.85	226.45
	S.E.	N	9.48	N	9.48	12.42	26.28
	NO. TOWS	N	5	N	5	21	194
23MAY83	DENSITY	N	311.63	N	311.63	94.58	186.97
	S.E.	N	22.89	N	22.89	42.44	25.56
	NO. TOWS	N	3	N	3	19	186
30MAY83	DENSITY	N	5.50	N	5.50	36.50	46.31
	S.E.	N	5.50	N	5.50	11.15	3.97
	NO. TOWS	N	3	N	3	19	186
06JUN83	DENSITY	N	407.85	N	407.85	39.82	59.71
	S.E.	N	142.34	N	142.34	14.44	14.72
	NO. TOWS	N	3	N	3	19	186
13JUN83	DENSITY	N	290.01	N	290.01	135.93	60.42
	S.E.	N	161.76	N	161.76	66.72	10.43
	NO. TOWS	N	3	N	3	16	187
20JUN83	DENSITY	N	145.91	N	145.91	0.55	10.05
	S.E.	N	103.06	N	103.06	0.33	3.44
	NO. TOWS	N	3	N	3	16	187
27JUN83	DENSITY	N	6.03	N	6.03	0.18	0.52
	S.E.	N	4.60	N	4.60	0.18	0.24
	NO. TOWS	N	3	N	3	16	187
04JUL83	DENSITY	N	0.95	N	0.95	0.00	0.07
	S.E.	N	0.95	N	0.95	0.00	0.04
	NO. TOWS	N	3	N	3	16	187

N -- STRATUM NOT SAMPLED

TABLE B-112
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	WHITE PERCH						POST YOLK-SAC LARVAE					
	YONKERS			TAPPAN ZEE			CROTON-HAVERSTRAW			REGION		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	3	10	6	3	6	15
09MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	3	10	6	3	6	15
16MAY83	DENSITY	41.58	29.41	30.82	63.81	7.16	271.00	141.73	134.47	47.85	168.03	129.34
	S.E.	25.06	29.41	26.16	37.95	3.01	128.82	57.08	38.20	37.39	31.63	20.84
	NO. TOWS	3	3	6	3	4	3	10	6	3	6	15
23MAY83	DENSITY	0.00	2.62	2.31	211.62	149.60	215.65	201.38	287.80	623.84	558.45	474.07
	S.E.	0.00	1.34	1.19	82.81	98.05	85.85	51.90	45.60	141.27	382.18	162.49
	NO. TOWS	3	3	6	3	4	4	11	5	4	4	13
30MAY83	DENSITY	57.68	21.86	26.01	103.26	21.18	81.79	78.22	288.56	216.03	358.66	301.69
	S.E.	30.33	16.09	14.65	75.75	10.71	51.96	36.35	67.58	115.97	101.60	55.11
	NO. TOWS	3	3	6	3	3	4	10	5	5	3	13
06JUN83	DENSITY	2.82	24.59	22.06	82.11	454.20	153.87	184.69	237.36	251.94	425.77	318.76
	S.E.	1.57	11.29	9.98	37.06	176.21	57.87	44.37	74.65	76.07	310.59	132.81
	NO. TOWS	3	3	6	3	4	4	11	4	4	4	12
13JUN83	DENSITY	0.00	1.09	0.97	288.73	1100.77	556.81	560.40	477.28	747.10	930.02	724.55
	S.E.	0.00	0.77	0.68	112.87	709.13	341.75	205.01	301.02	161.52	353.73	186.77
	NO. TOWS	1	8	9	3	5	6	14	4	6	6	16
20JUN83	DENSITY	6.03	0.38	1.04	426.33	437.69	181.26	323.43	666.31	848.33	566.84	665.08
	S.E.	0.00	0.38	0.34	160.01	183.06	106.89	83.73	173.85	273.54	143.32	105.76
	NO. TOWS	1	8	9	3	5	6	14	4	6	5	15
27JUN83	DENSITY	0.00	0.00	0.00	27.39	7.50	27.65	23.67	123.38	173.08	69.58	111.99
	S.E.	0.00	0.00	0.00	27.39	5.65	12.85	11.78	11.11	84.46	16.80	20.26
	NO. TOWS	1	8	9	3	4	6	13	4	6	6	16
04JUL83	DENSITY	0.00	0.34	0.30	1.13	0.00	0.00	0.43	0.00	1.86	13.13	5.86
	S.E.	0.00	0.34	0.30	1.13	0.00	0.00	0.43	0.00	1.86	6.98	2.93
	NO. TOWS	1	8	9	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-112 (CONTINUED).

WHITE PERCH POST YOLK-SAC LARVAE

WEEK BEGINNING MONDAY	INDIAN POINT										WEST POINT										CORNWALL																	
	SHOAL			BOTTOM			CHANNEL			REGION			SHOAL			BOTTOM			CHANNEL			REGION			SHOAL			BOTTOM			CHANNEL			REGION				
	DENSITY	S.E.	NO. TOWS	DENSITY	S.E.	NO. TOWS	DENSITY	S.E.	NO. TOWS	DENSITY	S.E.	NO. TOWS	DENSITY	S.E.	NO. TOWS	DENSITY	S.E.	NO. TOWS	DENSITY	S.E.	NO. TOWS	DENSITY	S.E.	NO. TOWS	DENSITY	S.E.	NO. TOWS	DENSITY	S.E.	NO. TOWS	DENSITY	S.E.	NO. TOWS	DENSITY	S.E.	NO. TOWS		
02MAY83	0.00	0.00	4	0.00	0.00	7	0.00	0.00	25	0.00	0.00	36	0.00	0.00	4	0.00	0.00	30	0.00	0.00	34	0.00	0.00	5	0.00	0.00	12	0.00	0.00	6	0.00	0.00	23	0.00	0.00	23		
09MAY83	0.00	0.00	4	0.00	0.00	8	0.00	0.00	24	0.00	0.00	36	0.00	0.00	4	0.00	0.18	30	0.33	0.18	34	0.00	0.00	5	0.00	0.26	13	0.00	0.00	5	0.00	0.07	23	0.07	0.07	23		
16MAY83	125.45	30.04	4	325.56	250.35	7	254.85	47.84	36	250.35	28.15	25	254.85	47.84	36	325.56	49.95	30	329.68	49.95	30	305.50	43.53	37	1046.84	315.87	5	143.74	63.56	10	56.28	35.39	5	136.69	34.52	20	34.52	20
23MAY83	457.84	134.59	3	269.84	414.58	6	393.99	45.65	22	414.58	55.85	13	393.99	45.65	22	269.84	69.54	6	343.11	74.56	23	318.74	64.65	30	874.63	450.35	5	203.87	55.09	9	232.92	61.37	6	262.45	51.25	20	51.25	20
30MAY83	116.46	39.71	3	199.60	472.06	6	406.86	64.28	24	472.06	81.55	15	406.86	64.28	24	199.60	58.76	6	613.06	123.24	23	626.12	109.50	29	1520.73	499.51	5	520.18	207.56	9	555.09	243.31	6	601.85	176.36	20	176.36	20
06JUN83	237.33	109.84	4	1102.25	486.62	6	570.25	84.83	24	486.62	91.76	14	570.25	84.83	24	1102.25	281.62	6	420.93	117.64	23	386.51	101.76	30	484.99	269.61	5	442.25	304.07	9	44.66	22.45	5	174.84	82.96	19	82.96	19
13JUN83	1251.90	219.86	5	2190.69	1166.67	5	1336.02	312.91	26	1166.67	234.90	16	1336.02	312.91	26	2190.69	1580.64	5	398.58	60.96	25	374.34	55.57	33	575.66	456.37	3	537.13	125.11	12	758.35	269.76	13	689.54	187.93	28	187.93	28
20JUN83	444.61	62.76	5	478.78	474.86	5	473.66	39.24	27	474.86	45.64	17	473.66	39.24	27	478.78	100.66	5	296.49	19.52	25	306.76	19.64	33	436.65	115.61	3	369.17	63.26	12	356.01	49.20	13	364.15	37.91	28	37.91	28
27JUN83	202.28	47.85	5	327.93	354.79	6	341.26	46.89	27	354.79	57.85	16	341.26	46.89	27	327.93	78.57	6	185.39	21.00	25	193.48	18.66	33	144.06	78.83	3	833.52	212.62	12	583.68	99.41	13	623.97	87.79	28	87.79	28
04JUL83	43.25	11.75	5	12.86	63.23	5	53.94	16.76	26	63.23	21.38	16	53.94	16.76	26	12.86	10.49	5	291.59	30.66	25	365.14	42.38	33	125.39	41.51	3	277.88	96.14	12	164.04	34.32	13	191.76	34.48	28	34.48	28

N -- STRATUM NOT SAMPLED

TABLE B-112 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE PERCH										POST YOLK-SAC LARVAE										
	POUGHKEEPSIE					HYDE PARK					KINGSTON					KINGSTON					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	
02MAY83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	
	NO. TOWS	N	9	10	19	N	10	11	21	N	10	11	21	N	6	7	13	N	6	7	13
09MAY83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	
	NO. TOWS	N	10	10	20	N	10	10	20	N	10	10	20	N	6	7	13	N	6	7	13
16MAY83	DENSITY	N	116.24	100.79	104.38	N	12.97	3.89	5.77	N	12.97	3.89	5.77	N	3.26	2.90	3.02	N	3.26	2.90	3.02
	S.E.	N	78.40	48.26	41.28	N	4.11	1.12	1.23	N	4.11	1.12	1.23	N	1.69	0.49	0.66	N	1.69	0.49	0.66
	NO. TOWS	N	10	10	20	N	8	11	19	N	8	11	19	N	6	7	13	N	6	7	13
23MAY83	DENSITY	N	264.18	137.24	166.70	N	36.32	64.75	58.85	N	36.32	64.75	58.85	N	58.14	22.42	34.48	N	58.14	22.42	34.48
	S.E.	N	84.09	24.74	27.23	N	19.30	23.56	19.10	N	19.30	23.56	19.10	N	35.15	7.99	13.00	N	35.15	7.99	13.00
	NO. TOWS	N	16	22	38	N	7	12	19	N	7	12	19	N	4	6	10	N	4	6	10
30MAY83	DENSITY	N	709.63	317.09	408.19	N	123.35	121.00	121.49	N	123.35	121.00	121.49	N	572.12	217.25	337.12	N	572.12	217.25	337.12
	S.E.	N	267.33	122.08	112.42	N	45.46	28.51	24.49	N	45.46	28.51	24.49	N	134.60	76.65	68.14	N	134.60	76.65	68.14
	NO. TOWS	N	16	22	38	N	7	12	19	N	7	12	19	N	5	5	10	N	5	5	10
06JUN83	DENSITY	N	340.70	259.46	278.31	N	357.38	85.29	141.68	N	357.38	85.29	141.68	N	41.22	44.67	43.50	N	41.22	44.67	43.50
	S.E.	N	84.56	94.31	75.03	N	154.89	29.80	39.86	N	154.89	29.80	39.86	N	15.09	26.94	18.56	N	15.09	26.94	18.56
	NO. TOWS	N	16	22	38	N	7	12	19	N	7	12	19	N	4	6	10	N	4	6	10
13JUN83	DENSITY	N	573.49	420.84	456.26	N	433.52	777.97	706.58	N	433.52	777.97	706.58	N	1108.77	953.12	1005.70	N	1108.77	953.12	1005.70
	S.E.	N	278.77	180.58	153.02	N	144.75	292.20	233.58	N	144.75	292.20	233.58	N	231.35	332.42	233.59	N	231.35	332.42	233.59
	NO. TOWS	N	7	15	22	N	5	9	14	N	5	9	14	N	5	5	10	N	5	5	10
20JUN83	DENSITY	N	680.48	524.00	560.31	N	985.77	1172.79	1134.03	N	985.77	1172.79	1134.03	N	2392.24	1862.24	2041.28	N	2392.24	1862.24	2041.28
	S.E.	N	238.37	149.18	127.22	N	368.58	115.34	119.14	N	368.58	115.34	119.14	N	692.42	722.42	532.50	N	692.42	722.42	532.50
	NO. TOWS	N	8	14	22	N	5	9	14	N	5	9	14	N	5	6	11	N	5	6	11
27JUN83	DENSITY	N	599.13	437.73	475.18	N	1577.28	522.31	740.96	N	1577.28	522.31	740.96	N	1065.69	860.97	930.13	N	1065.69	860.97	930.13
	S.E.	N	120.74	65.94	57.88	N	368.00	202.91	178.02	N	368.00	202.91	178.02	N	402.91	236.77	207.62	N	402.91	236.77	207.62
	NO. TOWS	N	7	15	22	N	5	9	14	N	5	9	14	N	4	6	10	N	4	6	10
04JUL83	DENSITY	N	192.54	309.62	282.45	N	418.67	460.06	451.48	N	418.67	460.06	451.48	N	1315.17	324.57	659.20	N	1315.17	324.57	659.20
	S.E.	N	62.36	63.46	50.84	N	36.82	97.48	77.65	N	36.82	97.48	77.65	N	128.92	187.04	131.29	N	128.92	187.04	131.29
	NO. TOWS	N	7	15	22	N	5	9	14	N	5	9	14	N	4	6	10	N	4	6	10

N -- STRATUM NOT SAMPLED

TABLE B-112 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE PERCH			POST YOLK-SAC LARVAE			
	SAUGERTIES			CATSKILL			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	3	3	N	3	3	6
09MAY83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	3	3	N	3	3	6
16MAY83	DENSITY	3.70	4.42	N	3.04	1.12	2.04
	S.E.	2.27	0.85	N	1.72	1.12	1.01
	NO. TOWS	4	3	N	3	3	6
23MAY83	DENSITY	5.81	26.83	N	5.25	8.06	6.72
	S.E.	2.01	18.22	N	1.18	4.21	2.27
	NO. TOWS	5	3	N	3	3	6
30MAY83	DENSITY	13.57	40.84	N	5.43	9.17	7.39
	S.E.	8.54	31.57	N	1.01	6.70	3.53
	NO. TOWS	5	3	N	3	3	6
06JUN83	DENSITY	0.00	4.27	N	0.00	3.37	1.76
	S.E.	0.00	2.30	N	0.00	3.37	1.76
	NO. TOWS	5	3	N	3	3	6
13JUN83	DENSITY	1109.66	294.68	N	542.29	239.38	384.14
	S.E.	466.67	50.65	N	330.00	150.80	176.27
	NO. TOWS	4	2	N	3	3	6
20JUN83	DENSITY	2133.69	2102.38	N	1845.68	3703.79	2815.78
	S.E.	315.98	563.84	N	192.49	1190.95	628.55
	NO. TOWS	3	2	N	3	3	6
27JUN83	DENSITY	1773.57	153.10	N	4225.50	702.21	2386.02
	S.E.	593.07	150.11	N	868.32	150.32	422.33
	NO. TOWS	4	2	N	3	3	6
04JUL83	DENSITY	512.30	305.40	N	1596.23	624.84	1089.08
	S.E.	320.94	134.99	N	853.84	426.85	464.95
	NO. TOWS	4	2	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-112 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE PERCH			ALBANY			POST YOLK-SAC LARVAE		
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
		N	0.00	N	0.00	0.00	0.00	0.00	0.00
02MAY83		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	5	N	5	21	66	107	194
09MAY83		N	0.00	N	0.00	0.00	0.02	0.04	0.03
		N	0.00	N	0.00	0.00	0.02	0.02	0.02
		N	5	N	5	21	69	104	194
16MAY83		N	0.00	N	0.00	117.45	57.02	122.93	106.24
		N	0.00	N	0.00	25.65	19.42	16.31	11.99
		N	5	N	5	21	67	106	194
23MAY83		N	0.00	N	0.00	242.80	133.01	175.29	171.57
		N	0.00	N	0.00	49.91	18.61	21.55	15.66
		N	3	N	3	19	68	99	186
30MAY83		N	0.00	N	0.00	194.88	245.36	262.51	251.66
		N	0.00	N	0.00	48.22	39.97	31.18	23.18
		N	3	N	3	19	68	99	186
06JUN83		N	0.00	N	0.00	133.60	237.88	192.33	197.72
		N	0.00	N	0.00	29.49	36.24	26.77	19.91
		N	3	N	3	19	68	99	186
13JUN83		N	0.00	N	0.00	364.74	739.91	542.56	573.44
		N	0.00	N	0.00	97.60	148.59	64.65	56.75
		N	3	N	3	16	63	108	187
20JUN83		N	97.76	N	97.76	435.61	1032.07	819.79	834.05
		N	49.24	N	49.24	97.11	87.88	95.96	67.27
		N	3	N	3	16	63	108	187
27JUN83		N	1224.85	N	1224.85	61.46	1304.15	322.30	537.28
		N	544.46	N	544.46	15.70	161.19	30.57	44.34
		N	3	N	3	16	62	109	187
04JUL83		N	2078.70	N	2078.70	7.62	769.43	219.95	333.74
		N	195.88	N	195.88	1.76	127.53	31.86	37.61
		N	3	N	3	16	62	109	187

N -- STRATUM NOT SAMPLED

TABLE B-113
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	WHITE PERCH											
	YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	4	3	10	6	6	15
09MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	4	3	10	6	6	15
16MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	4	3	10	6	6	15
23MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	4	4	11	5	4	13
30MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	3	4	10	5	3	13
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	4	4	11	4	4	12
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	9	3	5	6	14	4	6	16
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	9	3	5	6	14	4	5	15
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29
	NO. TOWS	1	8	9	9	3	4	6	13	4	6	16
04JUL83	DENSITY	0.00	0.00	0.00	0.00	1.13	0.00	0.00	0.43	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	1.13	0.00	0.00	0.43	0.00	0.00	0.00
	NO. TOWS	1	8	9	9	3	5	6	14	4	6	16

N -- STRATUM NOT SAMPLED

TABLE B-113 (CONTINUED).

WHITE PERCH YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY	INDIAN POINT			WEST POINT			CORNWALL					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	7	25	36	N	4	30	34	5	12	6
09MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	N	4	30	0.00	0.00	0.00	0.00
	NO. TOWS	4	8	24	36	N	4	30	34	5	13	5
16MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	N	7	30	0.00	0.00	0.00	0.00
	NO. TOWS	4	7	25	36	N	7	30	37	5	10	5
23MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	N	7	23	0.00	0.00	0.00	0.00
	NO. TOWS	3	6	13	22	N	7	23	30	5	9	6
30MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	N	6	23	0.00	0.00	0.00	0.00
	NO. TOWS	3	6	15	24	N	6	23	29	5	9	6
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	N	7	23	0.00	0.00	0.00	0.00
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	5
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	N	8	25	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	N	8	25	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	17	27	N	8	25	33	3	12	13
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	N	8	25	0.00	0.00	0.00	0.00
	NO. TOWS	5	6	16	27	N	8	25	33	3	12	13
04JUL83	DENSITY	1.85	0.00	0.66	0.63	0.63	0.38	0.23	0.25	0.00	0.00	0.00
	S.E.	1.22	0.00	0.38	0.31	0.31	0.38	0.16	0.15	0.00	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13

N -- STRATUM NOT SAMPLED

TABLE B-113 (CONTINUED).

WHITE PERCH

YOUNG-OF-THE-YEAR

WEEK
BEGINNING
MONDAY

WEEK BEGINNING MONDAY	POUGHKEEPSIE			HYDE PARK			KINGSTON					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	9	10	19	N	10	11	21	N	6	7	13
09MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	10	10	20	N	10	10	20	N	6	7	13
16MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	10	10	20	N	8	11	19	N	6	7	13
23MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10
30MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	16	22	38	N	7	12	19	N	5	5	10
06JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10
13JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	7	15	22	N	5	9	14	N	5	5	10
20JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	8	14	22	N	5	9	14	N	5	6	11
27JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10
04JUL83	DENSITY	0.00	0.16	0.12	N	0.57	0.00	0.12	N	0.00	0.00	0.00
	S.E.	0.00	0.16	0.12	N	0.57	0.00	0.12	N	0.00	0.00	0.00
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10

N -- STRATUM NOT SAMPLED

TABLE B-113 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE PERCH			SAUGERTIES			YOUNG-OF-THE-YEAR							
	SHOAL			BOTTOM			CHANNEL			CATSKILL				
	DENSITY S.E. NO. TOWS	SHOAL	NO. TOWS	DENSITY S.E. NO. TOWS	BOTTOM	NO. TOWS	DENSITY S.E. NO. TOWS	CHANNEL	NO. TOWS	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	0.00 0.00 3	N	3	0.00 0.00 3	N	3	0.00 0.00 6	N	6	0.00 0.00 3	N	3	0.00 0.00 3	0.00 0.00 6
09MAY83	0.00 0.00 3	N	3	0.00 0.00 3	N	3	0.00 0.00 6	N	6	0.00 0.00 3	N	3	0.00 0.00 3	0.00 0.00 6
16MAY83	0.00 0.00 4	N	4	0.00 0.00 3	N	3	0.00 0.00 7	N	7	0.00 0.00 3	N	3	0.00 0.00 3	0.00 0.00 6
23MAY83	0.00 0.00 5	N	5	0.00 0.00 3	N	3	0.00 0.00 8	N	8	0.00 0.00 3	N	3	0.00 0.00 3	0.00 0.00 6
30MAY83	0.00 0.00 5	N	5	0.00 0.00 3	N	3	0.00 0.00 8	N	8	0.00 0.00 3	N	3	0.00 0.00 3	0.00 0.00 6
06JUN83	0.00 0.00 5	N	5	0.00 0.00 3	N	3	0.00 0.00 8	N	8	0.00 0.00 3	N	3	0.00 0.00 3	0.00 0.00 6
13JUN83	0.00 0.00 4	N	4	0.00 0.00 2	N	2	0.00 0.00 6	N	6	0.00 0.00 3	N	3	0.00 0.00 3	0.00 0.00 6
20JUN83	0.00 0.00 3	N	3	0.00 0.00 2	N	2	0.00 0.00 5	N	5	0.00 0.00 3	N	3	0.00 0.00 3	0.00 0.00 6
27JUN83	0.00 0.00 4	N	4	0.00 0.00 2	N	2	0.00 0.00 6	N	6	0.00 0.00 3	N	3	0.00 0.00 3	0.00 0.00 6
04JUL83	0.00 0.00 4	N	4	0.00 0.00 2	N	2	0.00 0.00 6	N	6	0.00 0.00 3	N	3	0.00 0.00 3	0.00 0.00 6

N -- STRATUM NOT SAMPLED

TABLE B-113 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE PERCH			ALBANY			COMBINED					
	YOUNG-OF-THE-YEAR			YOUNG-OF-THE-YEAR			YOUNG-OF-THE-YEAR					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	0.00	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
	NO. TOWS	N	5	N	5	N	5	N	21	66	107	194
09MAY83	DENSITY	N	0.00	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
	NO. TOWS	N	5	N	5	N	5	N	21	69	104	194
16MAY83	DENSITY	N	0.00	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
	NO. TOWS	N	5	N	5	N	5	N	21	67	106	194
23MAY83	DENSITY	N	0.00	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
	NO. TOWS	N	3	N	3	N	3	N	19	68	99	186
30MAY83	DENSITY	N	0.00	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
	NO. TOWS	N	3	N	3	N	3	N	19	68	99	186
06JUN83	DENSITY	N	0.00	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
	NO. TOWS	N	3	N	3	N	3	N	19	68	99	186
13JUN83	DENSITY	N	0.00	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
	NO. TOWS	N	3	N	3	N	3	N	16	63	108	187
20JUN83	DENSITY	N	0.00	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
	NO. TOWS	N	3	N	3	N	3	N	16	63	108	187
27JUN83	DENSITY	N	0.00	N	0.00	N	0.00	N	0.19	0.00	0.00	0.02
	S.E.	N	0.00	N	0.00	N	0.00	N	0.19	0.00	0.00	0.02
	NO. TOWS	N	3	N	3	N	3	N	16	62	109	187
04JUL83	DENSITY	N	0.00	N	0.00	N	0.00	N	0.72	0.05	0.12	0.17
	S.E.	N	0.00	N	0.00	N	0.00	N	0.62	0.04	0.05	0.07
	NO. TOWS	N	3	N	3	N	3	N	16	62	109	187

N -- STRATUM NOT SAMPLED

TABLE B-114
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	WHITE PERCH											
	YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	0.06	0.00	0.00	0.02	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.06	0.00	0.00	0.02	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	32	7	7	46	16	8	3	27
22AUG83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	29	9	8	46	16	8	3	27
05SEP83	DENSITY	0.00	0.00	0.00	0.35	0.00	0.00	0.13	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.27	0.00	0.00	0.10	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	29	8	8	45	16	8	2	26
19SEP83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	11	31	8	8	47	15	8	3	26
03OCT83	DENSITY	0.42	0.00	0.05	0.31	0.00	0.00	0.12	0.15	0.29	0.00	0.12
	S.E.	0.42	0.00	0.05	0.24	0.00	0.00	0.09	0.15	0.29	0.00	0.09
	NO. TOWS	6	5	11	31	7	8	46	17	8	3	28
17OCT83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	30	8	8	46	16	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-114 (CONTINUED).

WHITE PERCH YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY	INDIAN POINT			WEST POINT			CORNWALL					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	4	3	7	5	6	3	14
22AUG83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.00	0.00	0.03
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.00	0.00	0.03
	NO. TOWS	7	5	2	14	5	3	8	5	5	3	13
05SEP83	DENSITY	0.00	0.39	0.00	0.06	0.00	0.00	0.00	0.47	0.44	0.00	0.14
	S.E.	0.00	0.39	0.00	0.06	0.00	0.00	0.00	0.47	0.44	0.00	0.12
	NO. TOWS	6	6	3	15	5	3	8	5	5	3	13
19SEP83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.25	0.00	0.00	0.07
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.00	0.00	0.05
	NO. TOWS	6	5	3	14	5	3	8	6	5	2	13
03OCT83	DENSITY	0.00	0.00	0.00	0.00	0.51	0.00	0.07	1.49	0.00	0.00	0.09
	S.E.	0.00	0.00	0.00	0.00	0.51	0.00	0.07	1.05	0.00	0.00	0.06
	NO. TOWS	6	5	3	14	4	2	6	5	6	4	15
17OCT83	DENSITY	0.44	0.00	0.00	0.03	0.00	0.00	0.00	3.85	1.42	0.00	0.60
	S.E.	0.44	0.00	0.00	0.03	0.00	0.00	0.00	3.22	0.58	0.00	0.24
	NO. TOWS	6	6	3	15	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-114 (CONTINUED).

WHITE PERCH

YOUNG-OF-THE-YEAR

WEEK
BEGINNING
MONDAY

WEEK BEGINNING MONDAY	POUGHKEEPSIE			HYDE PARK			KINGSTON					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	N	1.92	0.00	0.40	N	2.18	0.00	0.74
	S.E.	0.00	0.00	0.00	N	1.12	0.00	0.23	N	0.87	0.00	0.29
	NO. TOWS	N 5	N 3	N 8	N	6	4	10	N	9	6	15
22AUG83	DENSITY	5.82	0.00	1.35	N	0.44	0.00	0.09	N	0.27	0.00	0.09
	S.E.	3.86	0.00	0.90	N	0.44	0.00	0.09	N	0.27	0.00	0.09
	NO. TOWS	N 5	N 3	N 8	N	6	4	10	N	9	6	15
05SEP83	DENSITY	4.22	0.00	0.98	N	0.00	0.00	0.00	N	2.86	0.00	0.97
	S.E.	2.91	0.00	0.67	N	0.00	0.00	0.00	N	2.32	0.00	0.78
	NO. TOWS	N 5	N 3	N 8	N	6	4	10	N	9	6	15
19SEP83	DENSITY	5.93	0.00	1.38	N	5.69	0.00	1.18	N	6.69	0.00	2.26
	S.E.	3.19	0.00	0.74	N	3.58	0.00	0.74	N	2.15	0.00	0.73
	NO. TOWS	N 5	N 3	N 8	N	6	4	10	N	9	6	15
03OCT83	DENSITY	2.59	0.00	0.60	N	7.92	0.63	2.15	N	5.22	0.00	1.76
	S.E.	1.66	0.00	0.39	N	5.46	0.63	1.24	N	2.43	0.00	0.82
	NO. TOWS	N 5	N 3	N 8	N	6	4	10	N	9	6	15
17OCT83	DENSITY	6.46	0.00	1.50	N	3.52	0.50	1.13	N	2.70	0.00	0.91
	S.E.	3.12	0.00	0.72	N	1.31	0.50	0.48	N	1.78	0.00	0.60
	NO. TOWS	N 5	N 3	N 8	N	6	4	10	N	9	6	15

N -- STRATUM NOT SAMPLED

TABLE B-114 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE PERCH			SAUGERTIES			YOUNG-OF-THE-YEAR			CATSKILL			
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	7.99 2.38 12	N	7.99	0.00	2.86	N	4.08	0.00	1.95	N	4.08	0.00	1.95
		N	2.38	0.00	0.85	N	1.40	0.00	0.67	N	1.40	0.00	0.67
		N	12	6	18	N	15	6	21	N	15	6	21
22AUG83	0.21 0.21 12	N	0.21	0.00	0.07	N	0.95	0.00	0.45	N	0.95	0.00	0.45
		N	0.21	0.00	0.07	N	0.44	0.00	0.21	N	0.44	0.00	0.21
		N	12	6	18	N	15	6	21	N	15	6	21
05SEP83	6.98 6.73 12	N	6.98	0.00	2.50	N	0.70	0.00	0.34	N	0.70	0.00	0.34
		N	6.73	0.00	2.41	N	0.39	0.00	0.19	N	0.39	0.00	0.19
		N	12	6	18	N	15	6	21	N	15	6	21
19SEP83	3.65 0.93 12	N	3.65	0.00	1.31	N	0.47	0.00	0.22	N	0.47	0.00	0.22
		N	0.93	0.00	0.33	N	0.34	0.00	0.16	N	0.34	0.00	0.16
		N	12	6	18	N	15	6	21	N	15	6	21
03OCT83	3.72 0.94 12	N	3.72	0.00	1.33	N	1.50	0.00	0.72	N	1.50	0.00	0.72
		N	0.94	0.00	0.34	N	0.82	0.00	0.39	N	0.82	0.00	0.39
		N	12	6	18	N	15	6	21	N	15	6	21
17OCT83	4.35 0.84 13	N	4.35	0.00	1.56	N	3.18	0.00	1.52	N	3.18	0.00	1.52
		N	0.84	0.00	0.30	N	0.69	0.00	0.33	N	0.69	0.00	0.33
		N	13	6	19	N	11	6	20	N	11	6	20

N -- STRATUM NOT SAMPLED

TABLE B-114 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE PERCH			ALBANY			YOUNG-OF-THE-YEAR		
							COMBINED		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	
08AUG83	DENSITY	N	0.82	N	0.82	0.03	1.88	0.00	0.46
	S.E.	N	0.57	N	0.57	0.03	0.36	0.00	0.09
	NO. TOWS	N	8	N	8	66	85	49	200
22AUG83	DENSITY	N	0.37	N	0.37	0.02	0.98	0.00	0.24
	S.E.	N	0.37	N	0.37	0.02	0.49	0.00	0.12
	NO. TOWS	N	8	N	8	64	87	49	200
05SEP83	DENSITY	N	1.76	N	1.76	0.21	1.94	0.00	0.50
	S.E.	N	1.00	N	1.00	0.15	0.88	0.00	0.22
	NO. TOWS	N	8	N	8	63	87	49	199
19SEP83	DENSITY	N	0.00	N	0.00	0.05	2.14	0.00	0.53
	S.E.	N	0.00	N	0.00	0.03	0.50	0.00	0.12
	NO. TOWS	N	8	N	8	64	86	49	199
03OCT83	DENSITY	N	1.42	N	1.42	0.31	2.12	0.06	0.59
	S.E.	N	1.10	N	1.10	0.15	0.50	0.06	0.13
	NO. TOWS	N	8	N	8	65	85	50	200
17OCT83	DENSITY	N	5.95	N	5.95	0.16	3.04	0.04	0.79
	S.E.	N	2.57	N	2.57	0.12	0.56	0.04	0.14
	NO. TOWS	N	8	N	8	64	86	50	200

N -- STRATUM NOT SAMPLED

TABLE B-115
 CATCH PER UNIT EFFORT (NUMBER PER HAUL) BY WEEK AND REGION,
 BEACH SEINE SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	YK	TZ	CH	IP	WP	REGIONS					SG	CS	AL	COMBINED
						YK	TZ	CH	IP	WP				
01AUG83	CPUE	1.60	8.14	16.60	22.00	7.67	1.80	35.20	11.20	39.56	10.00	24.71	12.92	
	S.E. NO. HAULS	1.36 5	3.60 14	7.76 5	13.76 5	5.53 6	0.97 5	15.76 5	5.09 5	9.26 9	4.06 10	16.86 7	1.99 100	
15AUG83	CPUE	0.60	5.57	7.40	28.00	7.33	8.80	4.60	16.00	13.11	13.20	12.00	8.92	
	S.E. NO. HAULS	0.40 5	1.61 14	5.31 5	16.00 5	4.13 6	4.26 5	2.29 5	5.53 5	6.45 9	6.00 10	12.00 7	1.59 100	
29AUG83	CPUE	0.00	85.36	0.00	16.40	31.50	0.60	23.20	8.60	27.67	11.70	0.14	21.51	
	S.E. NO. HAULS	0.00 5	84.21 14	0.00 5	7.76 5	23.36 6	0.40 5	11.27 5	4.76 5	14.75 9	5.06 10	0.14 7	13.50 100	
12SEP83	CPUE	0.60	3.21	5.60	4.80	5.83	0.40	1.40	14.60	13.56	30.00	0.00	8.80	
	S.E. NO. HAULS	0.40 5	2.26 14	4.63 5	2.75 5	2.73 6	0.40 5	0.68 5	10.77 5	4.59 9	12.89 10	0.00 7	1.90 100	
26SEP83	CPUE	0.00	12.79	6.60	22.00	4.29	39.80	1.60	4.00	7.56	3.30	0.43	6.74	
	S.E. NO. HAULS	0.00 5	6.89 14	5.63 5	10.06 5	2.02 7	30.25 5	0.68 5	2.02 5	5.86 9	2.68 10	0.43 7	1.86 101	
10OCT83	CPUE	0.00	11.93	7.14	8.20	6.33	0.20	0.25	2.83	2.56	9.70	0.00	4.60	
	S.E. NO. HAULS	0.00 5	10.40 14	5.87 7	6.73 5	3.57 6	0.20 5	0.25 4	2.44 6	1.46 9	3.44 10	0.00 7	1.77 102	

TABLE B-116
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	WHITE PERCH												YEARLING											
	YONKERS						TAPPAN ZEE						CROTON-HAVERSTRAW											
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION								
02MAY83	DENSITY	14.43		1.22	2.75	7.28	7.28	1.70	2.35	4.09	2.68	1.38	0.00	1.28										
	S.E.	14.43		1.22	1.99	7.28	7.28	1.70	2.35	2.95	1.70	1.38	0.00	0.69										
	NO. TOWS	3		3	6	3	3	4	3	10	6	3	6	15										
09MAY83	DENSITY	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.33	33.41	0.00	8.20										
	S.E.	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.75	22.83	0.00	5.06										
	NO. TOWS	3		3	6	3	3	4	3	10	6	3	6	15										
16MAY83	DENSITY	6.77		0.00	0.79	0.00	0.00	0.00	1.21	0.52	5.01	23.52	0.00	7.01										
	S.E.	6.77		0.00	0.79	0.00	0.00	0.00	1.21	0.52	3.18	23.52	0.00	5.30										
	NO. TOWS	3		3	6	3	3	4	3	10	6	3	6	15										
23MAY83	DENSITY	2.69		0.00	0.31	0.00	0.00	3.28	0.00	0.63	0.00	3.05	0.00	0.67										
	S.E.	1.37		0.00	0.16	0.00	0.00	1.90	0.00	0.37	0.00	2.06	0.00	0.45										
	NO. TOWS	3		3	6	3	3	4	4	11	5	4	4	13										
30MAY83	DENSITY	1.42		0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
	S.E.	1.42		0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
	NO. TOWS	3		3	6	3	3	3	4	10	5	5	3	13										
06JUN83	DENSITY	0.00		0.00	0.00	15.71	14.20	0.00	0.00	5.94	0.00	0.00	0.00	0.00										
	S.E.	0.00		0.00	0.00	14.20	14.20	0.00	0.00	5.37	0.00	0.00	0.00	0.00										
	NO. TOWS	3		3	6	3	3	4	4	11	4	4	4	12										
13JUN83	DENSITY	0.00		0.00	0.00	1.11	1.11	0.00	0.00	0.42	0.00	0.00	0.00	0.00										
	S.E.	0.00		0.00	0.00	1.11	1.11	0.00	0.00	0.42	0.00	0.00	0.00	0.00										
	NO. TOWS	1		8	9	3	3	5	6	14	4	6	6	16										
20JUN83	DENSITY	0.00		0.00	0.00	1.31	1.31	0.00	0.00	0.49	0.87	0.53	0.66	0.71										
	S.E.	0.00		0.00	0.00	1.31	1.31	0.00	0.00	0.49	0.87	0.53	0.66	0.44										
	NO. TOWS	1		8	9	3	3	5	6	14	4	6	5	15										
27JUN83	DENSITY	0.00		0.00	0.00	1.05	1.05	1.62	6.29	3.41	0.96	1.63	0.51	0.92										
	S.E.	0.00		0.00	0.00	1.05	1.05	0.94	6.29	2.73	0.96	0.74	0.51	0.44										
	NO. TOWS	1		8	9	3	3	4	6	13	4	6	6	16										
04JUL83	DENSITY	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85	0.00	0.00	0.31										
	S.E.	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85	0.00	0.00	0.31										
	NO. TOWS	1		8	9	3	3	5	6	14	4	6	6	16										

N -- STRATUM NOT SAMPLED

TABLE B-116 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE PERCH												YEARLING		
	INDIAN POINT				WEST POINT				CORNWALL				REGION	CHANNEL	REGION
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION			
02MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 4	13.07 6.44 7	0.40 0.29 25	2.41 1.06 36	N N N	47.38 39.06 4	0.10 0.10 30	6.62 5.39 34	2.87 1.39 5	6.13 1.80 12	0.00 0.00 6	1.78 0.48 23		
09MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 4	0.46 0.46 8	0.64 0.41 24	0.57 0.32 36	N N N	1.44 1.44 4	0.29 0.16 30	0.45 0.24 34	0.00 0.00 5	3.94 1.29 13	0.00 0.00 5	1.04 0.34 23		
16MAY83	DENSITY S.E. NO. TOWS	6.80 3.09 4	4.08 2.20 7	1.00 0.50 25	1.85 0.56 36	N N N	15.96 4.46 7	0.57 0.29 30	2.69 0.66 37	0.00 0.00 5	8.08 2.24 10	0.00 0.00 5	2.13 0.59 20		
23MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 3	1.40 0.88 6	0.00 0.00 13	0.22 0.14 22	N N N	4.99 1.67 7	0.55 0.26 23	1.16 0.32 30	0.00 0.00 5	3.41 1.59 9	0.00 0.00 6	0.90 0.42 20		
30MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 3	0.00 0.00 6	0.00 0.00 15	0.00 0.00 24	N N N	2.64 1.97 6	0.00 0.00 23	0.36 0.27 29	0.00 0.00 5	1.09 1.09 9	0.00 0.00 6	0.29 0.29 20		
06JUN83	DENSITY S.E. NO. TOWS	0.00 0.00 4	0.00 0.00 6	0.00 0.00 14	0.00 0.00 24	N N N	0.00 0.00 7	0.00 0.00 23	0.00 0.00 30	0.00 0.00 5	0.33 0.33 9	0.00 0.00 5	0.09 0.09 19		
13JUN83	DENSITY S.E. NO. TOWS	0.73 0.73 5	0.00 0.00 5	0.00 0.00 16	0.04 0.04 26	N N N	0.00 0.00 8	0.13 0.13 25	0.11 0.11 33	0.00 0.00 3	0.78 0.41 12	0.00 0.00 13	0.21 0.11 28		
20JUN83	DENSITY S.E. NO. TOWS	0.75 0.75 5	0.73 0.73 5	0.00 0.00 17	0.16 0.13 27	N N N	0.48 0.48 8	0.14 0.14 25	0.19 0.14 33	0.00 0.00 3	1.52 0.80 12	0.00 0.00 13	0.40 0.21 28		
27JUN83	DENSITY S.E. NO. TOWS	0.69 0.69 5	0.00 0.00 6	0.19 0.19 16	0.19 0.15 27	N N N	0.00 0.00 8	0.15 0.15 25	0.13 0.13 33	0.00 0.00 3	0.54 0.36 12	0.00 0.00 13	0.14 0.10 28		
04JUL83	DENSITY S.E. NO. TOWS	1.25 0.77 5	0.58 0.58 5	0.33 0.22 16	0.42 0.20 26	N N N	0.82 0.54 8	0.18 0.18 25	0.27 0.17 33	0.00 0.00 3	0.00 0.00 12	0.00 0.00 13	0.00 0.00 28		

N -- STRATUM NOT SAMPLED

TABLE B-116 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE PERCH											
	POUGHKEEPSIE				HYDE PARK				KINGSTON			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.25	0.00	0.06	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.25	0.00	0.06	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	9	10	19	N	10	11	21	N	6	7	13
09MAY83	DENSITY	0.00	0.00	0.00	N	0.93	0.00	0.19	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.47	0.00	0.10	N	0.00	0.00	0.00
	NO. TOWS	10	10	20	N	10	10	20	N	6	7	13
16MAY83	DENSITY	1.79	0.00	0.41	N	0.73	0.00	0.15	N	1.89	0.00	0.64
	S.E.	0.66	0.00	0.15	N	0.48	0.00	0.10	N	1.89	0.00	0.64
	NO. TOWS	10	10	20	N	8	11	19	N	6	7	13
23MAY83	DENSITY	0.17	0.00	0.04	N	1.17	0.00	0.24	N	0.00	0.00	0.00
	S.E.	0.17	0.00	0.04	N	0.81	0.00	0.17	N	0.00	0.00	0.00
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10
30MAY83	DENSITY	0.56	0.00	0.13	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.40	0.00	0.09	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	16	22	38	N	7	12	19	N	5	5	10
06JUN83	DENSITY	2.07	0.00	0.48	N	0.87	0.00	0.18	N	0.00	0.00	0.00
	S.E.	0.94	0.00	0.22	N	0.56	0.00	0.12	N	0.00	0.00	0.00
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10
13JUN83	DENSITY	0.87	0.00	0.20	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.87	0.00	0.20	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	7	15	22	N	5	9	14	N	5	5	10
20JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	3.00	0.00	1.01
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	2.29	0.00	0.77
	NO. TOWS	8	14	22	N	5	9	14	N	5	6	11
27JUN83	DENSITY	2.07	0.00	0.48	N	2.48	0.37	0.81	N	0.00	0.00	0.00
	S.E.	1.13	0.00	0.26	N	1.84	0.37	0.48	N	0.00	0.00	0.00
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10
04JUL83	DENSITY	0.00	0.37	0.28	N	0.48	0.63	0.60	N	0.00	0.00	0.00
	S.E.	0.00	0.37	0.28	N	0.48	0.42	0.35	N	0.00	0.00	0.00
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10

N -- STRATUM NOT SAMPLED

TABLE B-116 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE PERCH			SAUGERTIES			YEARLING			CATSKILL						
	SHOAL			BOTTOM			CHANNEL			REGION						
	DENSITY S.E. NO. TOWS	SHOAL	NO. TOWS	DENSITY S.E. NO. TOWS	BOTTOM	NO. TOWS	DENSITY S.E. NO. TOWS	CHANNEL	NO. TOWS	DENSITY S.E. NO. TOWS	SHOAL	NO. TOWS	DENSITY S.E. NO. TOWS	CHANNEL	NO. TOWS	REGION
02MAY83		N	3	0.00	0.00	3	0.00	0.00	3	0.00	N	3	0.00	0.00	3	0.00
		N	3	0.00	0.00	3	0.00	0.00	3	0.00	N	3	0.00	0.00	3	0.00
		N	3	0.00	0.00	3	0.00	0.00	3	0.00	N	3	0.00	0.00	3	0.00
09MAY83		N	3	0.00	0.00	3	0.00	0.00	3	0.00	N	3	0.00	0.00	3	0.00
		N	3	0.00	0.00	3	0.00	0.00	3	0.00	N	3	0.00	0.00	3	0.00
		N	3	0.00	0.00	3	0.00	0.00	3	0.00	N	3	0.00	0.00	3	0.00
16MAY83		N	4	0.95	0.00	3	0.34	0.00	3	0.00	N	3	0.34	0.00	3	0.00
		N	4	0.95	0.00	3	0.34	0.00	3	0.00	N	3	0.34	0.00	3	0.00
		N	4	0.95	0.00	3	0.34	0.00	3	0.00	N	3	0.34	0.00	3	0.00
23MAY83		N	5	0.00	0.00	3	0.00	0.00	3	0.00	N	3	0.00	0.00	3	0.00
		N	5	0.00	0.00	3	0.00	0.00	3	0.00	N	3	0.00	0.00	3	0.00
		N	5	0.00	0.00	3	0.00	0.00	3	0.00	N	3	0.00	0.00	3	0.00
30MAY83		N	5	0.00	0.00	3	0.00	0.00	3	0.00	N	3	0.00	0.00	3	0.00
		N	5	0.00	0.00	3	0.00	0.00	3	0.00	N	3	0.00	0.00	3	0.00
		N	5	0.00	0.00	3	0.00	0.00	3	0.00	N	3	0.00	0.00	3	0.00
06JUN83		N	5	0.56	0.00	3	0.20	0.00	3	0.00	N	3	0.20	0.00	3	0.00
		N	5	0.56	0.00	3	0.20	0.00	3	0.00	N	3	0.20	0.00	3	0.00
		N	5	0.56	0.00	3	0.20	0.00	3	0.00	N	3	0.20	0.00	3	0.00
13JUN83		N	4	1.64	0.00	2	0.59	0.00	2	0.00	N	3	0.59	0.00	3	0.00
		N	4	0.95	0.00	2	0.34	0.00	2	0.00	N	3	0.34	0.00	3	0.00
		N	4	0.95	0.00	2	0.34	0.00	2	0.00	N	3	0.34	0.00	3	0.00
20JUN83		N	3	3.96	0.00	2	1.42	0.00	2	0.00	N	3	1.42	0.00	3	0.00
		N	3	1.04	0.00	2	0.37	0.00	2	0.00	N	3	0.37	0.00	3	0.00
		N	3	1.04	0.00	2	0.37	0.00	2	0.00	N	3	0.37	0.00	3	0.00
27JUN83		N	4	3.82	0.00	2	1.37	0.00	2	0.00	N	3	1.37	0.00	3	0.00
		N	4	2.94	0.00	2	1.05	0.00	2	0.00	N	3	1.05	0.00	3	0.00
		N	4	2.94	0.00	2	1.05	0.00	2	0.00	N	3	1.05	0.00	3	0.00
04JUL83		N	4	0.00	0.00	2	0.00	0.00	2	0.00	N	3	0.00	0.00	3	0.49
		N	4	0.00	0.00	2	0.00	0.00	2	0.00	N	3	0.00	0.00	3	0.49
		N	4	0.00	0.00	2	0.00	0.00	2	0.00	N	3	0.00	0.00	3	0.49

N -- STRATUM NOT SAMPLED

TABLE B-116 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE PERCH			ALBANY			YEARLING			COMBINED		
	SHOAL			BOTTOM			CHANNEL			REGION		
	DENSITY S.E. NO. TOWS	0.70 0.70 5	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 5	N N N	DENSITY S.E. NO. TOWS	0.70 0.70 5	N N N	SHOAL	BOTTOM	CHANNEL
02MAY83	DENSITY S.E. NO. TOWS	0.70 0.70 5	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 5	N N N	0.70 0.70 5	N N N	6.45 4.35 21	4.02 2.06 66	0.44 0.28 107	1.91 0.69 194
09MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 5	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 5	N N N	0.00 0.00 5	N N N	0.56 0.42 21	2.37 1.34 69	0.10 0.05 104	0.71 0.33 194
16MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 5	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 5	N N N	0.00 0.00 5	N N N	2.41 1.13 21	3.52 1.43 67	0.29 0.13 106	1.29 0.38 194
23MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 3	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 3	N N N	0.00 0.00 3	N N N	0.32 0.16 19	1.21 0.29 68	0.07 0.03 99	0.37 0.08 186
30MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 3	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 3	N N N	0.00 0.00 3	N N N	0.17 0.17 19	0.28 0.13 68	0.00 0.00 99	0.08 0.04 186
06JUN83	DENSITY S.E. NO. TOWS	0.00 0.00 3	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 3	N N N	0.00 0.00 3	N N N	8.57 7.75 19	0.40 0.14 68	0.00 0.00 99	0.94 0.76 186
13JUN83	DENSITY S.E. NO. TOWS	0.00 0.00 3	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 3	N N N	0.00 0.00 3	N N N	0.65 0.61 16	0.35 0.16 63	0.02 0.02 108	0.16 0.07 187
20JUN83	DENSITY S.E. NO. TOWS	0.00 0.00 3	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 3	N N N	0.00 0.00 3	N N N	0.97 0.74 16	0.91 0.24 63	0.04 0.03 108	0.35 0.10 187
27JUN83	DENSITY S.E. NO. TOWS	0.00 0.00 3	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 3	N N N	0.00 0.00 3	N N N	0.85 0.62 16	1.16 0.40 62	0.67 0.58 109	0.81 0.40 187
04JUL83	DENSITY S.E. NO. TOWS	0.00 0.00 3	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 3	N N N	0.00 0.00 3	N N N	0.28 0.21 16	0.25 0.15 62	0.17 0.08 109	0.20 0.07 187

N -- STRATUM NOT SAMPLED

TABLE B-117
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	WHITE PERCH											
	YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	2.83	0.00	0.39	1.24	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	2.58	0.00	0.39	0.99	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	32	7	7	46	16	8	3	27
22AUG83	DENSITY	1.27	0.00	0.15	0.30	0.00	0.00	0.11	0.16	0.00	0.00	0.06
	S.E.	1.27	0.00	0.15	0.30	0.00	0.00	0.11	0.16	0.00	0.00	0.06
	NO. TOWS	7	5	12	29	9	8	46	16	8	3	27
05SEP83	DENSITY	0.00	0.00	0.00	0.53	0.00	0.00	0.20	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.32	0.00	0.00	0.12	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	29	8	8	45	16	8	2	26
19SEP83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96	0.00	0.21
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.00	0.15
	NO. TOWS	6	5	11	31	8	8	47	15	8	3	26
03OCT83	DENSITY	2.91	0.00	0.34	0.63	6.36	0.00	1.46	1.73	0.00	0.00	0.63
	S.E.	2.91	0.00	0.34	0.44	5.91	0.00	1.15	0.87	0.00	0.00	0.32
	NO. TOWS	6	5	11	31	7	8	46	17	8	3	28
17OCT83	DENSITY	0.00	0.00	0.00	0.26	0.00	0.00	0.10	0.16	0.00	0.00	0.06
	S.E.	0.00	0.00	0.00	0.14	0.00	0.00	0.05	0.16	0.00	0.00	0.06
	NO. TOWS	7	5	12	30	8	8	46	16	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-117 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE PERCH												YEARLING		
	INDIAN POINT				WEST POINT				CORNWALL				REGION	CHANNEL	REGION
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION			
08AUG83	DENSITY S.E. NO. TOWS	2.23 2.23 6	1.34 1.34 5	0.00 0.00 3	0.35 0.25 14	N	0.00 0.00 4	0.00 0.00 3	0.00 0.00 7	0.00 0.00 5	0.00 0.00 6	0.00 0.00 3	0.00 0.00 14	0.00 0.00 14	
22AUG83	DENSITY S.E. NO. TOWS	0.00 0.00 7	0.00 0.00 5	0.00 0.00 2	0.00 0.00 14	N	1.47 1.47 5	0.00 0.00 3	0.20 0.20 8	2.12 2.12 5	1.40 1.40 5	0.00 0.00 3	0.49 0.39 13		
05SEP83	DENSITY S.E. NO. TOWS	0.00 0.00 6	0.87 0.87 6	0.00 0.00 3	0.14 0.14 15	N	0.00 0.00 5	0.00 0.00 3	0.00 0.00 8	0.51 0.51 5	0.90 0.55 5	0.00 0.00 3	0.27 0.15 13		
19SEP83	DENSITY S.E. NO. TOWS	0.00 0.00 6	0.00 0.00 5	0.00 0.00 3	0.00 0.00 14	N	0.00 0.00 5	0.00 0.00 3	0.00 0.00 8	5.51 3.49 6	2.25 2.25 5	0.00 0.00 2	0.91 0.63 13		
03OCT83	DENSITY S.E. NO. TOWS	2.43 2.43 6	5.17 4.10 5	0.00 0.00 3	0.98 0.67 14	N	4.11 4.11 4	0.00 0.00 2	0.57 0.57 6	11.67 4.41 5	1.86 1.18 6	0.00 0.00 4	1.17 0.40 15		
17OCT83	DENSITY S.E. NO. TOWS	1.48 1.48 6	0.00 0.00 6	0.00 0.00 3	0.09 0.09 15	N	1.78 0.73 5	0.00 0.00 3	0.25 0.10 8	10.00 3.52 5	11.00 6.29 5	0.00 0.00 3	3.48 1.67 13		

N -- STRATUM NOT SAMPLED

TABLE B-117 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE PERCH											
	POUGHKEEPSIE				HYDE PARK				KINGSTON			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	N	3.76	0.00	0.78	N	5.81	1.71	3.10
	S.E.	0.00	0.00	0.00	N	1.03	0.00	0.21	N	2.26	1.71	1.37
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
22AUG83	DENSITY	0.97	0.00	0.23	N	7.35	0.00	1.52	N	5.84	0.00	1.97
	S.E.	0.97	0.00	0.23	N	3.44	0.00	0.71	N	3.75	0.00	1.27
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
05SEP83	DENSITY	0.00	0.00	0.00	N	0.60	0.00	0.13	N	0.26	0.00	0.09
	S.E.	0.00	0.00	0.00	N	0.60	0.00	0.13	N	0.26	0.00	0.09
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
19SEP83	DENSITY	5.71	0.00	1.32	N	14.77	0.00	1.06	N	18.47	0.77	6.75
	S.E.	2.35	0.00	0.55	N	4.44	0.00	0.92	N	5.63	0.77	1.97
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
03OCT83	DENSITY	5.90	0.73	1.93	N	6.43	4.37	4.80	N	14.31	0.00	4.83
	S.E.	2.34	0.73	0.78	N	2.63	3.66	2.95	N	5.07	0.00	1.71
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
17OCT83	DENSITY	3.79	0.00	0.88	N	6.90	0.00	1.43	N	7.33	0.77	2.99
	S.E.	0.95	0.00	0.22	N	3.15	0.00	0.65	N	2.70	0.77	1.04
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15

N -- STRATUM NOT SAMPLED

TABLE B-117 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE PERCH		SAUGERTIES			YEARLING			CATSKILL				
	DENSITY S.E. NO. TOWS	SHOAL N	BOTTOM	CHANNEL	REGION	SHOAL N	BOTTOM	CHANNEL	REGION	SHOAL N	BOTTOM	CHANNEL	REGION
08AUG83													
22AUG83													
05SEP83													
19SEP83													
03OCT83													
17OCT83													

N -- STRATUM NOT SAMPLED

TABLE B-117 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE PERCH			YEARLING				
	ALBANY			COMBINED				
	SHOAI	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	5.56	N	5.56	2.30	0.14	0.82
	S.E.	N	4.94	N	4.94	0.69	0.11	0.23
	NO. TOWS	N	8	N	8	85	49	200
22AUG83	DENSITY	N	1.24	N	1.24	1.86	0.00	0.50
	S.E.	N	1.24	N	1.24	0.57	0.00	0.14
	NO. TOWS	N	8	N	8	87	49	200
05SEP83	DENSITY	N	1.53	N	1.53	0.66	0.06	0.23
	S.E.	N	1.53	N	1.53	0.28	0.06	0.08
	NO. TOWS	N	8	N	8	87	49	199
19SEP83	DENSITY	N	0.32	N	0.32	4.33	0.05	1.11
	S.E.	N	0.32	N	0.32	0.67	0.05	0.17
	NO. TOWS	N	8	N	8	86	49	199
03OCT83	DENSITY	N	3.69	N	3.69	7.39	0.60	2.37
	S.E.	N	2.48	N	2.48	1.21	0.35	0.38
	NO. TOWS	N	8	N	8	85	50	200
17OCT83	DENSITY	N	2.14	N	2.14	3.65	0.14	1.05
	S.E.	N	1.22	N	1.22	0.58	0.10	0.16
	NO. TOWS	N	8	N	8	86	50	200

N -- STRATUM NOT SAMPLED

TABLE B-118
 CATCH PER UNIT EFFORT (NUMBER PER HAUL) BY WEEK AND REGION,
 BEACH SEINE SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	WHITE PERCH													AL	COMBINED
	YEARLING														
	REGIONS														
	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL	COMBINED		
01AUG83	CPU	0.60	12.04	19.86	8.60	4.40	11.83	2.20	0.80	2.80	15.33	4.40	10.00	10.79	
	S.E. NO. HAULS	0.60 5	4.59 24	12.98 14	4.64 5	2.32 5	10.64 6	1.50 5	0.58 5	2.33 5	5.17 9	2.81 10	8.89 7	9.64 100	
15AUG83	CPU	0.60	7.63	18.36	6.20	8.20	8.17	1.80	0.40	0.80	2.22	4.40	0.14	6.81	
	S.E. NO. HAULS	0.40 5	3.63 24	4.88 14	2.48 5	2.22 5	3.42 6	1.80 5	0.40 5	0.80 5	1.44 9	2.50 10	0.14 7	7.68 100	
29AUG83	CPU	0.00	2.50	83.29	3.80	2.40	2.17	0.40	0.80	0.80	3.22	0.70	0.00	14.69	
	S.E. NO. HAULS	0.00 5	0.92 24	69.84 14	2.73 5	1.60 5	1.08 6	0.40 5	0.80 5	0.37 5	1.67 9	0.70 10	0.00 7	10.00 100	
12SEP83	CPU	0.00	3.75	5.07	3.60	2.20	4.17	0.00	0.40	3.00	5.33	2.60	0.00	3.30	
	S.E. NO. HAULS	0.00 5	1.51 24	4.77 14	2.29 5	1.36 5	1.99 6	0.00 5	0.40 5	1.48 5	2.46 9	1.41 10	0.00 7	5.49 100	
26SEP83	CPU	0.00	0.33	2.14	4.60	1.60	3.00	0.80	0.80	0.80	1.33	0.10	0.00	1.12	
	S.E. NO. HAULS	0.00 5	0.19 24	1.37 14	3.31 5	0.98 5	1.38 7	0.80 5	0.80 5	0.58 5	0.83 9	0.10 10	0.00 7	3.94 101	
10OCT83	CPU	0.00	0.13	3.29	1.00	1.40	3.33	0.00	0.00	0.50	1.78	0.70	0.14	1.14	
	S.E. NO. HAULS	0.00 5	0.09 24	3.06 14	0.85 7	0.24 5	2.16 6	0.00 5	0.00 4	0.50 6	1.12 9	0.70 10	0.14 7	3.50 102	

TABLE B-119
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	WHITE PERCH											
	YONKERS				TAPPAN ZEE				OLDER			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	3.40	0.00	0.39	0.00	7.75	0.00	1.50	24.23	34.86	0.00	16.51
	S.E.	1.71	0.00	0.20	0.00	4.48	0.00	0.86	12.73	19.83	0.00	6.37
	NO. TOWS	3	3	6	3	4	3	10	6	3	6	15
09MAY83	DENSITY	8.82	0.00	1.02	0.00	0.00	0.00	0.00	0.56	41.58	0.00	9.35
	S.E.	8.82	0.00	1.02	0.00	0.00	0.00	0.00	0.56	24.21	0.00	5.33
	NO. TOWS	3	3	6	3	4	3	10	6	3	6	15
16MAY83	DENSITY	0.00	0.00	0.00	0.00	1.09	0.00	0.21	7.59	0.00	0.00	2.77
	S.E.	0.00	0.00	0.00	0.00	1.09	0.00	0.21	6.27	0.00	0.00	2.29
	NO. TOWS	3	3	6	3	4	3	10	6	3	6	15
23MAY83	DENSITY	8.42	0.00	0.98	0.00	1.00	0.00	0.19	0.00	0.86	0.00	0.19
	S.E.	8.42	0.00	0.98	0.00	1.00	0.00	0.19	0.00	0.86	0.00	0.19
	NO. TOWS	3	3	6	3	4	4	11	5	4	4	13
30MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.39	0.00	0.00	0.51
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85	0.00	0.00	0.31
	NO. TOWS	3	3	6	3	3	4	10	5	5	3	13
06JUN83	DENSITY	0.00	0.00	0.00	2.94	2.65	0.00	1.62	0.00	0.74	0.00	0.16
	S.E.	0.00	0.00	0.00	2.94	0.90	0.00	1.12	0.00	0.74	0.00	0.16
	NO. TOWS	3	3	6	3	4	4	11	4	4	4	12
13JUN83	DENSITY	2.88	0.00	0.33	2.35	4.29	0.51	1.94	5.39	2.31	0.00	2.48
	S.E.	0.00	0.00	0.00	2.35	2.10	0.51	1.00	3.49	1.46	0.00	1.31
	NO. TOWS	1	8	9	3	5	6	14	4	6	6	16
20JUN83	DENSITY	0.00	0.00	0.00	10.21	4.25	0.51	4.90	7.06	18.14	0.00	6.57
	S.E.	0.00	0.00	0.00	5.53	2.78	0.51	2.17	3.30	5.54	0.00	1.71
	NO. TOWS	1	8	9	3	5	6	14	4	6	5	15
27JUN83	DENSITY	0.00	0.00	0.00	7.61	5.35	0.52	4.13	2.56	15.07	0.00	4.25
	S.E.	0.00	0.00	0.00	3.96	3.31	0.52	1.65	0.87	6.30	0.00	1.42
	NO. TOWS	1	8	9	3	4	6	13	4	6	6	16
04JUL83	DENSITY	3.48	0.00	0.40	13.75	5.93	0.00	6.35	0.00	11.07	0.00	2.44
	S.E.	0.00	0.00	0.00	1.65	5.93	0.00	1.30	0.00	3.56	0.00	0.78
	NO. TOWS	1	8	9	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-119 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE PERCH												OLDER			
	INDIAN POINT				WEST POINT				CORNWALL				REGION			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	6.27	11.98	0.48	2.68	1.69	0.49	0.66	4.13	6.38	0.00	1.92				
	S.E. NO. TOWS	2.72 4	6.22 7	0.36 25	1.05 36	1.69 4	0.34 30	0.38 34	2.46 5	1.38 12	0.00 6	0.39 23				
09MAY83	DENSITY	0.83	3.92	0.13	0.78	7.86	0.73	1.71	3.62	12.97	0.00	3.62				
	S.E. NO. TOWS	0.83 4	3.42 8	0.13 24	0.56 36	3.85 4	0.33 30	0.60 34	2.24 5	2.72 13	0.00 5	0.73 23				
16MAY83	DENSITY	1.69	3.44	0.00	0.65	27.07	0.88	4.49	7.40	14.25	0.00	4.18				
	S.E. NO. TOWS	0.97 4	2.83 7	0.00 25	0.46 36	10.74 7	0.38 30	1.52 37	3.22 5	1.97 10	0.00 5	0.55 20				
23MAY83	DENSITY	0.00	0.83	0.27	0.34	8.31	0.28	1.39	1.89	2.05	1.51	1.67				
	S.E. NO. TOWS	0.00 3	0.83 6	0.27 13	0.25 22	5.88 7	0.19 23	0.83 30	1.89 5	1.36 9	1.51 6	1.09 20				
30MAY83	DENSITY	0.00	1.08	0.21	0.33	14.74	0.15	2.16	0.00	4.95	0.00	1.30				
	S.E. NO. TOWS	0.00 3	1.08 6	0.21 15	0.24 24	6.70 6	0.15 23	0.93 29	0.00 5	2.58 9	0.00 6	0.68 20				
06JUN83	DENSITY	0.76	1.16	0.23	0.41	16.36	0.00	2.26	0.00	15.26	0.00	4.02				
	S.E. NO. TOWS	0.76 4	1.16 6	0.23 14	0.26 24	9.70 7	0.00 23	1.34 30	0.00 5	3.42 9	0.00 5	0.90 19				
13JUN83	DENSITY	0.00	0.00	0.69	0.54	0.57	1.19	1.10	0.00	2.61	0.21	0.83				
	S.E. NO. TOWS	0.00 5	0.00 5	0.39 16	0.31 26	0.57 8	0.74 25	0.64 33	0.00 3	1.43 12	0.21 13	0.40 28				
20JUN83	DENSITY	5.34	4.29	1.85	2.45	0.00	0.67	0.58	0.00	3.94	0.00	1.04				
	S.E. NO. TOWS	2.94 5	2.63 5	0.81 17	0.78 27	0.00 8	0.35 25	0.30 33	0.00 3	1.53 12	0.00 13	0.40 28				
27JUN83	DENSITY	3.63	3.88	0.21	1.01	0.36	0.39	0.38	5.29	1.06	0.00	0.59				
	S.E. NO. TOWS	2.32 5	2.09 6	0.21 16	0.40 27	0.36 8	0.21 25	0.19 33	5.29 3	1.06 12	0.00 13	0.41 28				
04JUL83	DENSITY	2.48	6.09	0.19	1.28	0.00	0.23	0.20	0.93	0.49	0.00	0.18				
	S.E. NO. TOWS	1.52 5	4.04 5	0.19 16	0.67 26	0.00 8	0.23 25	0.20 33	0.93 3	0.33 12	0.00 13	0.10 28				

N -- STRATUM NOT SAMPLED

TABLE B-119 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE PERCH										OLDER										
	POUGHKEEPSIE					HYDE PARK					KINGSTON					REGION					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	
02MAY83	DENSITY	N	0.82	0.00	0.19	N	1.32	0.00	0.27	N	0.00	0.36	0.24	N	0.00	0.36	0.24	N	0.00	0.36	0.24
	S.E.	N	0.58	0.00	0.14	N	0.54	0.00	0.11	N	0.00	0.36	0.24	N	0.00	0.36	0.24	N	0.00	0.36	0.24
	NO. TOWS	N	9	10	19	N	10	11	21	N	6	7	13	N	6	7	13	N	6	7	13
09MAY83	DENSITY	N	6.85	0.00	1.59	N	51.05	0.00	10.58	N	33.90	0.00	11.45	N	33.90	0.00	11.45	N	33.90	0.00	11.45
	S.E.	N	1.76	0.00	0.41	N	30.14	0.00	6.25	N	8.24	0.00	2.78	N	8.24	0.00	2.78	N	8.24	0.00	2.78
	NO. TOWS	N	10	10	20	N	10	10	20	N	6	7	13	N	6	7	13	N	6	7	13
16MAY83	DENSITY	N	9.75	0.00	2.26	N	7.94	0.25	1.85	N	1.83	0.00	0.62	N	1.83	0.00	0.62	N	1.83	0.00	0.62
	S.E.	N	3.95	0.00	0.92	N	3.95	0.25	0.84	N	1.40	0.00	0.47	N	1.40	0.00	0.47	N	1.40	0.00	0.47
	NO. TOWS	N	10	10	20	N	8	11	19	N	6	7	13	N	6	7	13	N	6	7	13
23MAY83	DENSITY	N	3.63	0.00	0.84	N	2.83	0.00	0.59	N	0.00	0.42	0.28	N	0.00	0.42	0.28	N	0.00	0.42	0.28
	S.E.	N	1.54	0.00	0.36	N	1.36	0.00	0.28	N	0.00	0.42	0.28	N	0.00	0.42	0.28	N	0.00	0.42	0.28
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6	10	N	4	6	10	N	4	6	10
30MAY83	DENSITY	N	6.37	0.27	1.69	N	5.21	0.00	1.08	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	4.59	0.19	1.07	N	3.91	0.00	0.81	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	16	22	38	N	7	12	19	N	5	5	10	N	5	5	10	N	5	5	10
06JUN83	DENSITY	N	11.15	0.00	2.59	N	0.44	0.72	0.66	N	0.72	0.00	0.24	N	0.72	0.00	0.24	N	0.72	0.00	0.24
	S.E.	N	4.41	0.00	1.02	N	0.44	0.38	0.31	N	0.72	0.00	0.24	N	0.72	0.00	0.24	N	0.72	0.00	0.24
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6	10	N	4	6	10	N	4	6	10
13JUN83	DENSITY	N	1.48	0.18	0.48	N	8.82	0.00	1.83	N	2.41	0.00	0.81	N	2.41	0.00	0.81	N	2.41	0.00	0.81
	S.E.	N	1.48	0.18	0.37	N	4.73	0.00	0.98	N	1.15	0.00	0.39	N	1.15	0.00	0.39	N	1.15	0.00	0.39
	NO. TOWS	N	7	15	22	N	5	9	14	N	5	5	10	N	5	5	10	N	5	5	10
20JUN83	DENSITY	N	1.73	0.19	0.55	N	2.30	0.42	0.81	N	7.84	0.57	3.03	N	7.84	0.57	3.03	N	7.84	0.57	3.03
	S.E.	N	1.73	0.19	0.43	N	1.67	0.42	0.48	N	3.24	0.57	1.16	N	3.24	0.57	1.16	N	3.24	0.57	1.16
	NO. TOWS	N	8	14	22	N	5	9	14	N	5	6	11	N	5	6	11	N	5	6	11
27JUN83	DENSITY	N	0.88	0.22	0.38	N	0.00	0.30	0.23	N	1.49	0.00	0.50	N	1.49	0.00	0.50	N	1.49	0.00	0.50
	S.E.	N	0.88	0.22	0.27	N	0.00	0.30	0.23	N	0.86	0.00	0.29	N	0.86	0.00	0.29	N	0.86	0.00	0.29
	NO. TOWS	N	7	15	22	N	5	9	14	N	4	6	10	N	4	6	10	N	4	6	10
04JUL83	DENSITY	N	0.53	0.48	0.49	N	0.00	0.31	0.24	N	0.62	0.00	0.21	N	0.62	0.00	0.21	N	0.62	0.00	0.21
	S.E.	N	0.53	0.26	0.23	N	0.00	0.31	0.24	N	0.62	0.00	0.21	N	0.62	0.00	0.21	N	0.62	0.00	0.21
	NO. TOWS	N	7	15	22	N	5	9	14	N	4	6	10	N	4	6	10	N	4	6	10

N -- STRATUM NOT SAMPLED

TABLE B-119 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE PERCH			SAUGERTIES			OLDER			CATSKILL		
	DENSITY S.E. NO. TOWS	SHOAL		DENSITY S.E. NO. TOWS	SHOAL		DENSITY S.E. NO. TOWS	SHOAL		DENSITY S.E. NO. TOWS	SHOAL	
		BOTTOM	CHANNEL		REGION	CHANNEL		REGION	CHANNEL		REGION	CHANNEL
02MAY83	0.00 0.00 3	N	N	0.00 0.00 3	N	N	0.00 0.00 6	N	N	2.78 2.78 3	0.00 0.00 3	1.33 1.33 6
09MAY83	22.04 12.70 3	N	N	0.00 0.00 3	N	N	7.89 4.55 6	N	N	0.91 0.91 3	0.00 0.00 3	0.43 0.43 6
16MAY83	6.10 3.72 4	N	N	0.00 0.00 3	N	N	2.19 1.33 7	N	N	0.00 0.00 3	0.00 0.00 3	0.00 0.00 6
23MAY83	1.20 0.73 5	N	N	0.00 0.00 3	N	N	0.43 0.26 8	N	N	0.00 0.00 3	0.00 0.00 3	0.00 0.00 6
30MAY83	11.40 6.38 5	N	N	0.00 0.00 3	N	N	4.08 2.29 8	N	N	0.00 0.00 3	0.00 0.00 3	0.00 0.00 6
06JUN83	5.35 2.44 5	N	N	0.00 0.00 3	N	N	1.92 0.87 8	N	N	1.83 0.92 3	0.00 0.00 3	0.88 0.44 6
13JUN83	5.58 5.58 4	N	N	0.00 0.00 2	N	N	2.00 2.00 6	N	N	0.00 0.00 3	0.00 0.00 3	0.00 0.00 6
20JUN83	2.87 2.87 3	N	N	0.00 0.00 2	N	N	1.03 1.03 5	N	N	1.06 1.06 3	0.00 0.00 3	0.50 0.50 6
27JUN83	3.87 3.87 4	N	N	4.49 4.49 2	N	N	4.27 3.20 6	N	N	6.47 3.23 3	1.71 1.71 3	3.98 1.79 6
04JUL83	0.00 0.00 4	N	N	0.00 0.00 2	N	N	0.00 0.00 6	N	N	1.16 1.16 3	0.00 0.00 3	0.55 0.55 6

N -- STRATUM NOT SAMPLED

TABLE B-119 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE PERCH			ALBANY			OLDER													
	DENSITY S.E. NO. TOWS	SHOAL N	BOTTOM N	CHANNEL N	REGION N	SHOAL N	BOTTOM N	CHANNEL N	REGION N											
										COMBINED	SHOAL	BOTTOM	CHANNEL	REGION						
02MAY83																				
09MAY83																				
16MAY83																				
23MAY83																				
30MAY83																				
06JUN83																				
13JUN83																				
20JUN83																				
27JUN83																				
04JUL83																				

N -- STRATUM NOT SAMPLED

TABLE B-120
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	YONKERS			WHITE PERCH			TAPPAN ZEE			OLDER			CROTON-HAVERSTRAW			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	0.00	0.11	10.86	7.56	1.22	6.09	1.57	5.90	0.00	1.87	0.00	5.90	0.00	1.87
	S.F.	N	0.00	0.11	4.30	7.56	1.22	2.25	0.76	3.65	0.00	0.85	0.00	3.65	0.00	0.85
	NO. TOWS	7	5	12	32	7	7	46	16	8	3	27	3	8	3	27
22AUG83	DENSITY	N	0.43	2.43	4.17	3.18	0.00	2.19	0.00	0.62	0.00	0.14	0.00	0.62	0.00	0.14
	S.F.	N	0.43	0.72	1.73	1.86	0.00	0.75	0.00	0.41	0.00	0.09	0.00	0.41	0.00	0.09
	NO. TOWS	7	5	12	29	9	8	46	16	8	3	27	3	8	3	27
05SEP83	DENSITY	N	0.00	0.05	2.16	1.89	0.00	1.18	0.90	0.00	0.00	0.33	0.00	0.00	0.00	0.33
	S.F.	N	0.00	0.05	0.86	1.24	0.00	0.40	0.74	0.00	0.00	0.27	0.00	0.00	0.00	0.27
	NO. TOWS	7	5	12	29	8	8	45	16	8	2	26	2	8	2	26
19SEP83	DENSITY	N	0.00	0.16	0.00	0.00	0.00	0.00	0.67	0.00	0.00	0.24	0.00	0.00	0.00	0.24
	S.F.	N	0.00	0.11	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.15	0.00	0.00	0.00	0.15
	NO. TOWS	6	5	11	31	8	8	47	15	8	3	26	3	8	3	26
03OCT83	DENSITY	N	0.00	0.06	3.16	1.40	0.00	1.47	7.30	7.80	0.00	4.38	0.00	7.80	0.00	4.38
	S.F.	N	0.00	0.06	1.94	1.40	0.00	0.78	2.41	5.00	0.00	1.41	0.00	5.00	0.00	1.41
	NO. TOWS	6	5	11	31	7	8	46	17	8	3	28	3	8	3	28
17OCT83	DENSITY	N	0.00	0.31	2.21	0.32	0.00	0.90	0.32	0.00	0.00	0.12	0.00	0.00	0.00	0.12
	S.F.	N	0.00	0.20	0.90	0.32	0.00	0.34	0.32	0.00	0.00	0.12	0.00	0.00	0.00	0.12
	NO. TOWS	7	5	12	30	8	8	46	16	7	3	26	3	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-120 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE PERCH										OLDER		
	INDIAN POINT					WEST POINT					CORNWALL		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	
08AUG83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.66	0.00	0.00	0.15	
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.67	0.00	0.00	0.10	
	NO. TOWS	6	5	3	14	4	3	7	5	6	3	14	
22AUG83	DENSITY	0.00	0.00	0.00	0.00	2.83	0.00	0.39	11.65	13.98	0.00	4.36	
	S.E.	0.00	0.00	0.00	0.00	1.74	0.00	0.24	3.21	5.37	0.00	1.43	
	NO. TOWS	7	5	2	14	5	3	8	5	5	3	13	
05SEP83	DENSITY	0.48	0.39	0.00	0.09	0.00	0.00	0.00	1.48	5.67	0.00	1.58	
	S.E.	0.48	0.39	0.00	0.07	0.00	0.00	0.00	1.00	4.07	0.00	1.07	
	NO. TOWS	6	6	3	15	5	3	8	5	5	3	13	
19SEP83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95	0.00	0.25	
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95	0.00	0.25	
	NO. TOWS	6	5	3	14	5	3	8	6	5	2	13	
03OCT83	DENSITY	0.00	0.57	0.00	0.09	0.00	0.00	0.00	1.53	0.00	0.00	0.09	
	S.E.	0.00	0.57	0.00	0.09	0.00	0.00	0.00	1.01	0.00	0.00	0.06	
	NO. TOWS	6	5	3	14	4	2	6	5	6	4	15	
17OCT83	DENSITY	0.00	0.84	0.00	0.13	0.00	0.00	0.00	0.93	0.00	0.00	0.05	
	S.E.	0.00	0.84	0.00	0.13	0.00	0.00	0.00	0.93	0.00	0.00	0.05	
	NO. TOWS	6	6	3	15	5	3	8	5	5	3	13	

N -- STRATUM NOT SAMPLED

TABLE B-120 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE PERCH											
	POUGHKEEPSIE				HYDE PARK				OLDER			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	2.58	0.00	0.60	N	9.59	0.00	1.99	N	10.52	4.56	6.58
	S.E.	1.50	0.00	0.35	N	2.78	0.00	0.58	N	2.72	4.56	3.16
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
22AUG83	DENSITY	16.43	0.00	3.81	N	21.10	0.00	4.37	N	74.73	0.00	25.24
	S.E.	4.79	0.00	1.11	N	8.26	0.00	1.71	N	17.23	0.00	5.82
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
05SEP83	DENSITY	2.45	0.78	1.17	N	1.46	0.57	0.75	N	16.71	0.00	5.65
	S.E.	1.97	0.78	0.75	N	0.78	0.57	0.48	N	4.23	0.00	1.43
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
19SEP83	DENSITY	1.96	0.00	0.46	N	0.73	0.00	0.15	N	1.17	0.00	0.39
	S.E.	1.96	0.00	0.46	N	0.47	0.00	0.10	N	0.81	0.00	0.27
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
03OCT83	DENSITY	0.00	0.00	0.00	N	0.89	0.00	0.18	N	1.27	0.00	0.43
	S.E.	0.00	0.00	0.00	N	0.56	0.00	0.12	N	0.68	0.00	0.23
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
17OCT83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15

N -- STRATUM NOT SAMPLED

TABLE B-120 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE PERCH						OLDER						
	SAUGERTIES			CATSKILL			SAUGERTIES			CATSKILL			
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83		N	7.71	0.30	2.96	N	8.32	2.89	5.48	N	1.44	2.43	1.44
		N	1.87	0.30	0.70	N	1.44	2.43	1.44	N	1.44	2.43	1.44
		N	12	6	18	N	15	6	21	N	15	6	21
22AUG83		N	14.68	0.00	5.26	N	31.57	0.00	15.09	N	5.19	0.00	2.48
		N	3.02	0.00	1.08	N	5.19	0.00	2.48	N	15	6	21
		N	12	6	18	N	15	6	21	N	15	6	21
05SEP83		N	17.50	3.40	8.45	N	16.36	0.00	7.82	N	4.97	0.00	2.37
		N	5.18	1.85	2.20	N	4.97	0.00	2.37	N	15	6	21
		N	12	6	18	N	15	6	21	N	15	6	21
19SEP83		N	5.73	0.00	2.05	N	5.57	0.00	2.66	N	2.52	0.00	1.20
		N	1.43	0.00	0.51	N	2.52	0.00	1.20	N	15	6	21
		N	12	6	18	N	15	6	21	N	15	6	21
03OCT83		N	0.48	0.77	0.67	N	0.69	0.00	0.33	N	0.31	0.00	0.15
		N	0.32	0.49	0.33	N	0.31	0.00	0.15	N	15	6	21
		N	12	6	18	N	15	6	21	N	15	6	21
17OCT83		N	0.17	0.00	0.06	N	0.18	0.00	0.08	N	0.18	0.00	0.08
		N	0.17	0.00	0.06	N	0.18	0.00	0.08	N	14	6	20
		N	13	6	19	N	14	6	20	N	14	6	20

N -- STRATUM NOT SAMPLED

TABLE B-120 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE PERCH						OLDER					
	ALBANY			COMBINED			ALBANY			COMBINED		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	12.56	N	12.56	N	6.53	6.53	6.53	6.64	0.59	2.65
	S.E.	N	5.39	N	5.39	N	2.36	2.36	2.36	1.20	0.34	0.44
	NO. TOWS	N	8	N	8	N	66	66	66	85	49	200
22AUG83	DENSITY	N	60.61	N	60.61	N	4.82	4.82	4.82	25.03	0.06	6.64
	S.E.	N	10.24	N	10.24	N	1.14	1.14	1.14	2.31	0.06	0.58
	NO. TOWS	N	8	N	8	N	64	64	64	87	49	200
05SEP83	DENSITY	N	19.48	N	19.48	N	1.52	1.52	1.52	9.18	0.43	2.68
	S.E.	N	7.36	N	7.36	N	0.51	0.51	0.51	1.41	0.19	0.37
	NO. TOWS	N	8	N	8	N	63	63	63	87	49	199
19SEP83	DENSITY	N	0.00	N	0.00	N	0.32	0.32	0.32	1.87	0.00	0.49
	S.E.	N	0.00	N	0.00	N	0.15	0.15	0.15	0.47	0.00	0.11
	NO. TOWS	N	8	N	8	N	64	64	64	86	49	199
03OCT83	DENSITY	N	0.37	N	0.37	N	3.61	3.61	3.61	1.01	0.06	0.64
	S.E.	N	0.37	N	0.37	N	1.21	1.21	1.21	0.35	0.04	0.15
	NO. TOWS	N	8	N	8	N	65	65	65	85	50	200
17OCT83	DENSITY	N	0.00	N	0.00	N	1.63	1.63	1.63	0.13	0.00	0.19
	S.E.	N	0.00	N	0.00	N	0.54	0.54	0.54	0.07	0.00	0.06
	NO. TOWS	N	8	N	8	N	64	64	64	86	50	200

N -- STRATUM NOT SAMPLED

TABLE B-121
 CATCH PER UNIT EFFORT (NUMBER PER HAUL) BY WEEK AND REGION,
 BEACH SEINE SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	WHITE PERCH										AL	COMBINED	
	OLDER					REGIONS							
	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS		
01AUG83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7	0.00 100
15AUG83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7	0.00 100
29AUG83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7	0.00 100
12SEP83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7	0.00 100
26SEP83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 5	0.00 5	0.00 7	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7	0.00 101
10OCT83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 7	0.00 5	0.00 6	0.00 5	0.00 6	0.00 9	0.00 10	0.00 7	0.00 102

TABLE B-122
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	AMERICAN SHAD												EGGS			
	YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW				REGION	CHANNEL	REGION	
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION				
02MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	15	6	3	6
09MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	15	6	3	6
16MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	15	6	3	6
23MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	N	3	6	3	4	3	11	5	4	13	3	4	3	13
30MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	N	3	6	3	3	4	10	5	3	13	3	5	3	13
06JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	N	3	6	3	4	4	11	4	4	12	3	4	4	12
13JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	16	1	5	6	16
20JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	15	1	5	5	15
27JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	N	8	9	3	4	6	13	4	6	16	1	4	6	16
04JUL83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	16	1	5	6	16

N -- STRATUM NOT SAMPLED

TABLE B-122 (CONTINUED).

WEEK BEGINNING MONDAY	AMERICAN SHAD												EGGS				
	INDIAN POINT				WEST POINT				CORNWALL				REGION	CHANNEL	REGION		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION					
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	7	25	36	4	30	5	12	6	23	5	6	23	5	6	23
09MAY83	DENSITY	0.00	0.00	0.27	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.27	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	8	24	36	4	30	5	13	5	23	5	5	23	5	5	23
16MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	7	25	36	7	30	5	7	10	37	5	5	20	5	5	20
23MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	6	13	22	7	23	5	7	9	30	5	6	20	5	6	20
30MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	6	15	24	6	23	5	6	9	29	5	6	20	5	6	20
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	6	14	24	7	23	5	7	9	30	5	5	19	5	5	19
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	16	26	8	25	3	8	12	33	3	13	28	3	13	28
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	17	27	8	25	3	8	12	33	3	13	28	3	13	28
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	6	16	27	8	25	3	8	12	33	3	13	28	3	13	28
04JUL83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	16	26	8	25	3	8	12	33	3	13	28	3	13	28

N -- STRATUM NOT SAMPLED

TABLE B-122 (CONTINUED).

WEEK BEGINNING MONDAY	AMERICAN SHAD						EGGS					
	SAUGERTIES						CATSKILL					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	REGION	SHOAL	BOTTOM	CHANNEL	REGION		
02MAY83	DENSITY	478.28	0.00	171.28	N	0.00	0.00	0.00	0.00	0.00		
	S.E.	243.53	0.00	87.21	N	0.00	0.00	0.00	0.00	0.00		
	NO. TOWS	3	3	6	N	3	3	3	3	6		
09MAY83	DENSITY	1579.07	24.97	581.52	N	7399.80	422.29	3756.91				
	S.E.	1538.46	24.97	551.18	N	6469.78	223.37	3094.16				
	NO. TOWS	3	3	6	N	3	3	6				
16MAY83	DENSITY	424.68	33.98	173.90	N	136.59	0.00	65.28				
	S.E.	133.33	28.91	51.23	N	72.32	0.00	34.56				
	NO. TOWS	4	3	7	N	3	3	6				
23MAY83	DENSITY	588.89	0.00	210.89	N	167.44	26.57	93.89				
	S.E.	303.33	0.00	108.63	N	114.25	17.48	55.36				
	NO. TOWS	5	3	8	N	3	3	6				
30MAY83	DENSITY	2.51	0.00	0.90	N	100.66	11.67	54.20				
	S.E.	0.63	0.00	0.23	N	23.69	4.47	11.56				
	NO. TOWS	5	3	8	N	3	3	6				
06JUN83	DENSITY	16.35	0.87	6.42	N	81.01	3.54	40.56				
	S.E.	5.86	0.87	2.17	N	18.01	3.54	8.80				
	NO. TOWS	5	3	8	N	3	3	6				
13JUN83	DENSITY	0.00	0.00	0.00	N	10.06	0.96	5.31				
	S.E.	0.00	0.00	0.00	N	3.50	0.96	1.74				
	NO. TOWS	4	2	6	N	3	3	6				
20JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00				
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00				
	NO. TOWS	3	2	5	N	3	3	6				
27JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00				
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00				
	NO. TOWS	4	2	6	N	3	3	6				
04JUL83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00				
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00				
	NO. TOWS	4	2	6	N	3	3	6				

N -- STRATUM NOT SAMPLED

TABLE B-122 (CONTINUED).

WEEK BEGINNING MONDAY	AMERICAN SHAD			ALBANY			EGGS		
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
		N	N	N	N	N	N	N	N
02MAY83		195.83	89.48	N	195.83	0.00	133.26	10.45	39.52
				N	89.48	0.00	46.61	7.38	12.41
				N	5	21	66	107	194
09MAY83		337.52	120.71	N	337.52	0.00	1279.46	25.93	330.59
				N	120.71	0.00	911.41	12.73	223.52
				N	5	21	69	104	194
16MAY83		7566.56	2597.50	N	7566.56	0.00	1081.29	4.56	267.99
				N	2597.50	0.00	333.65	2.81	81.79
				N	5	21	67	106	194
23MAY83		2221.68	1135.06	N	2221.68	0.00	399.98	1.75	99.17
				N	1135.06	0.00	152.04	0.99	37.27
				N	3	19	68	99	186
30MAY83		854.50	525.82	N	854.50	0.00	124.90	0.70	31.07
				N	525.82	0.00	67.36	0.25	16.51
				N	3	19	68	99	186
06JUN83		69.39	37.18	N	69.39	0.00	22.44	0.27	5.67
				N	37.18	0.00	5.42	0.21	1.34
				N	3	19	68	99	186
13JUN83		60.13	60.13	N	60.13	0.00	9.26	0.05	2.30
				N	60.13	0.00	7.71	0.05	1.89
				N	3	16	63	108	187
20JUN83		0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
				N	0.00	0.00	0.00	0.00	0.00
				N	3	16	63	108	187
27JUN83		0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
				N	0.00	0.00	0.00	0.00	0.00
				N	3	16	62	109	187
04JUL83		0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
				N	0.00	0.00	0.00	0.00	0.00
				N	3	16	62	109	187

N -- STRATUM NOT SAMPLED

TABLE B-123
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	AMERICAN SHAD												YOLK-SAC LARVAE			
	YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW							
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	4	10	10	4	3	10	6	3	6	15
09MAY83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	4	10	10	4	3	6	6	3	6	15
16MAY83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	4	10	10	4	3	6	6	3	6	15
23MAY83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	4	11	11	4	5	4	5	4	4	13
30MAY83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	3	10	10	4	5	5	4	5	3	13
06JUN83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	4	11	11	4	4	4	4	4	4	12
13JUN83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	9	3	5	14	14	6	4	4	6	6	6	16
20JUN83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	9	3	5	14	14	6	4	4	6	6	5	15
27JUN83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	9	3	4	13	13	6	4	4	6	6	6	16
04JUL83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	9	3	5	14	14	6	4	4	6	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-123 (CONTINUED).

AMERICAN SHAD YOLK-SAC LARVAE

WEEK BEGINNING MONDAY	INDIAN POINT			WEST POINT			CORNWALL			REGION
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	7	25	4	30	34	5	6	23
09MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	8	24	4	30	34	5	5	23
16MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	7	25	7	30	37	5	5	20
23MAY83	DENSITY	0.00	0.00	0.00	0.00	0.14	2.98	0.35	2.23	1.78
	S.E.	0.00	0.00	0.00	0.00	0.14	2.34	0.35	2.23	1.52
	NO. TOWS	3	6	13	7	23	30	5	6	20
30MAY83	DENSITY	0.00	0.00	0.00	0.00	0.13	6.11	3.88	0.00	1.38
	S.E.	0.00	0.00	0.00	0.00	0.13	5.36	1.73	0.00	0.55
	NO. TOWS	3	6	15	6	23	29	5	6	20
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.52	1.03
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94	0.64
	NO. TOWS	4	6	14	7	23	30	5	5	19
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	16	8	25	33	3	13	28
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	17	8	25	33	3	13	28
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	6	16	8	25	33	3	13	28
04JUL83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	16	8	25	33	3	13	28

N -- STRATUM NOT SAMPLED

TABLE B-123 (CONTINUED).

YOLK-SAC LARVAE

AMERICAN SHAD

WEEK
BEGINNING
MONDAY

WEEK BEGINNING MONDAY	POUGHKEEPSIE			HYDE PARK			KINGSTON					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	9	10	10	19	10	11	21	N	6	7	13
09MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	10	10	10	20	10	10	20	N	6	7	13
16MAY83	DENSITY	2.19	0.25	0.70	N	19.15	1.19	4.91	N	22.33	3.69	9.99
	S.E.	1.30	0.25	0.36	N	5.11	0.64	1.18	N	14.67	3.69	5.52
	NO. TOWS	10	10	20	N	8	11	19	N	6	7	13
23MAY83	DENSITY	5.17	7.26	6.78	N	27.70	16.40	18.74	N	156.11	45.19	82.66
	S.E.	1.65	1.91	1.52	N	11.46	5.54	4.99	N	87.40	13.97	30.94
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10
30MAY83	DENSITY	21.66	2.30	6.79	N	16.30	13.87	14.38	N	208.40	20.27	83.82
	S.E.	7.55	1.75	2.21	N	9.09	5.43	4.70	N	138.25	13.20	47.51
	NO. TOWS	16	22	38	N	7	12	19	N	5	5	10
06JUN83	DENSITY	1.53	2.14	2.00	N	13.89	2.17	4.60	N	126.64	13.07	51.43
	S.E.	0.69	0.89	0.70	N	3.85	1.42	1.38	N	38.36	3.84	13.21
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10
13JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.69	0.55	N	7.40	5.77	6.32
	S.E.	0.00	0.00	0.00	N	0.00	0.46	0.36	N	5.15	4.29	3.33
	NO. TOWS	7	15	22	N	5	9	14	N	5	5	10
20JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	8	14	22	N	5	9	14	N	5	6	11
27JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10
04JUL83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10

N -- STRATUM NOT SAMPLED

TABLE B-123 (CONTINUED).

WEEK BEGINNING MONDAY	AMERICAN SHAD			YOLK-SAC LARVAE			CATSKILL		
	SAUGERTIES			SHOALS			CHANNELS		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	
02MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	
	NO. TOWS	3	3	6	N	3	3	6	
09MAY83	DENSITY	1.05	0.00	0.38	N	0.00	0.00	0.00	
	S.E.	1.05	0.00	0.38	N	0.00	0.00	0.00	
	NO. TOWS	3	3	6	N	3	3	6	
16MAY83	DENSITY	25.49	1.22	9.91	N	10.15	0.00	4.85	
	S.E.	12.88	1.22	4.68	N	6.02	0.00	2.88	
	NO. TOWS	4	3	7	N	3	3	6	
23MAY83	DENSITY	96.64	16.39	45.13	N	53.77	10.72	31.29	
	S.E.	37.04	12.33	15.45	N	13.55	4.17	6.83	
	NO. TOWS	5	3	8	N	3	3	6	
30MAY83	DENSITY	87.81	19.09	43.70	N	219.14	242.27	231.22	
	S.E.	40.90	11.50	16.40	N	70.99	195.58	107.60	
	NO. TOWS	5	3	8	N	3	3	6	
06JUN83	DENSITY	70.89	45.56	54.63	N	468.49	52.25	251.18	
	S.E.	27.26	19.47	15.86	N	415.39	12.71	198.63	
	NO. TOWS	5	3	8	N	3	3	6	
13JUN83	DENSITY	21.16	17.24	18.65	N	37.87	44.78	41.48	
	S.E.	8.51	17.24	11.48	N	8.55	11.01	7.05	
	NO. TOWS	4	2	6	N	3	3	6	
20JUN83	DENSITY	0.00	1.74	1.12	N	0.00	0.00	0.00	
	S.E.	0.00	1.74	1.12	N	0.00	0.00	0.00	
	NO. TOWS	3	2	5	N	3	3	6	
27JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	
	NO. TOWS	4	2	6	N	3	3	6	
04JUL83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	
	NO. TOWS	4	2	6	N	3	3	6	

N -- STRATUM NOT SAMPLED

TABLE B-123 (CONTINUED).

WEEK BEGINNING MONDAY	AMERICAN SHAD			ALBANY			YOLK-SAC LARVAE		
				COMBINED					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	
02MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	5	N	5	21	66	107	194	
09MAY83	DENSITY	0.00	N	0.00	0.00	0.12	0.00	0.03	
	S.E.	0.00	N	0.00	0.00	0.12	0.00	0.03	
	NO. TOWS	5	N	5	21	69	104	194	
16MAY83	DENSITY	8.65	N	8.65	0.00	8.78	0.47	2.46	
	S.E.	7.89	N	7.89	0.00	2.36	0.26	0.60	
	NO. TOWS	5	N	5	21	67	106	194	
23MAY83	DENSITY	335.50	N	335.50	0.11	77.14	7.41	23.78	
	S.E.	242.43	N	242.43	0.09	32.25	1.43	7.96	
	NO. TOWS	3	N	3	19	68	99	186	
30MAY83	DENSITY	465.33	N	465.33	0.22	121.68	17.97	41.64	
	S.E.	90.93	N	90.93	0.19	19.90	11.10	8.77	
	NO. TOWS	3	N	3	19	68	99	186	
06JUN83	DENSITY	1740.49	N	1740.49	0.00	307.43	7.84	80.49	
	S.E.	765.18	N	765.18	0.00	113.58	1.67	27.86	
	NO. TOWS	3	N	3	19	68	99	186	
13JUN83	DENSITY	301.91	N	301.91	0.00	46.90	4.26	14.29	
	S.E.	151.56	N	151.56	0.00	19.46	1.47	4.87	
	NO. TOWS	3	N	3	16	63	108	187	
20JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.13	0.09	
	S.E.	0.00	N	0.00	0.00	0.00	0.13	0.09	
	NO. TOWS	3	N	3	16	63	108	187	
27JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	3	N	3	16	62	109	187	
04JUL83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	3	N	3	16	62	109	187	

N -- STRATUM NOT SAMPLED

TABLE B-124
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	AMERICAN SHAD												POST YOLK-SAC LARVAE			
	YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW				REGION	REGION		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION				
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	3	6	3	4	3	10	6	3	6	6	6	6	15
09MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	3	6	3	4	3	10	6	3	6	6	6	6	15
16MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	3	6	3	4	3	10	6	3	6	6	6	6	15
23MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	3	6	3	4	4	11	5	4	4	4	4	4	13
30MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	3	6	3	3	4	10	5	5	3	3	3	3	13
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	3	6	3	4	4	11	4	4	4	4	4	4	12
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.46
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.24
	NO. TOWS	1	8	8	9	3	5	6	14	4	6	6	6	6	6	16
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51
	NO. TOWS	1	8	8	9	3	5	6	14	4	6	6	6	6	6	15
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	8	9	3	4	6	13	4	6	6	6	6	6	16
04JUL83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	8	9	3	5	6	14	4	6	6	6	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-124 (CONTINUED).

AMERICAN SHAD POST YOLK-SAC LARVAE

WEEK BEGINNING MONDAY	INDIAN POINT			WEST POINT			CORNWALL			REGION	
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL		BOTTOM
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	7	25	36	N	4	30	34	5	12
09MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	8	24	36	N	4	30	34	5	13
16MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	7	25	36	N	7	30	37	5	10
23MAY83	DENSITY	1.14	0.00	0.00	0.07	0.00	0.14	0.12	1.81	0.00	7.83
	S.E.	1.14	0.00	0.00	0.07	0.00	0.14	0.12	1.81	0.00	3.26
	NO. TOWS	3	6	13	22	N	7	23	30	5	9
30MAY83	DENSITY	0.00	0.57	0.52	0.50	0.50	6.88	6.01	46.14	6.45	28.91
	S.E.	0.00	0.57	0.36	0.30	0.30	4.16	3.59	15.09	1.38	19.27
	NO. TOWS	3	6	15	24	N	6	23	29	5	9
06JUN83	DENSITY	0.00	0.00	0.24	0.19	0.19	6.81	6.30	69.87	0.51	86.25
	S.E.	0.00	0.00	0.24	0.19	0.19	2.91	2.55	54.26	0.51	34.28
	NO. TOWS	4	6	14	24	N	7	30	5	9	5
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.51	0.51	39.33	0.26	7.23
	S.E.	0.00	0.00	0.00	0.00	0.00	0.31	0.28	32.00	0.26	2.46
	NO. TOWS	5	5	16	26	N	8	33	3	12	13
20JUN83	DENSITY	3.76	0.68	0.37	0.62	0.62	10.72	9.43	45.26	4.59	12.71
	S.E.	3.11	0.68	0.25	0.29	0.29	3.50	3.02	37.40	3.53	6.13
	NO. TOWS	5	5	17	27	N	8	33	3	12	13
27JUN83	DENSITY	1.28	0.00	0.62	0.56	0.56	17.38	16.38	33.05	12.11	36.70
	S.E.	1.28	0.00	0.34	0.27	0.27	4.88	4.27	31.46	4.98	14.87
	NO. TOWS	5	6	16	27	N	8	33	3	12	13
04JUL83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.05	7.42	7.17	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.05	7.42	3.49	0.00
	NO. TOWS	5	5	16	26	N	8	33	3	12	13

N -- STRATUM NOT SAMPLED

TABLE B-124 (CONTINUED).

AMERICAN SHAD POST YOLK-SAC LARVAE

WEEK BEGINNING MONDAY	POUGHKEEPSIE			HYDE PARK			KINGSTON					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	9	10	10	19	10	11	21	N	6	7	13
09MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	10	10	10	20	10	10	20	N	6	7	13
16MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	10	10	10	20	8	11	19	N	6	7	13
23MAY83	DENSITY	2.79	4.18	3.86	N	0.84	6.84	5.59	N	15.43	25.32	21.98
	S.E.	1.54	1.56	1.25	N	0.54	2.04	1.62	N	8.95	7.34	5.72
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10
30MAY83	DENSITY	55.70	54.83	55.03	N	27.87	363.96	294.31	N	213.58	320.08	284.10
	S.E.	11.21	12.76	10.14	N	9.12	128.87	102.18	N	87.98	111.38	79.52
	NO. TOWS	16	22	38	N	7	12	19	N	5	5	10
06JUN83	DENSITY	11.43	43.52	36.08	N	203.29	143.86	156.17	N	135.05	713.40	518.03
	S.E.	4.57	20.47	15.75	N	76.74	79.20	64.77	N	46.16	170.47	113.96
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10
13JUN83	DENSITY	0.00	38.84	29.83	N	6.98	108.84	87.73	N	80.81	291.23	220.15
	S.E.	0.00	13.42	10.31	N	6.98	35.86	28.46	N	54.66	101.82	69.91
	NO. TOWS	7	15	22	N	5	9	14	N	5	5	10
20JUN83	DENSITY	7.94	45.30	36.63	N	15.48	49.15	42.17	N	106.35	32.34	57.34
	S.E.	3.08	19.28	14.83	N	4.94	26.00	20.64	N	60.11	15.40	22.72
	NO. TOWS	8	14	22	N	5	9	14	N	5	6	11
27JUN83	DENSITY	4.51	23.33	18.96	N	87.96	8.40	24.89	N	185.73	15.85	73.23
	S.E.	1.85	12.25	9.42	N	47.77	4.95	10.65	N	54.78	6.22	18.96
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10
04JUL83	DENSITY	0.85	2.63	2.22	N	4.08	10.04	8.80	N	5.32	26.06	19.05
	S.E.	0.56	1.79	1.38	N	1.28	3.88	3.09	N	2.62	20.71	13.74
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10

N -- STRATUM NOT SAMPLED

TABLE B-124 (CONTINUED).

WEEK BEGINNING MONDAY	AMERICAN SHAD				POST YOLK-SAC LARVAE			
	SAUCERTIES		CATSKILL		SAUCERTIES		CATSKILL	
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	3	3	6	N	3	6
09MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	3	3	6	N	3	6
16MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	4	3	7	N	3	6
23MAY83	DENSITY	3.63	1.14	2.03	N	0.00	1.73	0.90
	S.E.	2.22	1.14	1.08	N	0.00	0.86	0.45
	NO. TOWS	N	5	3	8	N	3	6
30MAY83	DENSITY	107.71	144.62	131.40	N	27.22	236.31	136.38
	S.E.	67.56	63.60	47.45	N	5.68	198.67	103.76
	NO. TOWS	N	5	3	8	N	3	6
06JUN83	DENSITY	33.24	302.69	206.20	N	11.21	62.76	38.12
	S.E.	12.51	137.77	88.55	N	5.62	23.61	12.61
	NO. TOWS	N	5	3	8	N	3	6
13JUN83	DENSITY	28.46	2075.52	1342.44	N	15.29	2373.86	1246.68
	S.E.	9.89	1465.53	940.70	N	10.74	1134.81	592.50
	NO. TOWS	N	4	2	6	N	3	6
20JUN83	DENSITY	57.30	32.53	41.40	N	170.67	257.09	215.79
	S.E.	10.96	1.21	4.00	N	8.11	201.22	105.13
	NO. TOWS	N	3	2	5	N	3	6
27JUN83	DENSITY	204.57	18.43	85.09	N	288.99	82.13	180.99
	S.E.	99.65	9.45	36.20	N	33.00	7.72	16.28
	NO. TOWS	N	4	2	6	N	3	6
04JUL83	DENSITY	0.75	30.58	19.90	N	14.60	53.39	34.85
	S.E.	0.75	30.58	19.63	N	8.50	8.33	5.95
	NO. TOWS	N	4	2	6	N	3	6

N -- STRATUM NOT SAMPLED

TABLE B-124 (CONTINUED).

WEEK BEGINNING MONDAY	AMERICAN SHAD			ALBANY			COMBINED		
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
		N	0.00	N	0.00	0.00	0.00	0.00	0.00
02MAY83		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	5	N	5	21	66	107	194
09MAY83		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	5	N	5	21	69	104	194
16MAY83		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	5	N	5	21	67	106	194
23MAY83		N	164.34	N	164.34	0.13	23.17	3.54	8.01
		N	164.34	N	164.34	0.09	21.04	0.60	5.17
		N	3	N	3	19	68	99	186
30MAY83		N	20.75	N	20.75	1.68	46.17	87.68	69.05
		N	11.54	N	11.54	0.55	11.01	18.23	12.27
		N	3	N	3	19	68	99	186
06JUN83		N	10.29	N	10.29	2.54	32.43	97.14	71.98
		N	6.98	N	6.98	1.97	6.48	17.03	11.29
		N	3	N	3	19	68	99	186
13JUN83		N	6.51	N	6.51	1.43	13.61	325.99	217.53
		N	6.51	N	6.51	1.16	5.14	128.60	84.45
		N	3	N	3	16	63	108	187
20JUN83		N	9.65	N	9.65	2.20	42.83	32.43	32.01
		N	8.11	N	8.11	1.41	5.56	12.00	7.99
		N	3	N	3	16	63	108	187
27JUN83		N	104.93	N	104.93	1.27	99.88	15.85	35.01
		N	47.30	N	47.30	1.15	14.72	2.42	3.94
		N	3	N	3	16	62	109	187
04JUL83		N	3.03	N	3.03	0.27	3.80	8.26	6.38
		N	1.80	N	1.80	0.27	1.25	2.74	1.83
		N	3	N	3	16	62	109	187

N -- STRATUM NOT SAMPLED

TABLE B-125
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	YOUNG-OF-THE-YEAR															
	AMERICAN SHAD				YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	N	3	6	3	4	3	10	6	4	3	6	3	6	15
09MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	N	3	6	3	4	3	10	6	4	3	6	3	6	15
16MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	N	3	6	3	4	3	10	6	4	3	6	3	6	15
23MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	N	3	6	3	4	4	11	5	4	4	4	4	4	13
30MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	N	3	6	3	3	4	10	5	3	5	5	5	3	13
06JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	N	3	6	3	4	4	11	4	4	4	4	4	4	12
13JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	4	4	6	6	16
20JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	4	4	6	5	15
27JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	N	8	9	3	4	6	13	4	6	4	4	6	6	16
04JUL83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	4	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-125 (CONTINUED).

AMERICAN SHAD YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY	INDIAN POINT			WEST POINT			CORNWALL						
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	4	7	25	36	N	4	30	34	5	12	6	23
09MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	0.00	0.00	0.00	N	4	30	34	5	13	5	23
	NO. TOWS	4	8	24	36	N	4	30	34	5	13	5	23
16MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	0.00	0.00	0.00	N	7	30	37	5	10	5	20
	NO. TOWS	4	7	25	36	N	7	30	37	5	10	5	20
23MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	0.00	0.00	0.00	N	7	23	30	5	9	6	20
	NO. TOWS	3	6	13	22	N	7	23	30	5	9	6	20
30MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	0.00	0.00	0.00	N	6	23	29	5	9	6	20
	NO. TOWS	3	6	15	24	N	6	23	29	5	9	6	20
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	0.00	0.00	0.00	N	7	23	30	5	9	6	20
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	6	20
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	0.00	0.00	0.00	N	8	25	33	3	12	13	28
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	0.00	0.00	0.00	N	8	25	33	3	12	13	28
	NO. TOWS	5	5	17	27	N	8	25	33	3	12	13	28
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	2.95	3.14	3.14	16.20	12.47	12.90	
	S.E.	0.00	0.00	0.00	0.00	N	1.84	1.85	1.85	7.04	5.26	4.03	
	NO. TOWS	5	6	16	27	N	8	25	33	3	12	13	
04JUL83	DENSITY	17.64	0.00	5.27	5.17	4.01	4.45	4.01	4.01	176.36	6.04	52.51	
	S.E.	6.38	0.00	2.49	1.98	0.87	1.00	0.87	0.87	48.06	2.75	12.87	
	NO. TOWS	5	5	16	26	33	8	25	33	12	13	28	

N -- STRATUM NOT SAMPLED

TABLE B-125 (CONTINUED).

AMERICAN SHAD

YOUNG-OF-THE-YEAR

WEEK
BEGINNING
MONDAY

WEEK BEGINNING MONDAY	POUGHKEEPSIE			HYDE PARK			KINGSTON						
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	
02MAY83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	
	NO. TOWS	N	9	10	19	N	10	11	21	N	6	7	13
09MAY83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00	
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00	
	NO. TOWS	N	10	10	20	N	10	10	20	N	6	7	13
16MAY83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00	
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00	
	NO. TOWS	N	10	10	20	N	8	11	19	N	6	7	13
23MAY83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00	
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00	
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6	10
30MAY83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00	
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00	
	NO. TOWS	N	16	22	38	N	7	12	19	N	5	10	10
06JUN83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00	
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00	
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6	10
13JUN83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00	
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00	
	NO. TOWS	N	7	15	22	N	5	9	14	N	5	5	10
20JUN83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00	
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00	
	NO. TOWS	N	8	14	22	N	5	9	14	N	5	6	11
27JUN83	DENSITY	N	2.72	3.67	3.45	N	61.32	0.95	13.46	N	151.44	2.19	52.61
	S.E.	N	0.80	2.30	1.77	N	47.09	0.65	9.77	N	110.81	1.10	37.44
	NO. TOWS	N	7	15	22	N	5	9	14	N	4	6	10
04JUL83	DENSITY	N	26.64	52.13	46.21	N	50.40	82.21	75.61	N	0.00	1.79	1.19
	S.E.	N	9.26	15.54	12.13	N	20.90	30.21	24.34	N	0.00	1.79	1.19
	NO. TOWS	N	7	15	22	N	5	9	14	N	4	6	10

N -- STRATUM NOT SAMPLED

TABLE B-125 (CONTINUED).

WEEK BEGINNING MONDAY	AMERICAN SHAD			SAUGERTIES			YOUNG-OF-THE-YEAR			CATSKILL			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	REGION
02MAY83	N	0.00 0.00 3	0.00 0.00 3	N	0.00 0.00 6	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 3	N	0.00 0.00 6	0.00 0.00 6	
09MAY83	N	0.00 0.00 3	0.00 0.00 3	N	0.00 0.00 6	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 3	N	0.00 0.00 6	0.00 0.00 6	
16MAY83	N	0.00 0.00 4	0.00 0.00 3	N	0.00 0.00 7	0.00 0.00 7	N	0.00 0.00 3	0.00 0.00 3	N	0.00 0.00 6	0.00 0.00 6	
23MAY83	N	0.00 0.00 5	0.00 0.00 3	N	0.00 0.00 8	0.00 0.00 8	N	0.00 0.00 3	0.00 0.00 3	N	0.00 0.00 6	0.00 0.00 6	
30MAY83	N	0.00 0.00 5	0.00 0.00 3	N	0.00 0.00 8	0.00 0.00 8	N	0.00 0.00 3	0.00 0.00 3	N	0.00 0.00 6	0.00 0.00 6	
06JUN83	N	0.00 0.00 5	0.00 0.00 3	N	0.00 0.00 8	0.00 0.00 8	N	0.00 0.00 3	0.00 0.00 3	N	0.00 0.00 6	0.00 0.00 6	
13JUN83	N	0.00 0.00 4	0.00 0.00 2	N	0.00 0.00 6	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 3	N	0.00 0.00 6	0.00 0.00 6	
20JUN83	N	0.00 0.00 3	0.00 0.00 2	N	0.00 0.00 5	0.00 0.00 5	N	0.00 0.00 3	0.00 0.00 3	N	0.00 0.00 6	0.00 0.00 6	
27JUN83	N	67.44 26.95 4	0.00 0.00 2	N	24.15 9.65 6	0.00 0.00 6	N	102.26 26.67 3	1.71 1.71 3	N	49.77 12.78 6	49.77 12.78 6	
04JUL83	N	0.00 0.00 4	0.00 0.00 2	N	0.00 0.00 6	0.00 0.00 6	N	20.65 20.65 3	47.65 47.65 3	N	34.74 26.76 6	34.74 26.76 6	

N -- STRATUM NOT SAMPLED

TABLE B-125 (CONTINUED).

WEEK BEGINNING MONDAY	AMERICAN SHAD			ALBANY			YOUNG-OF-THE-YEAR		
	DENSITY S.E. NO. TOWS	SHOAL N	BOTTOM 0.00 0.00 5	CHANNEL N	REGION 0.00 0.00 5	SHOAL 0.00 0.00 21	BOTTOM 0.00 0.00 66	CHANNEL 0.00 0.00 107	REGION 0.00 0.00 194
02MAY83	DENSITY S.E. NO. TOWS	N	0.00 0.00 5	N	0.00 0.00 5	0.00 0.00 21	0.00 0.00 66	0.00 0.00 107	0.00 0.00 194
09MAY83	DENSITY S.E. NO. TOWS	N	0.00 0.00 5	N	0.00 0.00 5	0.00 0.00 21	0.00 0.00 69	0.00 0.00 104	0.00 0.00 194
16MAY83	DENSITY S.E. NO. TOWS	N	0.00 0.00 5	N	0.00 0.00 5	0.00 0.00 21	0.00 0.00 67	0.00 0.00 106	0.00 0.00 194
23MAY83	DENSITY S.E. NO. TOWS	N	0.00 0.00 3	N	0.00 0.00 3	0.00 0.00 19	0.00 0.00 68	0.00 0.00 99	0.00 0.00 186
30MAY83	DENSITY S.E. NO. TOWS	N	0.00 0.00 3	N	0.00 0.00 3	0.00 0.00 19	0.00 0.00 68	0.00 0.00 99	0.00 0.00 186
06JUN83	DENSITY S.E. NO. TOWS	N	0.00 0.00 3	N	0.00 0.00 3	0.00 0.00 19	0.00 0.00 68	0.00 0.00 99	0.00 0.00 186
13JUN83	DENSITY S.E. NO. TOWS	N	0.00 0.00 3	N	0.00 0.00 3	0.00 0.00 16	0.00 0.00 63	0.00 0.00 108	0.00 0.00 187
20JUN83	DENSITY S.E. NO. TOWS	N	0.00 0.00 3	N	0.00 0.00 3	0.00 0.00 16	0.00 0.00 63	0.00 0.00 108	0.00 0.00 187
27JUN83	DENSITY S.E. NO. TOWS	N	2.02 1.01 3	N	2.02 1.01 3	0.11 0.11 16	40.49 11.07 62	2.03 0.57 109	11.27 2.74 187
04JUL83	DENSITY S.E. NO. TOWS	N	0.00 0.00 3	N	0.00 0.00 3	2.24 0.98 16	21.02 4.61 62	19.59 4.49 109	18.24 3.16 187

N -- STRATUM NOT SAMPLED

TABLE B-126
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	AMERICAN SHAD												YOUNG-OF-THE-YEAR											
	YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW				YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	3.76	N	3.07	3.15	11.78	4.88	5.63	7.81	4.72	0.00	0.00	1.21	1.33	0.00	0.73	4.72	0.00	0.00	1.72	4.72	0.00	0.00	1.72
	S.E.	1.17	N	1.92	1.70	3.31	3.66	5.63	2.81	1.43	0.00	0.00	0.36	0.71	0.00	0.20	1.43	0.00	0.00	0.52	1.43	0.00	0.00	0.52
	NO. TOWS	7	N	5	12	32	7	7	7	46	16	8	16	8	3	27	16	8	3	27	16	8	3	27
22AUG83	DENSITY	0.00	N	0.00	0.00	2.56	1.09	0.00	1.18	1.21	0.00	0.00	1.21	1.33	0.00	0.73	1.21	1.33	0.00	0.73	1.21	1.33	0.00	0.73
	S.E.	0.00	N	0.00	0.00	0.72	0.59	0.00	0.29	0.36	0.00	0.00	0.29	0.71	0.00	0.20	0.36	0.71	0.00	0.20	0.36	0.71	0.00	0.20
	NO. TOWS	7	N	5	12	29	9	8	46	16	3	8	16	8	3	27	16	8	3	27	16	8	3	27
05SEP83	DENSITY	0.41	N	0.00	0.05	0.45	0.00	0.00	0.17	1.38	0.00	0.00	1.38	0.00	0.00	0.50	1.38	0.00	0.00	0.50	1.38	0.00	0.00	0.50
	S.E.	0.41	N	0.00	0.05	0.28	0.00	0.00	0.10	0.75	0.00	0.00	0.75	0.00	0.00	0.27	0.75	0.00	0.00	0.27	0.75	0.00	0.00	0.27
	NO. TOWS	7	N	5	12	29	8	8	45	16	2	8	16	8	2	26	16	8	2	26	16	8	2	26
19SEP83	DENSITY	0.45	N	0.00	0.05	0.44	0.00	0.00	0.16	0.52	0.00	0.00	0.52	0.00	0.00	0.19	0.52	0.00	0.00	0.19	0.52	0.00	0.00	0.19
	S.E.	0.45	N	0.00	0.05	0.18	0.00	0.00	0.07	0.28	0.00	0.00	0.28	0.00	0.00	0.10	0.28	0.00	0.00	0.10	0.28	0.00	0.00	0.10
	NO. TOWS	6	N	5	11	31	8	8	47	15	3	8	15	8	3	26	15	8	3	26	15	8	3	26
03OCT83	DENSITY	0.47	N	0.00	0.05	0.07	0.80	0.27	0.30	0.62	0.00	0.27	0.62	1.13	0.00	0.48	0.62	1.13	0.00	0.48	0.62	1.13	0.00	0.48
	S.E.	0.47	N	0.00	0.05	0.07	0.80	0.27	0.19	0.37	0.00	0.27	0.37	0.85	0.00	0.23	0.37	0.85	0.00	0.23	0.37	0.85	0.00	0.23
	NO. TOWS	6	N	5	11	31	7	8	46	17	3	8	17	8	3	28	17	8	3	28	17	8	3	28
17OCT83	DENSITY	4.42	N	1.67	1.99	0.89	1.12	0.00	0.55	0.00	0.00	0.00	0.00	2.51	0.00	0.55	0.00	2.51	0.00	0.55	0.00	0.00	0.00	0.55
	S.E.	2.17	N	1.67	1.50	0.36	0.79	0.00	0.20	0.00	0.00	0.00	0.00	2.10	0.00	0.46	0.00	2.10	0.00	0.46	0.00	0.00	0.00	0.46
	NO. TOWS	7	N	5	12	30	8	8	46	16	3	8	16	7	3	26	16	7	3	26	16	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-126 (CONTINUED).

AMERICAN SHAD

YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY	INDIAN POINT			WEST POINT			CORNWALL			REGION
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	
08AUG83	DENSITY	2.44	0.00	4.10	3.34	0.08	17.68	3.85	0.71	2.52
	S.E.	1.35	0.00	4.10	3.20	0.08	16.95	1.38	0.71	1.15
	NO. TOWS	6	5	3	14	7	5	6	3	14
22AUG83	DENSITY	0.94	0.00	0.00	0.06	2.36	10.71	9.58	0.00	3.14
	S.E.	0.94	0.00	0.00	0.06	1.96	3.82	6.81	0.00	1.81
	NO. TOWS	7	5	2	14	8	5	5	3	13
05SEP83	DENSITY	0.53	0.81	0.00	0.16	0.00	0.47	0.00	0.00	0.03
	S.E.	0.53	0.51	0.00	0.09	0.00	0.47	0.00	0.00	0.03
	NO. TOWS	6	6	3	15	8	5	5	3	13
19SEP83	DENSITY	0.00	0.00	0.00	0.00	0.67	0.81	0.00	0.00	0.05
	S.E.	0.00	0.00	0.00	0.00	0.67	0.81	0.00	0.00	0.05
	NO. TOWS	6	5	3	14	8	6	5	2	13
03OCT83	DENSITY	6.28	0.00	0.00	0.38	0.07	6.61	0.00	0.00	0.38
	S.E.	4.21	0.00	0.00	0.25	0.07	2.53	0.00	0.00	0.15
	NO. TOWS	6	5	3	14	6	5	6	4	15
17OCT83	DENSITY	1.28	0.43	0.00	0.15	0.08	11.32	2.83	0.00	1.40
	S.E.	0.57	0.43	0.00	0.08	0.08	4.70	1.16	0.00	0.41
	NO. TOWS	6	6	3	15	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-126 (CONTINUED).

AMERICAN SHAD

YOUNG-OF-THE-YEAR

WEEK
BEGINNING
MONDAY

WEEK BEGINNING MONDAY	POUGHKEEPSIE			HYDE PARK			KINGSTON					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.91	0.00	0.21	N	5.16	0.00	1.07	N	18.07	0.00	6.10
	S.E.	0.91	0.00	0.21	N	3.88	0.00	0.80	N	9.44	0.00	3.19
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6
22AUG83	DENSITY	25.33	5.52	10.12	N	41.40	3.28	11.18	N	51.44	10.10	24.06
	S.E.	8.85	2.96	3.06	N	14.11	3.28	3.91	N	10.98	1.37	3.82
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	15
05SEP83	DENSITY	0.95	0.00	0.22	N	1.24	0.00	0.26	N	2.62	0.00	0.89
	S.E.	0.59	0.00	0.14	N	0.60	0.00	0.12	N	0.60	0.00	0.20
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	15
19SEP83	DENSITY	1.39	0.00	0.32	N	0.38	0.00	0.08	N	2.91	0.00	0.98
	S.E.	0.57	0.00	0.13	N	0.38	0.00	0.08	N	0.81	0.00	0.27
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	15
03OCT83	DENSITY	1.56	0.00	0.36	N	1.29	0.00	0.27	N	7.12	0.00	2.40
	S.E.	1.06	0.00	0.25	N	0.90	0.00	0.19	N	2.57	0.00	0.87
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	15
17OCT83	DENSITY	2.78	0.00	0.64	N	2.61	0.00	0.54	N	4.21	0.00	1.42
	S.E.	1.31	0.00	0.30	N	1.34	0.00	0.28	N	1.68	0.00	0.57
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	15

N -- STRATUM NOT SAMPLED

TABLE B-126 (CONTINUED).

WEEK BEGINNING MONDAY	AMERICAN SHAD			YOUNG-OF-THE-YEAR				
	SAUGERTIES			CATSKILL				
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION	
08AUG83	DENSITY	N	23.98	3.44	10.79	46.32	1.80	23.08
	S.E.	N	6.74	0.90	2.48	6.44	1.80	3.22
	NO. TOWS	N	12	6	18	15	6	21
22AUG83	DENSITY	N	74.98	3.16	28.88	76.28	11.03	42.22
	S.E.	N	18.29	2.77	6.78	20.61	8.60	10.83
	NO. TOWS	N	12	6	18	15	6	21
05SEP83	DENSITY	N	10.69	1.82	5.00	27.40	0.00	13.09
	S.E.	N	3.79	1.82	1.79	14.71	0.00	7.03
	NO. TOWS	N	12	6	18	15	6	21
19SEP83	DENSITY	N	1.74	0.00	0.62	3.27	2.19	2.71
	S.E.	N	0.72	0.00	0.26	1.23	2.19	1.28
	NO. TOWS	N	12	6	18	15	6	21
03OCT83	DENSITY	N	12.72	1.18	5.31	8.24	0.41	4.15
	S.E.	N	3.72	1.18	1.53	3.01	0.41	1.45
	NO. TOWS	N	12	6	18	15	6	21
17OCT83	DENSITY	N	1.50	0.00	0.54	3.43	0.00	1.64
	S.E.	N	0.66	0.00	0.24	1.35	0.00	0.64
	NO. TOWS	N	13	6	19	14	6	20

N -- STRATUM NOT SAMPLED

TABLE B-126 (CONTINUED).

WEEK BEGINNING MONDAY	AMERICAN SHAD			ALBANY			YOUNG-OF-THE-YEAR			COMBINED			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	REGION
08AUG83	N	41.42	N	41.42	N	8.80	N	17.24	1.79	8.80	17.24	1.79	6.27
	N	16.40	N	16.40	N	1.95	N	2.59	0.75	1.95	2.59	0.75	0.82
	N	8	N	8	N	66	N	85	49	66	85	49	200
22AUG83	N	39.78	N	39.78	N	2.13	N	35.99	2.64	2.13	35.99	2.64	10.76
	N	14.63	N	14.63	N	0.43	N	4.42	0.76	0.43	4.42	0.76	1.19
	N	8	N	8	N	64	N	87	49	64	87	49	200
05SEP83	N	59.37	N	59.37	N	0.68	N	13.07	0.14	0.68	13.07	0.14	3.36
	N	46.44	N	46.44	N	0.24	N	6.29	0.14	0.24	6.29	0.14	1.55
	N	8	N	8	N	63	N	87	49	63	87	49	199
19SEP83	N	0.31	N	0.31	N	0.45	N	1.14	0.20	0.45	1.14	0.20	0.46
	N	0.31	N	0.31	N	0.13	N	0.22	0.15	0.13	0.22	0.15	0.11
	N	8	N	8	N	64	N	86	49	64	86	49	199
03OCT83	N	0.00	N	0.00	N	0.84	N	3.65	0.14	0.84	3.65	0.14	1.07
	N	0.00	N	0.00	N	0.28	N	0.66	0.10	0.28	0.66	0.10	0.17
	N	8	N	8	N	65	N	85	50	65	85	50	200
17OCT83	N	0.60	N	0.60	N	1.50	N	2.10	0.23	1.50	2.10	0.23	0.81
	N	0.60	N	0.60	N	0.37	N	0.36	0.23	0.37	0.36	0.23	0.18
	N	8	N	8	N	64	N	86	50	64	86	50	200

N -- STRATUM NOT SAMPLED

TABLE B-127
 CATCH PER UNIT EFFORT (NUMBER PER HAUL) BY WEEK AND REGION,
 BEACH SEINE SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	AMERICAN SHAD	YOUNG-OF-THE-YEAR										AL	COMBINED	
		YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG			CS
01AUG83	CPUE	0.60	2.50	0.86	40.00	28.20	25.83	51.20	99.60	39.80	54.67	78.90	57.00	29.24
	S.E. NO. HAULS	0.40 5	1.00 24	0.47 14	35.04 5	15.72 5	11.31 6	28.21 5	35.06 5	16.94 5	12.02 9	35.24 10	16.20 7	5.12 100
15AUG83	CPUE	0.00	0.38	0.00	1.20	12.80	25.00	61.40	66.20	21.20	22.11	41.40	36.43	16.02
	S.E. NO. HAULS	0.00 5	0.22 24	0.00 14	0.80 5	5.09 5	10.40 6	10.01 5	27.96 5	8.55 5	5.14 9	11.86 10	11.01 7	1.94 100
29AUG83	CPUE	0.40	0.67	3.29	8.40	9.20	24.17	57.00	34.20	19.20	32.78	35.60	57.14	18.49
	S.E. NO. HAULS	0.24 5	0.38 24	3.14 14	7.44 5	4.03 5	17.50 6	15.08 5	9.92 5	7.88 5	8.85 9	13.93 10	17.83 7	2.76 100
12SEP83	CPUE	0.60	1.46	2.50	4.20	8.00	13.67	20.20	13.40	20.00	44.33	12.40	14.86	11.17
	S.E. NO. HAULS	0.40 5	0.79 24	2.13 14	3.01 5	6.53 5	6.70 6	2.60 5	8.02 5	9.61 5	14.31 9	3.26 10	4.51 7	1.75 100
26SEP83	CPUE	0.00	1.54	0.21	4.60	8.20	14.43	6.00	28.60	14.20	19.22	9.10	6.29	6.44
	S.E. NO. HAULS	0.00 5	0.74 24	0.15 14	4.60 5	4.26 5	6.48 7	2.43 5	8.39 5	5.83 5	4.94 9	2.11 10	2.74 7	0.86 101
10OCT83	CPUE	0.60	1.25	0.57	0.14	6.40	3.83	8.60	6.75	13.83	11.56	15.00	3.57	5.12
	S.E. NO. HAULS	0.40 5	0.58 24	0.43 14	0.14 7	4.66 5	1.05 6	4.27 5	2.39 4	4.04 6	3.97 9	4.38 10	1.59 7	0.74 102

TABLE B-128
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	YEARLING											
	AMERICAN SHAD				TAPPAN ZEE				CROTON-HAVERSTRAW			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	3	10	6	3	6	15
09MAY83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	3	10	6	3	6	15
16MAY83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	3	10	6	3	6	15
23MAY83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	3	11	5	4	13	
30MAY83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	3	10	5	3	13	
06JUN83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	3	11	4	4	12	
13JUN83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	9	3	5	14	4	6	16	
20JUN83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	9	3	5	14	4	6	15	
27JUN83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	9	3	4	13	4	6	16	
04JUL83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	9	3	5	14	4	6	16	

N -- STRATUM NOT SAMPLED

TABLE B-128 (CONTINUED).

AMERICAN SHAD

YEARLING

WEEK BEGINNING MONDAY	INDIAN POINT			WEST POINT			CORNWALL					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 4	0.00 7	0.00 25	0.00 36	0.00 4	0.00 30	0.00 34	0.00 5	0.00 12	0.00 6	0.00 23
09MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 4	0.00 8	0.00 24	0.00 36	0.00 4	0.00 30	0.00 34	0.00 5	0.00 13	0.00 5	0.00 23
16MAY83	DENSITY	0.00	0.00	0.14	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 4	0.00 7	0.14 25	0.11 36	0.00 7	0.00 30	0.00 37	0.00 5	0.00 10	0.00 5	0.00 20
23MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61	0.00	0.00	0.04
	S.E. NO. TOWS	0.00 3	0.00 6	0.00 13	0.00 22	0.00 7	0.00 23	0.00 30	0.61 5	0.00 9	0.00 6	0.04 20
30MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 3	0.00 6	0.00 15	0.00 24	0.00 6	0.00 23	0.00 29	0.00 5	0.00 9	0.00 6	0.00 20
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 4	0.00 6	0.00 14	0.00 24	0.00 7	0.00 23	0.00 30	0.00 5	0.00 9	0.00 5	0.00 19
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 5	0.00 5	0.00 16	0.00 26	0.00 8	0.00 25	0.00 33	0.00 3	0.00 12	0.00 13	0.00 28
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 5	0.00 5	0.00 17	0.00 27	0.00 8	0.00 25	0.00 33	0.00 3	0.00 12	0.00 13	0.00 28
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 5	0.00 6	0.00 16	0.00 27	0.00 8	0.00 25	0.00 33	0.00 3	0.00 12	0.00 13	0.00 28
04JUL83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 5	0.00 5	0.00 16	0.00 26	0.00 8	0.00 25	0.00 33	0.00 3	0.00 12	0.00 13	0.00 28

N -- STRATUM NOT SAMPLED

TABLE B-128 (CONTINUED).

WEEK BEGINNING MONDAY	AMERICAN SHAD												YEARLING			
	POUGHKEEPSIE				HYDE PARK				KINGSTON				REGION	CHANNEL	REGION	
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION				
02MAY83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	9	10	19	10	11	11	21	6	7	13	N	6	7	13
09MAY83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	10	10	20	10	10	10	20	6	7	13	N	6	7	13
16MAY83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	10	10	20	10	8	11	19	6	7	13	N	6	7	13
23MAY83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	16	22	38	7	12	12	19	4	6	10	N	4	6	10
30MAY83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	16	22	38	7	12	12	19	5	5	10	N	5	5	10
06JUN83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	16	22	38	7	12	12	19	4	6	10	N	4	6	10
13JUN83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	7	15	22	5	9	9	14	5	5	10	N	5	5	10
20JUN83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	8	14	22	5	9	9	14	5	6	11	N	5	6	11
27JUN83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	7	15	22	5	9	9	14	4	6	10	N	4	6	10
04JUL83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	7	15	22	5	9	9	14	4	6	10	N	4	6	10

N -- STRATUM NOT SAMPLED

TABLE B-128 (CONTINUED).

WEEK BEGINNING MONDAY	AMERICAN SHAD						YEARLING					
	SAUGERTIES			CATSKILL			SAUGERTIES			CATSKILL		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	3	3	6	N	3	3	N	3	3	6
09MAY83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	3	3	6	N	3	3	N	3	3	6
16MAY83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	4	3	7	N	3	3	N	3	3	6
23MAY83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	3	3	N	3	3	6
30MAY83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	3	3	N	3	3	6
06JUN83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	3	3	N	3	3	6
13JUN83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	4	2	6	N	3	3	N	3	3	6
20JUN83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	3	2	5	N	3	3	N	3	3	6
27JUN83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	4	2	6	N	3	3	N	3	3	6
04JUL83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	4	2	6	N	3	3	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-128 (CONTINUED).

WEEK BEGINNING MONDAY	AMERICAN SHAD			ALBANY			YEARLING		
	DENSITY S.E. NO. TOWS	SHOAL N	BOTTOM 0.00 5	CHANNEL N	REGION 0.00 5	SHOAL 0.00 21	BOTTOM 0.00 66	CHANNEL 0.00 107	REGION 0.00 194
02MAY83	DENSITY S.E. NO. TOWS	N N N	0.00 0.00 5	N N N	0.00 0.00 5	0.00 0.00 21	0.00 0.00 66	0.00 0.00 107	0.00 0.00 194
09MAY83	DENSITY S.E. NO. TOWS	N N N	0.00 0.00 5	N N N	0.00 0.00 5	0.00 0.00 21	0.00 0.00 69	0.00 0.00 104	0.00 0.00 194
16MAY83	DENSITY S.E. NO. TOWS	N N N	0.00 0.00 5	N N N	0.00 0.00 5	0.00 0.00 21	0.00 0.00 67	0.01 0.01 106	0.01 0.01 194
23MAY83	DENSITY S.E. NO. TOWS	N N N	0.00 0.00 3	N N N	0.00 0.00 3	0.02 0.02 19	0.00 0.00 68	0.00 0.00 99	0.00 0.00 186
30MAY83	DENSITY S.E. NO. TOWS	N N N	0.00 0.00 3	N N N	0.00 0.00 3	0.00 0.00 19	0.00 0.00 68	0.00 0.00 99	0.00 0.00 186
06JUN83	DENSITY S.E. NO. TOWS	N N N	0.00 0.00 3	N N N	0.00 0.00 3	0.00 0.00 19	0.00 0.00 68	0.00 0.00 99	0.00 0.00 186
13JUN83	DENSITY S.E. NO. TOWS	N N N	0.00 0.00 3	N N N	0.00 0.00 3	0.00 0.00 16	0.00 0.00 63	0.00 0.00 108	0.00 0.00 187
20JUN83	DENSITY S.E. NO. TOWS	N N N	0.00 0.00 3	N N N	0.00 0.00 3	0.00 0.00 16	0.00 0.00 63	0.00 0.00 108	0.00 0.00 187
27JUN83	DENSITY S.E. NO. TOWS	N N N	0.00 0.00 3	N N N	0.00 0.00 3	0.00 0.00 16	0.00 0.00 62	0.00 0.00 109	0.00 0.00 187
04JUL83	DENSITY S.E. NO. TOWS	N N N	0.00 0.00 3	N N N	0.00 0.00 3	0.00 0.00 16	0.00 0.00 62	0.00 0.00 109	0.00 0.00 187

N -- STRATUM NOT SAMPLED

TABLE B-129 (CONTINUED).

WEEK BEGINNING MONDAY	AMERICAN SHAD											
	INDIAN POINT				WEST POINT				YEARLING			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	3	7	5	6	14
22AUG83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	2	14	N	5	3	8	5	3	13
05SEP83	DENSITY	0.00	0.40	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.40	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	6	3	15	N	5	3	8	5	3	13
19SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	N	5	3	8	6	2	13
03OCT83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	2	6	6	4	15
17OCT83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	6	3	15	N	5	3	8	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-129 (CONTINUED).

WEEK BEGINNING MONDAY	AMERICAN SHAD											
	POUGHKEEPSIE				HYDE PARK				KINGSTON			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	15
22AUG83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	15
05SEP83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	15
19SEP83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	15
03OCT83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	15
17OCT83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	15

N -- STRATUM NOT SAMPLED

TABLE B-129 (CONTINUED).

WEEK BEGINNING MONDAY	AMERICAN SHAD			YEARLING			
	SAUGERTIES			CATSKILL			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N 12	6	N 18	N 15	6	21
22AUG83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N 12	6	N 18	N 15	6	21
05SEP83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N 12	6	N 18	N 15	6	21
19SEP83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N 12	6	N 18	N 15	6	21
03OCT83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N 12	6	N 18	N 15	6	21
17OCT83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N 13	6	N 19	N 14	6	20

N -- STRATUM NOT SAMPLED

TABLE B-129 (CONTINUED).

WEEK BEGINNING MOHDAY	AMERICAN SHAD			ALBANY			YEARLING			COMBINED			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	REGION
08AUG83	N	0.00	N	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	0.00	N	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	8	N	N	8	N	8	66	85	49	200	200	200
22AUG83	N	0.00	N	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	0.00	N	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	8	N	N	8	N	8	64	87	49	200	200	200
05SEP83	N	0.00	N	N	0.00	N	0.00	0.00	0.02	0.00	0.01	0.01	0.01
	N	0.00	N	N	0.00	N	0.00	0.00	0.02	0.00	0.01	0.01	0.01
	N	8	N	N	8	N	8	63	87	49	199	199	199
19SEP83	N	0.00	N	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	0.00	N	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	8	N	N	8	N	8	64	86	49	199	199	199
03OCT83	N	0.00	N	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	0.00	N	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	8	N	N	8	N	8	65	85	50	200	200	200
17OCT83	N	0.00	N	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	0.00	N	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	8	N	N	8	N	8	64	86	50	200	200	200

N -- STRATUM NOT SAMPLED

TABLE B-130
 CATCH PER UNIT EFFORT (NUMBER PER HAUL) BY WEEK AND REGION,
 BEACH SEINE SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	AMERICAN SHAD	YEARLING											AL	COMBINED			
		REGIONS															
		YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS					
01AUG83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 5	0.00 5	0.00 6	0.00 5	0.00 9	0.00 10	0.00 7	0.00 100
15AUG83	CPUE	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	S.E. NO. HAULS	0.00 5	0.04 24	0.00 14	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 5	0.00 5	0.00 6	0.00 5	0.00 9	0.00 10	0.00 7	0.00 100
29AUG83	CPUE	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	S.E. NO. HAULS	0.20 5	0.00 24	0.00 14	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 5	0.00 5	0.00 6	0.00 5	0.00 9	0.00 10	0.00 7	0.01 100
12SEP83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 5	0.00 5	0.00 6	0.00 5	0.00 9	0.00 10	0.00 7	0.00 100
26SEP83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 5	0.00 5	0.00 7	0.00 5	0.00 5	0.00 5	0.00 5	0.00 7	0.00 5	0.00 9	0.00 10	0.00 7	0.00 101
10OCT83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 7	0.00 5	0.00 6	0.00 5	0.00 4	0.00 5	0.00 6	0.00 6	0.00 5	0.00 9	0.00 10	0.00 7	0.00 102

TABLE B-131
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	YONKERS			AMERICAN SHAD			OLDER			CROTON-HAVERSTRAW		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	32	7	7	46	16	8	3	27
22AUG83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	29	9	8	46	16	8	3	27
05SEP83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	29	8	8	45	16	8	2	26
19SEP83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	11	31	8	8	47	15	8	3	26
03OCT83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	11	31	7	8	46	17	8	3	28
17OCT83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	30	8	8	46	16	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-131 (CONTINUED).

WEEK BEGINNING MONDAY	AMERICAN SHAD											
	INDIAN POINT				WEST POINT				CORNWALL			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	4	3	7	5	6	3	14
22AUG83	DENSITY	0.00	0.00	0.00	N	0.47	0.00	0.07	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.47	0.00	0.07	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	2	14	5	3	8	5	5	3	13
05SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	6	3	15	5	3	8	5	5	3	13
19SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	5	3	8	6	5	2	13
03OCT83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	4	2	6	5	6	4	15
17OCT83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	6	3	15	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-131 (CONTINUED).

WEEK BEGINNING MONDAY	AMERICAN SHAD											
	POUGHKEEPSIE				HYDE PARK				KINGSTON			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6
22AUG83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6
05SEP83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6
19SEP83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6
03OCT83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6
17OCT83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6

N -- STRATUM NOT SAMPLED

TABLE B-131 (CONTINUED).

WEEK BEGINNING MONDAY	AMERICAN SHAD						OLDER					
	SAUGERTIES			CATSKILL			SAUGERTIES			CATSKILL		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	12	6	18	N	15	6	N	15	6	21
22AUG83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	12	6	18	N	15	6	N	15	6	21
05SEP83	DENSITY	N	0.00	0.00	0.00	N	0.18	0.00	N	0.18	0.00	0.09
	S.E.	N	0.00	0.00	0.00	N	0.18	0.00	N	0.18	0.00	0.09
	NO. TOWS	N	12	6	18	N	15	6	N	15	6	21
19SEP83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	12	6	18	N	15	6	N	15	6	21
03OCT83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	12	6	18	N	15	6	N	15	6	21
17OCT83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	13	6	19	N	14	6	N	14	6	20

N -- STRATUM NOT SAMPLED

TABLE B-131 (CONTINUED).

WEEK BEGINNING MONDAY	AMERICAN SHAD						OLDER					
	ALBANY			COMBINED			ALBANY			COMBINED		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	8	N	8	8	8	66	85	49	200	200
22AUG83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	S.E.	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	NO. TOWS	N	8	N	8	8	8	64	87	49	200	200
05SEP83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	S.E.	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	NO. TOWS	N	8	N	8	8	8	63	87	49	199	199
19SEP83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	8	N	8	8	8	64	86	49	199	199
03OCT83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	8	N	8	8	8	65	85	50	200	200
17OCT83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	8	N	8	8	8	64	86	50	200	200

N -- STRATUM NOT SAMPLED

TABLE B-132
 CATCH PER UNIT EFFORT (NUMBER PER HAUL) BY WEEK AND REGION,
 BEACH SEINE SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	AMERICAN SHAD										OLDER		
	YK	TZ	GH	IP	WP	CW	PK	HP	KG	SG	CS	AL	COMBINED
01AUG83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7	0.00 100
15AUG83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7	0.00 100
29AUG83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7	0.00 100
12SEP83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7	0.00 100
26SEP83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 5	0.00 5	0.00 7	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7	0.00 101
10OCT83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 7	0.00 5	0.00 6	0.00 5	0.00 6	0.00 9	0.00 10	0.00 7	0.00 102

TABLE B-133
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	ATLANTIC TOMCOD												POST YOLK-SAC LARVAE					
	YONKERS						TAPPAN ZEE						CROTON-HAVERSTRAW					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION		
02MAY83	DENSITY	1.60	N	40.95	36.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	S.E.	1.60	N	37.35	33.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	NO. TOWS	3	N	3	6	3	4	3	10	3	6	10	6	3	6	15		
09MAY83	DENSITY	2.94	N	0.00	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59	2.21	0.00	0.70		
	S.E.	2.94	N	0.00	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59	2.21	0.00	0.53		
	NO. TOWS	3	N	3	6	3	4	3	10	3	6	10	6	3	6	15		
16MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.42	0.00	0.00	0.00	0.00		
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.42	0.00	0.00	0.00	0.00		
	NO. TOWS	3	N	3	6	3	4	3	10	3	6	10	6	3	6	15		
23MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	NO. TOWS	3	N	3	6	3	4	4	11	3	4	11	5	4	4	13		
30MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	NO. TOWS	3	N	3	6	3	4	4	10	3	4	10	5	5	3	13		
06JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	NO. TOWS	3	N	3	6	3	4	4	11	3	4	11	4	4	4	12		
13JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	NO. TOWS	1	N	8	9	3	5	6	14	3	6	14	4	6	6	16		
20JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	NO. TOWS	1	N	8	9	3	5	6	14	3	6	14	4	6	5	15		
27JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	NO. TOWS	1	N	8	9	3	4	6	13	3	6	13	4	6	6	16		
04JUL83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	NO. TOWS	1	N	8	9	3	5	6	14	3	6	14	4	6	6	16		

N -- STRATUM NOT SAMPLED

TABLE B-133 (CONTINUED).

WEEK BEGINNING MONDAY	ATLANTIC TOMCOD												POST YOLK-SAC LARVAE			
	INDIAN POINT				WEST POINT				CORNWALL							
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	4	7	25	36	4	30	34	5	12	6	23	5	6	23	23
09MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	4	8	24	36	4	30	34	5	13	5	23	5	5	23	23
16MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	4	7	25	36	7	30	37	5	10	5	20	5	5	20	20
23MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	3	6	13	22	7	23	30	5	9	6	20	5	6	20	20
30MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	3	6	15	24	6	23	29	5	9	6	20	5	6	20	20
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	4	6	14	24	7	23	30	5	9	5	19	5	5	19	19
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	5	5	16	26	8	25	33	3	12	13	28	3	13	28	28
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	5	5	17	27	8	25	33	3	12	13	28	3	13	28	28
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	5	6	16	27	8	25	33	3	12	13	28	3	13	28	28
04JUL83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	5	5	16	26	8	25	33	3	12	13	28	3	13	28	28

N -- STRATUM NOT SAMPLED

TABLE B-133 (CONTINUED).

WEEK BEGINNING MONDAY	ATLANTIC TOMCOD						POUGHKEEPSIE			HYDE PARK			POST YOLK-SAC LARVAE			KINGSTON						
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	
02MAY83		N	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	9	10	19	N	10	10	19	11	21	N	6	6	7	13	N	6	6	7	7	13
09MAY83		N	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	10	10	20	N	10	10	20	10	20	N	6	6	7	13	N	6	6	7	7	13
16MAY83		N	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	10	10	20	N	10	8	11	11	19	N	6	6	7	13	N	6	6	7	7	13
23MAY83		N	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	16	22	38	N	16	7	12	12	19	N	4	4	6	10	N	4	4	6	6	10
30MAY83		N	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	16	22	38	N	16	7	12	12	19	N	5	5	5	10	N	5	5	5	5	10
06JUN83		N	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	16	22	38	N	16	7	12	12	19	N	4	4	6	10	N	4	4	6	6	10
13JUN83		N	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	7	15	22	N	7	5	9	9	14	N	5	5	5	10	N	5	5	5	5	10
20JUN83		N	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	8	14	22	N	8	5	9	9	14	N	5	5	6	11	N	5	5	6	6	11
27JUN83		N	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	7	15	22	N	7	5	9	9	14	N	4	4	6	10	N	4	4	6	6	10
04JUL83		N	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	7	15	22	N	7	5	9	9	14	N	4	4	6	10	N	4	4	6	6	10

N -- STRATUM NOT SAMPLED

TABLE B-133 (CONTINUED).

ATLANTIC TOMCOD POST YOLK-SAC LARVAE

WEEK BEGINNING MONDAY	SAUGERTIES			CATSKILL			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	3	3	N	3	3	6
09MAY83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	3	3	N	3	3	6
16MAY83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	4	3	N	3	3	6
23MAY83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	N	3	3	6
30MAY83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	N	3	3	6
06JUN83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	N	3	3	6
13JUN83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	4	2	N	3	3	6
20JUN83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	3	2	N	3	3	6
27JUN83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	4	2	N	3	3	6
04JUL83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	4	2	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-133 (CONTINUED).

WEEK BEGINNING MONDAY	ATLANTIC TOMCOD			ALBANY			COMBINED			REGION
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	
02MAY83		N	0.00	N	0.00	0.19	0.00	5.58	3.68	
		N	0.00	N	0.00	0.19	0.00	5.09	3.34	
		N	5	N	5	21	66	107	194	
09MAY83		N	0.00	N	0.00	0.49	0.13	0.00	0.08	
		N	0.00	N	0.00	0.38	0.13	0.00	0.05	
		N	5	N	5	21	69	104	194	
16MAY83		N	0.00	N	0.00	0.00	0.24	0.00	0.06	
		N	0.00	N	0.00	0.00	0.24	0.00	0.06	
		N	5	N	5	21	67	106	194	
23MAY83		N	0.00	N	0.00	0.00	0.00	0.00	0.00	
		N	0.00	N	0.00	0.00	0.00	0.00	0.00	
		N	3	N	3	19	68	99	186	
30MAY83		N	0.00	N	0.00	0.00	0.00	0.00	0.00	
		N	0.00	N	0.00	0.00	0.00	0.00	0.00	
		N	3	N	3	19	68	99	186	
06JUN83		N	0.00	N	0.00	0.00	0.00	0.00	0.00	
		N	0.00	N	0.00	0.00	0.00	0.00	0.00	
		N	3	N	3	19	68	99	186	
13JUN83		N	0.00	N	0.00	0.00	0.00	0.00	0.00	
		N	0.00	N	0.00	0.00	0.00	0.00	0.00	
		N	3	N	3	16	63	108	187	
20JUN83		N	0.00	N	0.00	0.00	0.00	0.00	0.00	
		N	0.00	N	0.00	0.00	0.00	0.00	0.00	
		N	3	N	3	16	63	108	187	
27JUN83		N	0.00	N	0.00	0.00	0.00	0.00	0.00	
		N	0.00	N	0.00	0.00	0.00	0.00	0.00	
		N	3	N	3	16	62	109	187	
04JUL83		N	0.00	N	0.00	0.00	0.00	0.00	0.00	
		N	0.00	N	0.00	0.00	0.00	0.00	0.00	
		N	3	N	3	16	62	109	187	

N -- STRATUM NOT SAMPLED

TABLE B-134
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	ATLANTIC TOMCOD										YOUNG-OF-THE-YEAR									
	YONKERS					TAPPAN ZEE					CROTON-HAVERSTRAW									
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION				
02MAY83	DENSITY		14.15	215.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	S.E.		12.22	202.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	NO. TOWS		3	6	3	4	3	10	6	3	3	10	6	3	6	15				
09MAY83	DENSITY		14.83	1.72	0.00	11.87	0.00	2.29	3.41	38.11	0.58	9.87	2.75	30.90	0.58	6.88				
	S.E.		10.72	1.24	0.00	6.24	0.00	1.20	2.75	30.90	0.58	6.88	2.75	30.90	0.58	6.88				
	NO. TOWS		3	6	3	4	3	10	6	3	6	15	6	3	6	15				
16MAY83	DENSITY		0.00	0.00	2.38	497.01	0.00	96.81	1.70	28.75	0.00	6.95	1.70	28.75	0.00	6.95				
	S.E.		0.00	0.00	1.19	432.19	0.00	83.40	1.18	28.75	0.00	6.34	1.18	28.75	0.00	6.34				
	NO. TOWS		3	6	3	4	3	10	6	3	6	15	6	3	6	15				
23MAY83	DENSITY		326.67	37.90	1.54	101.88	43.50	38.90	0.00	90.63	0.75	20.25	0.00	40.64	0.75	8.95				
	S.E.		305.28	35.41	1.54	83.16	35.58	22.15	0.00	40.64	0.75	8.95	0.00	40.64	0.75	8.95				
	NO. TOWS		3	6	3	4	4	11	5	4	4	13	5	4	4	13				
30MAY83	DENSITY		224.28	27.08	0.00	540.10	23.67	114.38	0.72	2.11	0.00	0.73	0.72	2.11	0.00	0.53				
	S.E.		224.28	26.04	0.00	540.10	23.67	104.72	0.72	2.11	0.00	0.53	0.72	2.11	0.00	0.53				
	NO. TOWS		3	6	3	3	4	10	5	5	3	13	5	5	3	13				
06JUN83	DENSITY		0.00	22.19	19.58	4.10	1.52	8.85	0.99	4.29	0.00	1.31	0.99	4.29	0.00	0.83				
	S.E.		0.00	22.19	19.58	3.03	1.52	7.46	0.99	3.38	0.00	0.83	0.99	3.38	0.00	0.83				
	NO. TOWS		3	6	3	4	4	11	4	4	4	12	4	4	4	12				
13JUN83	DENSITY		158.67	144.99	0.00	316.87	29.28	73.70	0.00	5.30	0.00	1.17	0.00	3.07	0.00	0.68				
	S.E.		0.00	102.44	0.00	82.13	27.16	19.67	0.00	3.07	0.00	0.68	0.00	3.07	0.00	0.68				
	NO. TOWS		1	9	3	5	6	14	4	6	6	16	4	6	6	16				
20JUN83	DENSITY		1266.46	147.25	140.89	297.04	27.81	122.53	0.00	205.39	2.64	46.29	0.00	72.99	2.64	16.10				
	S.E.		0.00	0.34	87.00	41.95	11.15	34.22	0.00	72.99	2.64	16.10	0.00	72.99	2.64	16.10				
	NO. TOWS		1	9	3	5	6	14	4	6	5	15	4	6	5	15				
27JUN83	DENSITY		157.52	18.27	1.11	282.94	0.00	55.02	0.80	205.14	4.57	47.33	0.80	74.72	4.57	16.55				
	S.E.		0.00	0.00	1.11	130.33	0.00	25.15	0.80	74.72	4.57	16.55	0.80	74.72	4.57	16.55				
	NO. TOWS		1	9	3	4	6	13	4	6	6	16	4	6	6	16				
04JUL83	DENSITY		692.67	84.20	0.00	325.93	0.00	62.90	0.00	95.78	0.00	21.08	0.00	19.49	0.00	4.29				
	S.E.		0.00	3.84	0.00	63.02	0.00	12.16	0.00	19.49	0.00	4.29	0.00	19.49	0.00	4.29				
	NO. TOWS		1	9	3	5	6	14	4	6	6	16	4	6	6	16				

N -- STRATUM NOT SAMPLED

TABLE B-134 (CONTINUED).

ATLANTIC TOMCOD

WEEK
BEGINNING
MONDAY

WEEK BEGINNING MONDAY	INDIAN POINT			WEST POINT			CORNWALL					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	7	25	36	4	30	34	5	12	6	23
09MAY83	DENSITY	0.92	0.00	0.00	0.06	0.00	0.10	0.09	0.00	0.00	0.00	0.00
	S.E.	0.92	0.00	0.00	0.06	0.00	0.10	0.09	0.00	0.00	0.00	0.00
	NO. TOWS	4	8	24	36	4	30	34	5	13	5	23
16MAY83	DENSITY	1.71	59.62	1.33	10.70	29.38	0.29	4.30	0.00	3.00	0.00	0.79
	S.E.	1.71	46.66	1.21	7.54	15.88	0.16	2.20	0.00	2.34	0.00	0.62
	NO. TOWS	4	7	25	36	7	30	37	5	10	5	20
23MAY83	DENSITY	0.00	90.44	0.27	14.71	66.50	3.82	12.46	0.00	4.58	0.00	1.21
	S.E.	0.00	30.29	0.27	4.86	27.02	1.53	3.95	0.00	2.29	0.00	0.60
	NO. TOWS	3	6	13	22	7	23	30	5	9	6	20
30MAY83	DENSITY	0.00	82.06	2.66	15.23	127.15	0.42	17.90	0.00	0.31	0.00	0.08
	S.E.	0.00	41.14	2.24	6.82	68.60	0.32	9.46	0.00	0.31	0.00	0.08
	NO. TOWS	3	6	15	24	6	23	29	5	9	6	20
06JUN83	DENSITY	0.00	143.98	0.00	23.09	52.96	0.26	7.52	0.00	10.08	0.00	2.65
	S.E.	0.00	92.25	0.00	14.79	25.62	0.18	3.54	0.00	6.13	0.00	1.61
	NO. TOWS	4	6	14	24	7	23	30	5	9	5	19
13JUN83	DENSITY	0.00	58.89	0.71	9.99	61.60	0.98	9.34	0.00	3.02	0.21	0.93
	S.E.	0.00	34.19	0.41	5.49	15.77	0.52	2.22	0.00	1.21	0.21	0.35
	NO. TOWS	5	5	16	26	8	25	33	3	12	13	28
20JUN83	DENSITY	0.00	87.32	3.14	16.45	39.61	1.86	7.07	0.00	2.53	0.00	0.67
	S.E.	0.00	31.45	1.19	5.13	12.54	0.99	1.93	0.00	0.73	0.00	0.19
	NO. TOWS	5	5	17	27	8	25	33	3	12	13	28
27JUN83	DENSITY	1.38	120.47	1.41	20.50	9.11	6.84	7.16	0.00	5.77	0.20	1.66
	S.E.	0.85	57.42	1.15	9.25	5.33	2.20	2.03	0.00	2.12	0.20	0.57
	NO. TOWS	5	6	16	27	8	25	33	3	12	13	28
04JUL83	DENSITY	1.24	42.70	0.68	7.45	200.56	15.48	41.00	0.00	1.60	0.00	0.42
	S.E.	0.76	19.05	0.39	3.07	45.64	3.57	7.01	0.00	0.98	0.00	0.26
	NO. TOWS	5	5	16	26	8	25	33	3	12	13	28

N -- STRATUM NOT SAMPLED

TABLE B-134 (CONTINUED).

ATLANTIC TOMCOD

WEEK BEGINNING MONDAY	POUGHKEEPSIE			HYDE PARK			KINGSTON					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	9	10	10	19	10	11	21	6	6	7	13
09MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	10	10	20	20	10	10	20	6	6	7	13
16MAY83	DENSITY	0.89	0.00	0.21	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.45	0.00	0.11	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	10	10	20	20	8	11	19	6	6	7	13
23MAY83	DENSITY	6.24	0.00	1.45	N	0.82	0.00	0.17	N	0.00	0.00	0.00
	S.E.	4.09	0.00	0.95	N	0.53	0.00	0.11	N	0.00	0.00	0.00
	NO. TOWS	16	22	38	38	7	12	19	4	4	6	10
30MAY83	DENSITY	0.66	0.00	0.15	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.66	0.00	0.15	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	16	22	38	38	7	12	19	5	5	5	10
06JUN83	DENSITY	4.92	0.00	1.14	N	2.12	0.00	0.44	N	0.00	0.00	0.00
	S.E.	2.14	0.00	0.50	N	0.84	0.00	0.17	N	0.00	0.00	0.00
	NO. TOWS	16	22	38	38	7	12	19	4	4	6	10
13JUN83	DENSITY	5.65	0.00	1.31	N	0.62	0.00	0.13	N	0.00	0.00	0.00
	S.E.	4.57	0.00	1.06	N	0.62	0.00	0.13	N	0.00	0.00	0.00
	NO. TOWS	7	15	22	22	5	9	14	5	5	5	10
20JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	8	14	22	22	5	9	14	5	5	6	11
27JUN83	DENSITY	3.11	0.00	0.72	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	2.26	0.00	0.52	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	7	15	22	22	5	9	14	4	4	6	10
04JUL83	DENSITY	0.85	0.00	0.20	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.56	0.00	0.13	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	7	15	22	22	5	9	14	4	4	6	10

N -- STRATUM NOT SAMPLED

TABLE B-134 (CONTINUED).

WEEK BEGINNING MONDAY	ATLANTIC TOMCOD						YOUNG-OF-THE-YEAR					
	SAUGERTIES			CATSKILL			SAUGERTIES			CATSKILL		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	3	3	6	6	6	6	N	3	3	6
09MAY83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	3	3	6	6	6	6	N	3	3	6
16MAY83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	4	3	7	7	7	7	N	3	3	6
23MAY83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	8	8	8	N	3	3	6
30MAY83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	8	8	8	N	3	3	6
06JUN83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	8	8	8	N	3	3	6
13JUN83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	4	2	6	6	6	6	N	3	3	6
20JUN83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	3	2	5	5	5	5	N	3	3	6
27JUN83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	4	2	6	6	6	6	N	3	3	6
04JUL83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	4	2	6	6	6	6	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-134 (CONTINUED).

WEEK BEGINNING MONDAY	ATLANTIC TOMCOD			ALBANY			YOUNG-OF-THE-YEAR			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
	DENSITY S.E. NO. TOWS	0.00 0.00 5	N N 5	0.00 0.00 5	0.00 0.00 5	N N 5	1.69 1.46 21	0.00 0.00 66	32.97 31.24 107	21.82 20.52 194
02MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 5	N N 5	0.00 0.00 5	0.00 0.00 5	N N 5	1.69 1.46 21	0.00 0.00 66	32.97 31.24 107	21.82 20.52 194
09MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 5	N N 5	0.00 0.00 5	0.00 0.00 5	N N 5	2.65 1.44 21	3.55 1.94 69	0.04 0.03 104	1.15 0.50 194
16MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 5	N N 5	0.00 0.00 5	0.00 0.00 5	N N 5	1.81 0.72 21	62.63 48.42 67	0.18 0.13 106	15.64 11.87 194
23MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 3	N N 3	0.00 0.00 3	0.00 0.00 3	N N 3	39.83 36.44 19	26.68 9.88 68	4.55 3.30 99	13.44 4.84 186
30MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 3	N N 3	0.00 0.00 3	0.00 0.00 3	N N 3	26.94 26.76 19	72.06 60.51 68	2.70 2.21 99	22.08 15.13 186
06JUN83	DENSITY S.E. NO. TOWS	0.00 0.00 3	N N 3	0.00 0.00 3	0.00 0.00 3	N N 3	10.93 10.69 19	13.50 5.73 68	3.59 3.42 99	6.74 2.85 186
13JUN83	DENSITY S.E. NO. TOWS	0.00 0.00 3	N N 3	0.00 0.00 3	0.00 0.00 3	N N 3	18.94 0.00 16	43.37 9.46 63	22.42 15.98 108	27.21 10.74 187
20JUN83	DENSITY S.E. NO. TOWS	0.00 0.00 3	N N 3	0.00 0.00 3	0.00 0.00 3	N N 3	228.06 47.50 16	52.66 6.65 63	3.30 1.06 108	37.49 4.99 187
27JUN83	DENSITY S.E. NO. TOWS	0.00 0.00 3	N N 3	0.00 0.00 3	0.00 0.00 3	N N 3	19.68 0.64 16	52.10 15.60 62	1.18 0.35 109	15.47 3.83 187
04JUL83	DENSITY S.E. NO. TOWS	0.00 0.00 3	N N 3	0.00 0.00 3	0.00 0.00 3	N N 3	82.73 0.04 16	55.12 7.60 62	2.52 0.73 109	23.30 1.92 187

N -- STRATUM NOT SAMPLED

TABLE B-135
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	ATLANTIC TOMCOD												YOUNG-OF-THE-YEAR		
	YONKERS				TAPPAN ZEE				GROTON-HAVERSTRAW				REGION	REGION	
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION			
08AUG83	DENSITY	0.00	N	0.60	0.53	0.09	0.09	0.94	0.00	0.22	0.00	0.64	0.00	0.14	
	S.E.	0.00	N	0.60	0.53	0.09	0.09	0.64	0.00	0.13	0.00	0.42	0.00	0.09	
	NO. TOWS	7	N	5	12	32	32	7	7	46	16	8	3	27	
22AUG83	DENSITY	6.04	N	0.00	0.70	2.61	2.61	6.99	0.00	2.34	0.00	0.62	0.00	0.14	
	S.E.	2.44	N	0.00	0.28	1.04	1.04	3.34	0.00	0.75	0.00	0.41	0.00	0.09	
	NO. TOWS	7	N	5	12	29	29	9	8	46	16	8	3	27	
05SEP83	DENSITY	5.52	N	0.00	0.64	0.18	0.18	1.56	0.00	0.37	0.00	0.34	0.00	0.08	
	S.E.	2.51	N	0.00	0.29	0.18	0.18	0.93	0.00	0.19	0.00	0.34	0.00	0.08	
	NO. TOWS	7	N	5	12	29	29	8	8	45	16	8	2	26	
19SEP83	DENSITY	3.07	N	0.00	0.36	0.09	0.09	1.73	0.00	0.37	0.00	0.33	0.00	0.07	
	S.E.	1.58	N	0.00	0.18	0.09	0.09	0.90	0.00	0.18	0.00	0.33	0.00	0.07	
	NO. TOWS	6	N	5	11	31	31	8	8	47	15	8	3	26	
03OCT83	DENSITY	1.84	N	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.06	
	S.E.	0.58	N	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.06	
	NO. TOWS	6	N	5	11	31	31	7	8	46	17	8	3	28	
17OCT83	DENSITY	0.72	N	0.42	0.45	0.00	0.00	0.32	0.00	0.06	0.00	0.00	0.00	0.00	
	S.E.	0.72	N	0.42	0.38	0.00	0.00	0.32	0.00	0.06	0.00	0.00	0.00	0.00	
	NO. TOWS	7	N	5	12	30	30	8	8	46	16	7	3	26	

N -- STRATUM NOT SAMPLED

TABLE B-135 (CONTINUED).

ATLANTIC TOMCOD

YOUNG-OF-THE-YEAR

WEEK
BEGINNING
MONDAY

	INDIAN POINT			WEST POINT			CORNWALL					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	1.78	1.58	1.02	1.16	7.18	12.88	12.09	0.55	5.04	0.00	1.36
	S.E.	1.78	1.10	1.02	0.82	2.08	6.44	5.56	0.55	3.44	0.00	0.91
	NO. TOWS	6	5	3	14	4	3	7	5	6	3	14
22AUG83	DENSITY	0.00	0.00	0.00	0.00	11.77	0.00	1.62	0.53	0.00	0.00	0.03
	S.E.	0.00	0.00	0.00	0.00	1.42	0.00	0.20	0.53	0.00	0.00	0.03
	NO. TOWS	7	5	2	14	5	3	8	5	5	3	13
05SEP83	DENSITY	0.00	4.29	1.61	1.94	4.83	0.89	1.43	0.00	0.89	0.00	0.23
	S.E.	0.00	2.58	1.61	1.32	3.24	0.89	0.88	0.00	0.89	0.00	0.23
	NO. TOWS	6	6	3	15	5	3	8	5	5	3	13
19SEP83	DENSITY	0.00	0.00	0.00	0.00	0.99	0.00	0.14	0.00	1.41	0.00	0.37
	S.E.	0.00	0.00	0.00	0.00	0.99	0.00	0.14	0.00	0.95	0.00	0.25
	NO. TOWS	6	5	3	14	5	3	8	6	5	2	13
03OCT83	DENSITY	0.00	3.63	0.00	0.58	2.19	0.00	0.30	3.91	4.82	0.00	1.50
	S.E.	0.00	3.63	0.00	0.58	1.46	0.00	0.20	1.66	1.84	0.00	0.49
	NO. TOWS	6	5	3	14	4	2	6	5	6	4	15
17OCT83	DENSITY	0.00	0.00	0.00	0.00	1.15	0.00	0.16	1.01	10.40	0.00	2.80
	S.E.	0.00	0.00	0.00	0.00	1.15	0.00	0.16	1.01	4.73	0.00	1.25
	NO. TOWS	6	6	3	15	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-135 (CONTINUED).

YOUNG-OF-THE-YEAR

ATLANTIC TOMCOD

WEEK
BEGINNING
MONDAY

	POUGHKEEPSIE			HYDE PARK			KINGSTON			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
	REGION	REGION	REGION	REGION	REGION	REGION	REGION	REGION	REGION	REGION
08AUG83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	3	8	6	4	N	9	6	15
22AUG83	DENSITY	0.55	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.55	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	3	8	6	4	N	9	6	15
05SEP83	DENSITY	0.44	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.44	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	3	8	6	4	N	9	6	15
19SEP83	DENSITY	4.42	0.00	1.03	0.75	0.00	0.15	0.00	0.00	0.00
	S.E.	3.23	0.00	0.75	0.47	0.00	0.10	0.00	0.00	0.00
	NO. TOWS	5	3	8	6	4	N	9	6	15
03OCT83	DENSITY	3.01	0.00	0.70	0.90	0.00	0.19	0.60	0.00	0.20
	S.E.	1.79	0.00	0.41	0.57	0.00	0.12	0.60	0.00	0.20
	NO. TOWS	5	3	8	6	4	N	9	6	15
17OCT83	DENSITY	10.54	0.00	2.44	0.74	0.00	0.15	0.00	0.00	0.00
	S.E.	4.63	0.00	1.07	0.74	0.00	0.15	0.00	0.00	0.00
	NO. TOWS	5	3	8	6	4	N	9	6	15

N -- STRATUM NOT SAMPLED

TABLE B-135 (CONTINUED).

WEEK BEGINNING MONDAY	ATLANTIC TOMCOD				YOUNG-OF-THE-YEAR				
	SAUGERTIES		CATSKILL		SAUGERTIES		CATSKILL		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	
08AUG83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	12	6	18	N	15	6	21
22AUG83	DENSITY	N	0.00	0.00	0.00	N	0.17	0.00	0.08
	S.E.	N	0.00	0.00	0.00	N	0.17	0.00	0.08
	NO. TOWS	N	12	6	18	N	15	6	21
05SEP83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	12	6	18	N	15	6	21
19SEP83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	12	6	18	N	15	6	21
03OCT83	DENSITY	N	0.25	0.00	0.09	N	0.00	0.00	0.00
	S.E.	N	0.25	0.00	0.09	N	0.00	0.00	0.00
	NO. TOWS	N	12	6	18	N	15	6	21
17OCT83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	13	6	19	N	14	6	20

N -- STRATUM NOT SAMPLED

TABLE B-135 (CONTINUED).

WEEK BEGINNING MONDAY	ATLANTIC TOMCOD						YOUNG-OF-THE-YEAR					
	ALBANY			COMBINED			ALBANY			COMBINED		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	0.00	N	0.00	0.17	0.94	1.39	0.17	0.94	1.74	1.39
	S.E.	N	0.00	N	0.00	0.11	0.27	0.52	0.11	0.27	0.79	0.52
	NO. TOWS	N	8	N	8	66	85	200	66	85	49	200
22AUG83	DENSITY	N	0.00	N	0.00	2.17	1.52	0.58	2.17	1.52	0.00	0.58
	S.E.	N	0.00	N	0.00	0.64	0.39	0.11	0.64	0.39	0.00	0.11
	NO. TOWS	N	8	N	8	64	87	200	64	87	49	200
05SEP83	DENSITY	N	0.00	N	0.00	0.76	0.82	0.46	0.76	0.82	0.28	0.46
	S.E.	N	0.00	N	0.00	0.31	0.26	0.15	0.31	0.26	0.21	0.15
	NO. TOWS	N	8	N	8	63	87	199	63	87	49	199
19SEP83	DENSITY	N	0.00	N	0.00	0.41	0.95	0.27	0.41	0.95	0.00	0.27
	S.E.	N	0.00	N	0.00	0.19	0.42	0.11	0.19	0.42	0.00	0.11
	NO. TOWS	N	8	N	8	64	86	199	64	86	49	199
03OCT83	DENSITY	N	0.00	N	0.00	0.36	1.18	0.32	0.36	1.18	0.00	0.32
	S.E.	N	0.00	N	0.00	0.09	0.35	0.09	0.09	0.35	0.00	0.09
	NO. TOWS	N	8	N	8	65	85	200	65	85	50	200
17OCT83	DENSITY	N	0.00	N	0.00	0.12	2.14	0.57	0.12	2.14	0.06	0.57
	S.E.	N	0.00	N	0.00	0.09	0.66	0.17	0.09	0.66	0.06	0.17
	NO. TOWS	N	8	N	8	64	86	200	64	86	50	200

N -- STRATUM NOT SAMPLED

TABLE B-136
 CATCH PER UNIT EFFORT (NUMBER PER HAUL) BY WEEK AND REGION,
 BEACH SEINE SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	YK	TZ	CH	IP	WP	REGIONS				HP	KG	SG	CS	AL	COMBINED
						CW	PK	SG	CS						
01AUG83	CPU	0.08	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09
	S.E. NO. HAULS	0.08 24	0.31 14	0.00 5	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7	0.00 100	0.05
15AUG83	CPU	0.13	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06
	S.E. NO. HAULS	0.07 24	0.10 14	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7	0.00 100	0.02	
29AUG83	CPU	0.17	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10
	S.E. NO. HAULS	0.08 24	0.36 14	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7	0.00 100	0.06	
12SEP83	CPU	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
	S.E. NO. HAULS	0.10 24	0.00 14	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7	0.00 100	0.03	
26SEP83	CPU	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
	S.E. NO. HAULS	0.25 24	0.00 14	0.00 5	0.00 5	0.00 7	0.00 5	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7	0.00 101	0.07	
10OCT83	CPU	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
	S.E. NO. HAULS	0.09 24	0.00 14	0.00 7	0.00 5	0.00 6	0.00 5	0.00 4	0.00 4	0.00 6	0.00 9	0.00 7	0.00 102	0.02	

TABLE B-137
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	ALEWIFE/BLUEBACK HERRING EGGS											
	YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	3	6	3	4	10	6	3	6	15
09MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	4	3	10	6	3	6	15
16MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	4	3	10	6	3	6	15
23MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	4	4	11	5	4	13	
30MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	4	10	5	5	13	
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.76	0.33	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.76	0.33	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	4	4	11	4	4	12	
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	9	3	5	14	4	6	16	
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	9	3	5	14	4	6	15	
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	9	3	4	13	4	6	16	
04JUL83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	9	3	5	14	4	6	16	

N -- STRATUM NOT SAMPLED

TABLE B-137 (CONTINUED).

WEEK BEGINNING MONDAY	ALEWIFE/BLUEBACK HERRING										EGGS		
	INDIAN POINT					WEST POINT					CORNWALL		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	
02MAY83	DENSITY	0.00	0.53	0.14	0.20	N	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	0.53	0.14	0.14	N	0.00	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	4	7	25	36	N	4	30	5	12	6	23	
09MAY83	DENSITY	0.00	0.00	0.00	0.00	N	0.00	0.10	0.00	0.24	0.00	0.06	
	S.E.	0.00	0.00	0.00	0.00	N	0.00	0.10	0.00	0.24	0.00	0.06	
	NO. TOWS	4	8	24	36	N	4	30	5	13	5	23	
16MAY83	DENSITY	0.00	0.00	2.86	2.23	N	0.00	0.09	0.62	7.79	0.54	2.45	
	S.E.	0.00	0.00	2.73	2.13	N	0.00	0.09	0.62	2.19	0.54	0.68	
	NO. TOWS	4	7	25	36	N	7	30	5	10	5	20	
23MAY83	DENSITY	0.00	0.00	0.00	0.00	N	0.00	0.73	0.63	11.42	0.00	3.04	
	S.E.	0.00	0.00	0.00	0.00	N	0.00	0.73	0.63	6.44	0.00	1.70	
	NO. TOWS	3	6	13	22	N	7	23	5	9	6	20	
30MAY83	DENSITY	0.00	0.00	0.00	0.00	N	13.95	0.13	0.00	1.43	3.28	2.60	
	S.E.	0.00	0.00	0.00	0.00	N	13.20	0.13	0.00	0.95	2.63	1.80	
	NO. TOWS	3	6	15	24	N	6	23	5	9	6	20	
06JUN83	DENSITY	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	1.75	0.00	0.46	
	S.E.	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	1.41	0.00	0.37	
	NO. TOWS	4	6	14	24	N	7	23	5	9	5	19	
13JUN83	DENSITY	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	1.83	0.20	0.62	
	S.E.	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	1.06	0.20	0.31	
	NO. TOWS	5	5	16	26	N	8	25	3	12	13	28	
20JUN83	DENSITY	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	5	5	17	27	N	8	25	3	12	13	28	
27JUN83	DENSITY	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	5	6	16	27	N	8	25	3	12	13	28	
04JUL83	DENSITY	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	5	5	16	26	N	8	25	3	12	13	28	

N -- STRATUM NOT SAMPLED

TABLE B-137 (CONTINUED).

ALEWIFE/BUEBACK HERRING EGGS

WEEK BEGINNING MONDAY	POUGHKEEPSIE			HYDE PARK			KINGSTON					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	25.53	0.00	5.93	N	89.99	2.80	20.87	N	33.83	13.88	20.62
	S.E.	25.53	0.00	5.93	N	57.21	2.17	11.98	N	28.35	7.75	10.86
	NO. TOWS	9	10	19	N	10	11	21	N	6	7	13
09MAY83	DENSITY	206.16	2.26	49.57	N	1075.10	6.33	227.83	N	1902.88	3.57	645.18
	S.E.	78.54	1.85	18.28	N	881.19	3.60	182.65	N	1498.30	3.57	506.14
	NO. TOWS	10	10	20	N	10	10	20	N	6	7	13
16MAY83	DENSITY	834.35	9.70	201.07	N	2112.34	28.51	460.38	N	9116.38	67.13	3124.05
	S.E.	430.31	8.83	100.09	N	1438.99	19.91	298.65	N	4235.44	60.07	1431.32
	NO. TOWS	10	10	20	N	8	11	19	N	6	7	13
23MAY83	DENSITY	725.38	37.01	196.75	N	619.77	65.02	179.99	N	101590	687.16	34773.13
	S.E.	285.66	19.44	67.95	N	174.15	42.49	49.37	N	101157	668.36	34174.55
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10
30MAY83	DENSITY	34.31	0.00	7.96	N	36.76	45.84	43.96	N	60.61	3.52	22.81
	S.E.	21.98	0.00	5.10	N	20.18	43.11	34.43	N	48.28	2.50	16.39
	NO. TOWS	16	22	38	N	7	12	19	N	5	5	10
06JUN83	DENSITY	2.61	0.00	0.61	N	21.23	1.23	5.37	N	2169.97	0.00	733.04
	S.E.	1.72	0.00	0.40	N	10.46	0.75	2.25	N	2139.81	0.00	722.85
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10
13JUN83	DENSITY	1.00	0.18	0.37	N	0.00	0.00	0.00	N	9.86	14.48	12.92
	S.E.	1.00	0.18	0.27	N	0.00	0.00	0.00	N	6.44	14.48	9.83
	NO. TOWS	7	15	22	N	5	9	14	N	5	5	10
20JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	8	14	22	N	5	9	14	N	5	6	11
27JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10
04JUL83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10

N -- STRATUM NOT SAMPLED

TABLE B-137 (CONTINUED).

WEEK BEGINNING MONDAY	ALEWIFE/BLUEBACK HERRING						EGGS					
	SAUGERTIES			CATSKILL			SAUGERTIES			CATSKILL		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	93.50	3.38	35.65	N	2.25	0.86	1.52			
	S.E.	N	54.81	3.38	19.75	N	1.17	0.86	0.72			
	NO. TOWS	N	3	3	6	N	3	3	6			
09MAY83	DENSITY	N	30002.45	33.41	10765.79	N	105991	567.91	50950.74			
	S.E.	N	29998.05	30.17	10742.79	N	63970.03	442.06	30572.73			
	NO. TOWS	N	3	3	6	N	3	3	6			
16MAY83	DENSITY	N	1015.67	61.18	403.00	N	6518.81	51.58	3142.33			
	S.E.	N	511.72	25.88	184.01	N	3472.47	14.61	1659.54			
	NO. TOWS	N	4	3	7	N	3	3	6			
23MAY83	DENSITY	N	10594.75	2.28	3795.61	N	9120.58	569.56	4656.17			
	S.E.	N	2940.93	2.28	1053.19	N	7461.81	313.51	3569.82			
	NO. TOWS	N	5	3	8	N	3	3	6			
30MAY83	DENSITY	N	159.53	1.08	57.82	N	1462.64	284.38	847.48			
	S.E.	N	67.06	1.08	24.03	N	651.85	22.65	311.75			
	NO. TOWS	N	5	3	8	N	3	3	6			
06JUN83	DENSITY	N	700.00	8.94	256.42	N	5092.10	42.11	2455.55			
	S.E.	N	408.25	3.42	146.22	N	2566.94	20.74	1226.81			
	NO. TOWS	N	5	3	8	N	3	3	6			
13JUN83	DENSITY	N	0.00	0.00	0.00	N	1045.69	32.98	516.97			
	S.E.	N	0.00	0.00	0.00	N	829.27	23.06	396.50			
	NO. TOWS	N	4	2	6	N	3	3	6			
20JUN83	DENSITY	N	0.00	0.00	0.00	N	28.93	0.00	13.82			
	S.E.	N	0.00	0.00	0.00	N	5.40	0.00	2.58			
	NO. TOWS	N	3	2	5	N	3	3	6			
27JUN83	DENSITY	N	0.00	0.00	0.00	N	1.01	0.00	0.48			
	S.E.	N	0.00	0.00	0.00	N	1.01	0.00	0.48			
	NO. TOWS	N	4	2	6	N	3	3	6			
04JUL83	DENSITY	N	0.00	0.00	0.00	N	1.16	0.00	0.55			
	S.E.	N	0.00	0.00	0.00	N	1.16	0.00	0.55			
	NO. TOWS	N	4	2	6	N	3	3	6			

N -- STRATUM NOT SAMPLED

TABLE B-137 (CONTINUED).

WEEK BEGINNING MONDAY	ALEWIFE/BUEBACK HERRING			EGGS				
	ALBANY			COMBINED				
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	1862.69	N	1862.69	0.00	260.93	1.44	64.89
	S.E.	368.89	N	368.89	0.00	47.91	0.59	11.75
	NO. TOWS	5	N	5	21	66	107	194
09MAY83	DENSITY	202.52	N	202.52	0.00	18336.87	35.68	4517.28
	S.E.	170.63	N	170.63	0.00	9475.48	25.02	2322.23
	NO. TOWS	5	N	5	21	69	104	194
16MAY83	DENSITY	403916	N	403916	0.02	53714.99	16.14	13174.62
	S.E.	133274	N	133274	0.02	17063.01	4.88	4181.66
	NO. TOWS	5	N	5	21	67	106	194
23MAY83	DENSITY	5219.26	N	5219.26	0.02	11999.22	87.02	2997.81
	S.E.	3752.65	N	3752.65	0.02	8781.74	45.87	2152.37
	NO. TOWS	3	N	3	19	68	99	186
30MAY83	DENSITY	12012.09	N	12012.09	0.00	1769.73	20.59	447.23
	S.E.	4777.39	N	4777.39	0.00	617.92	4.01	151.46
	NO. TOWS	3	N	3	19	68	99	186
06JUN83	DENSITY	725.57	N	725.57	0.00	1064.48	3.23	262.99
	S.E.	350.91	N	350.91	0.00	404.85	1.20	99.22
	NO. TOWS	3	N	3	19	68	99	186
13JUN83	DENSITY	2547.86	N	2547.86	0.00	471.60	2.81	117.42
	S.E.	2058.39	N	2058.39	0.00	287.22	1.59	70.40
	NO. TOWS	3	N	3	16	63	108	187
20JUN83	DENSITY	355.86	N	355.86	0.00	49.53	0.00	12.14
	S.E.	313.51	N	313.51	0.00	40.12	0.00	9.83
	NO. TOWS	3	N	3	16	63	108	187
27JUN83	DENSITY	0.00	N	0.00	0.00	0.14	0.00	0.03
	S.E.	0.00	N	0.00	0.00	0.14	0.00	0.03
	NO. TOWS	3	N	3	16	62	109	187
04JUL83	DENSITY	0.00	N	0.00	0.00	0.16	0.00	0.04
	S.E.	0.00	N	0.00	0.00	0.16	0.00	0.04
	NO. TOWS	3	N	3	16	62	109	187

N -- STRATUM NOT SAMPLED

TABLE B-138
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	ALEWIFE/BLUEBACK HERRING												YOLK-SAC LARVAE			
	YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW							
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	1.40	0.00	0.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	1.40	0.00	0.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	3	10	6	3	6	6	6	3	6	15
09MAY83	DENSITY	1.40	1.52	1.51	0.00	0.00	1.08	0.46	18.26	0.00	1.08	0.46	2.80	1.10	2.80	8.07
	S.E.	1.40	1.52	1.35	0.00	0.00	1.08	0.46	3.92	0.00	1.08	0.46	1.10	1.10	1.66	1.61
	NO. TOWS	3	3	6	3	4	3	10	6	6	3	10	3	3	6	15
16MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	1.21	0.52	2.19	0.00	1.21	0.52	1.31	1.31	1.39	1.67
	S.E.	0.00	0.00	0.00	0.00	0.00	1.21	0.52	1.38	0.00	1.21	0.52	1.31	1.31	1.39	0.82
	NO. TOWS	3	3	6	3	4	3	10	6	6	3	10	3	3	6	15
23MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00	0.00	0.00	0.00	0.48
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.00	0.00	0.00	0.00	0.00	0.00	0.30
	NO. TOWS	3	3	6	3	4	4	11	5	4	4	11	4	4	4	13
30MAY83	DENSITY	0.00	0.00	0.00	1.02	0.00	0.00	0.39	1.39	0.00	0.00	0.39	2.21	2.21	1.19	1.49
	S.E.	0.00	0.00	0.00	1.02	0.00	0.00	0.39	0.85	0.00	0.00	0.39	0.90	0.90	1.19	0.62
	NO. TOWS	3	3	6	3	3	4	10	5	3	4	10	5	5	3	13
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.52	0.63
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.36
	NO. TOWS	3	3	6	3	4	4	11	4	4	4	11	4	4	4	12
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.21
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.21
	NO. TOWS	1	8	9	3	5	6	14	4	6	6	14	4	6	6	16
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	5	6	14	4	6	6	14	4	6	5	15
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	4	6	13	4	6	6	13	4	6	6	16
04JUL83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	5	6	14	4	6	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-138 (CONTINUED).

ALEWIFE/BLEUBACK HERRING YOLK-SAC LARVAE

WEEK BEGINNING MONDAY	INDIAN POINT			WEST POINT			CORNWALL					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.63	0.69	0.64	3.18	6.62	6.15	96.52	69.73	68.21	70.25
	S.E. NO. TOWS	0.00 4	0.63 7	0.42 25	0.34 36	2.20 4	2.13 30	1.86 34	39.06 5	18.36 12	28.91 6	20.34 23
09MAY83	DENSITY	73.81	5.63	33.69	31.61	11.58	32.99	30.04	20.37	41.83	25.20	29.30
	S.E. NO. TOWS	18.39 4	2.29 8	5.84 24	4.70 36	7.76 4	5.34 30	4.73 34	7.68 5	10.13 13	6.61 5	5.24 23
16MAY83	DENSITY	6.68	1.21	2.55	2.59	3.04	9.74	8.81	14.14	12.21	4.27	6.93
	S.E. NO. TOWS	2.32 4	0.78 7	0.90 25	0.72 36	0.97 7	1.56 30	1.35 37	6.23 5	2.81 10	1.82 5	1.49 20
23MAY83	DENSITY	0.00	2.02	0.49	0.71	0.61	9.08	7.91	25.06	81.11	9.89	29.52
	S.E. NO. TOWS	0.00 3	2.02 6	0.33 13	0.42 22	0.61 7	2.51 23	2.17 30	10.74 5	27.53 9	3.85 6	7.73 20
30MAY83	DENSITY	3.15	3.42	10.62	9.01	6.00	9.12	8.69	10.25	81.54	19.27	35.14
	S.E. NO. TOWS	1.70 3	1.55 6	2.45 15	1.93 24	4.63 6	3.17 23	2.80 29	3.88 5	27.79 9	7.25 6	8.82 20
06JUN83	DENSITY	0.80	1.83	8.99	7.35	4.42	9.97	9.20	16.45	5.06	16.84	13.71
	S.E. NO. TOWS	0.80 4	1.22 6	2.39 14	1.87 24	2.85 7	2.51 23	2.20 30	5.19 5	2.57 9	6.87 5	4.72 19
13JUN83	DENSITY	0.00	0.71	0.20	0.27	0.00	0.35	0.30	0.00	0.27	0.00	0.07
	S.E. NO. TOWS	0.00 5	0.71 5	0.20 16	0.19 26	0.00 8	0.26 25	0.22 33	0.00 3	0.27 12	0.00 13	0.07 28
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.00	0.20
	S.E. NO. TOWS	0.00 5	0.00 5	0.00 17	0.00 27	0.00 8	0.00 25	0.00 33	0.00 3	0.57 12	0.00 13	0.15 28
27JUN83	DENSITY	0.65	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.65 5	0.00 6	0.00 16	0.04 27	0.00 8	0.00 25	0.00 33	0.00 3	0.00 12	0.00 13	0.00 28
04JUL83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 5	0.00 5	0.00 16	0.00 26	0.00 8	0.00 25	0.00 33	0.00 3	0.00 12	0.00 13	0.00 28

N -- STRATUM NOT SAMPLED

TABLE B-138 (CONTINUED).

ALEMIFE/BLUEBACK HERRING YOLK-SAC LARVAE

WEEK BEGINNING MONDAY	POUGHKEEPSIE			HYDE PARK			KINGSTON					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	26.78	26.02	26.20	N	50.88	23.26	28.99	N	5.52	13.18	10.59
	S.E.	6.54	7.33	5.83	N	11.08	8.84	7.37	N	2.56	8.63	5.78
	NO. TOWS	N	9	19	N	10	11	21	N	6	7	13
09MAY83	DENSITY	73.62	51.74	56.82	N	90.24	57.81	64.53	N	195.95	62.80	107.78
	S.E.	18.01	15.76	12.80	N	30.82	22.56	18.99	N	60.60	23.75	25.81
	NO. TOWS	N	10	20	N	10	10	20	N	6	7	13
16MAY83	DENSITY	40.30	68.17	61.70	N	226.11	69.72	102.13	N	157.74	243.09	214.26
	S.E.	11.52	28.53	22.07	N	63.87	21.11	21.34	N	90.40	163.67	112.60
	NO. TOWS	N	10	20	N	8	11	19	N	6	7	13
23MAY83	DENSITY	374.44	113.97	174.41	N	613.59	189.30	277.23	N	928.01	651.27	744.75
	S.E.	150.95	36.34	44.79	N	284.77	61.09	76.35	N	574.08	230.65	246.86
	NO. TOWS	N	16	38	N	7	12	19	N	4	6	10
30MAY83	DENSITY	114.43	16.17	38.97	N	282.88	91.01	130.78	N	1051.08	79.39	407.64
	S.E.	29.89	3.63	7.48	N	145.37	23.72	35.51	N	363.36	37.28	125.20
	NO. TOWS	N	16	38	N	7	12	19	N	5	5	10
06JUN83	DENSITY	34.89	30.74	31.71	N	124.54	73.24	83.87	N	764.33	22.79	273.29
	S.E.	10.97	7.62	6.38	N	68.72	33.70	30.27	N	601.76	10.54	203.40
	NO. TOWS	N	16	38	N	7	12	19	N	4	6	10
13JUN83	DENSITY	2.45	0.21	0.73	N	2.08	13.80	11.37	N	33.77	43.53	40.23
	S.E.	1.67	0.21	0.42	N	1.43	4.62	3.68	N	12.95	4.69	5.37
	NO. TOWS	N	7	22	N	5	9	14	N	5	5	10
20JUN83	DENSITY	0.35	0.42	0.40	N	0.00	0.00	0.00	N	0.00	0.57	0.38
	S.E.	0.35	0.42	0.33	N	0.00	0.00	0.00	N	0.00	0.57	0.38
	NO. TOWS	N	8	22	N	5	9	14	N	5	6	11
27JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.30	0.23	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.30	0.23	N	0.00	0.00	0.00
	NO. TOWS	N	7	22	N	5	9	14	N	4	6	10
04JUL83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	7	22	N	5	9	14	N	4	6	10

N -- STRATUM NOT SAMPLED

TABLE B-138 (CONTINUED).

WEEK BEGINNING MONDAY	ALEWIFE/BUEBACK HERRING						YOLK-SAC LARVAE					
	SAUCERTIES			CATSKILL			SAUCERTIES			CATSKILL		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	10.38	0.00	N	3.72	0.00	N	0.00	0.00	0.00	0.00
	S.E.	N	10.38	0.00	N	3.72	0.00	N	0.00	0.00	0.00	0.00
	NO. TOWS	N	3	3	6	N	3	3	3	3	3	6
09MAY83	DENSITY	N	171.78	64.88	N	103.16	62.39	N	107.85	62.39	84.12	84.12
	S.E.	N	75.38	17.46	N	29.23	37.35	N	92.16	37.35	48.17	48.17
	NO. TOWS	N	3	3	6	N	3	3	3	3	3	6
16MAY83	DENSITY	N	666.39	241.03	N	393.35	61.00	N	918.98	61.00	471.04	471.04
	S.E.	N	302.20	87.23	N	121.85	34.85	N	360.80	34.85	173.39	173.39
	NO. TOWS	N	4	3	7	N	3	3	3	3	3	6
23MAY83	DENSITY	N	476.49	186.14	N	290.12	2831.28	N	5290.42	2831.28	4006.52	4006.52
	S.E.	N	103.95	141.65	N	98.25	934.40	N	1534.10	934.40	880.63	880.63
	NO. TOWS	N	5	3	8	N	3	3	3	3	3	6
30MAY83	DENSITY	N	1553.37	23.30	N	571.24	2459.35	N	4221.71	2459.35	3301.60	3301.60
	S.E.	N	773.64	14.31	N	277.20	248.37	N	488.71	248.37	267.14	267.14
	NO. TOWS	N	5	3	8	N	3	3	3	3	3	6
06JUN83	DENSITY	N	386.81	149.94	N	234.76	219.24	N	770.30	219.24	482.60	482.60
	S.E.	N	196.48	52.42	N	77.99	73.09	N	606.82	73.09	292.50	292.50
	NO. TOWS	N	5	3	8	N	3	3	3	3	3	6
13JUN83	DENSITY	N	16.36	20.17	N	18.80	116.25	N	219.49	116.25	165.59	165.59
	S.E.	N	7.75	20.17	N	13.24	53.88	N	68.85	53.88	43.29	43.29
	NO. TOWS	N	4	2	6	N	3	3	3	3	3	6
20JUN83	DENSITY	N	1.01	0.00	N	0.36	5.51	N	6.42	5.51	5.94	5.94
	S.E.	N	1.01	0.00	N	0.36	3.90	N	3.66	3.90	2.68	2.68
	NO. TOWS	N	3	2	5	N	3	3	3	3	3	6
27JUN83	DENSITY	N	0.00	0.00	N	0.00	1.23	N	0.00	1.23	0.64	0.64
	S.E.	N	0.00	0.00	N	0.00	1.23	N	0.00	1.23	0.64	0.64
	NO. TOWS	N	4	2	6	N	3	3	3	3	3	6
04JUL83	DENSITY	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00	0.00
	NO. TOWS	N	4	2	6	N	3	3	3	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-138 (CONTINUED).

WEEK BEGINNING MONDAY	ALEWIFE/BLUEBACK HERRING			YOLK-SAC LARVAE					
	ALBANY			COMBINED					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	
02MAY83	DENSITY	N	0.00	N	0.00	4.27	12.95	12.10	11.54
	S.E.	N	0.00	N	0.00	1.61	2.02	2.37	1.64
	NO. TOWS	N	5	N	5	21	66	107	194
09MAY83	DENSITY	N	93.47	N	93.47	9.49	81.73	35.11	44.02
	S.E.	N	46.76	N	46.76	1.44	17.54	4.39	5.18
	NO. TOWS	N	5	N	5	21	69	104	194
16MAY83	DENSITY	N	63.47	N	63.47	1.42	244.45	55.56	96.53
	S.E.	N	19.08	N	19.08	0.42	61.22	13.29	17.36
	NO. TOWS	N	5	N	5	21	67	106	194
23MAY83	DENSITY	N	11768.75	N	11768.75	1.23	2460.89	250.65	767.80
	S.E.	N	5033.84	N	5033.84	0.44	680.45	56.21	170.79
	NO. TOWS	N	3	N	3	19	68	99	186
30MAY83	DENSITY	N	1244.74	N	1244.74	1.44	1047.27	159.39	361.46
	S.E.	N	553.83	N	553.83	0.62	135.55	14.41	34.54
	NO. TOWS	N	3	N	3	19	68	99	186
06JUN83	DENSITY	N	2629.77	N	2629.77	0.64	565.30	39.67	164.65
	S.E.	N	916.67	N	916.67	0.19	154.87	6.62	38.20
	NO. TOWS	N	3	N	3	19	68	99	186
13JUN83	DENSITY	N	1063.85	N	1063.85	0.00	171.71	12.15	50.06
	S.E.	N	570.89	N	570.89	0.00	73.67	3.44	18.20
	NO. TOWS	N	3	N	3	16	63	108	187
20JUN83	DENSITY	N	95.43	N	95.43	0.00	13.31	0.41	3.53
	S.E.	N	70.32	N	70.32	0.00	9.01	0.23	2.21
	NO. TOWS	N	3	N	3	16	63	108	187
27JUN83	DENSITY	N	0.00	N	0.00	0.04	0.00	0.10	0.07
	S.E.	N	0.00	N	0.00	0.04	0.00	0.07	0.05
	NO. TOWS	N	3	N	3	16	62	109	187
04JUL83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	3	N	3	16	62	109	187

N -- STRATUM NOT SAMPLED

TABLE B-139
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	ALEWIFE/BLUEBACK HERRING										POST YOLK-SAC LARVAE									
	YONKERS					TAPPAN ZEE					CROTON-HAVERSTRAW					CROTON-HAVERSTRAW				
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	3	6	3	4	3	10	3	3	10	6	3	6	15	6	3	6	15
09MAY83	DENSITY	7.35	1.29	2.00	0.41	5.61	5.66	4.55	126.39	4.56	5.66	4.55	126.39	4.56	13.55	52.75	4.56	13.55	52.75	52.75
	S.E.	7.35	1.29	1.43	0.23	1.33	3.06	1.40	29.87	2.89	3.06	1.40	29.87	2.89	5.49	11.15	2.89	5.49	11.15	11.15
	NO. TOWS	3	3	6	6	3	4	10	6	6	3	10	6	3	6	15	6	3	6	15
16MAY83	DENSITY	3.57	0.00	0.00	0.41	7.13	19.75	11.36	106.81	56.36	19.75	11.36	106.81	56.36	72.62	81.52	56.36	72.62	81.52	81.52
	S.E.	2.00	0.00	0.00	0.23	3.57	12.77	5.64	33.77	54.17	12.77	5.64	33.77	54.17	14.75	18.21	54.17	14.75	18.21	18.21
	NO. TOWS	3	3	3	6	3	4	10	6	3	3	10	6	3	6	15	6	3	6	15
23MAY83	DENSITY	0.00	1.13	1.00	1.00	19.10	6.05	10.74	22.52	13.88	6.05	10.74	22.52	13.88	41.88	28.65	13.88	41.88	28.65	28.65
	S.E.	0.00	1.13	1.00	1.00	4.67	2.09	2.06	9.07	6.13	2.09	2.06	9.07	6.13	37.35	15.91	6.13	37.35	15.91	15.91
	NO. TOWS	3	3	6	6	3	4	11	5	4	4	11	5	4	4	13	4	4	4	13
30MAY83	DENSITY	21.60	20.68	20.79	20.79	206.01	73.68	111.67	71.19	46.02	73.68	111.67	71.19	46.02	237.44	134.65	46.02	237.44	134.65	134.65
	S.E.	11.69	18.91	16.77	16.77	204.05	71.70	83.08	25.48	19.84	71.70	83.08	25.48	19.84	13.65	11.73	19.84	13.65	11.73	11.73
	NO. TOWS	3	3	6	6	3	4	10	5	3	4	10	5	3	3	13	3	3	3	13
06JUN83	DENSITY	35.49	128.47	117.68	117.68	21.88	217.88	104.25	534.16	10.14	217.88	104.25	534.16	10.14	124.51	248.84	10.14	124.51	248.84	248.84
	S.E.	24.19	78.37	69.34	69.34	7.11	87.88	37.82	216.77	3.63	87.88	37.82	216.77	3.63	52.95	82.10	3.63	52.95	82.10	82.10
	NO. TOWS	3	3	6	6	3	4	11	4	4	4	11	4	4	4	12	4	4	4	12
13JUN83	DENSITY	0.00	0.00	0.00	0.00	22.35	22.00	18.07	789.75	185.82	22.00	18.07	789.75	185.82	4796.36	2319.73	185.82	4796.36	2319.73	2319.73
	S.E.	0.00	0.00	0.00	0.00	18.91	13.42	9.18	475.46	127.34	13.42	9.18	475.46	127.34	1825.63	777.81	127.34	1825.63	777.81	777.81
	NO. TOWS	1	8	9	9	3	6	14	4	6	6	14	4	6	6	16	6	6	6	16
20JUN83	DENSITY	0.00	0.40	0.36	0.36	3.92	19.82	12.74	1504.06	112.81	19.82	12.74	1504.06	112.81	162.58	641.17	112.81	162.58	641.17	641.17
	S.E.	0.00	0.40	0.36	0.36	3.92	17.93	7.94	623.38	73.50	17.93	7.94	623.38	73.50	54.87	229.20	73.50	54.87	229.20	229.20
	NO. TOWS	1	8	9	9	3	6	14	4	6	6	14	4	6	5	15	6	6	5	15
27JUN83	DENSITY	0.00	0.00	0.00	0.00	1.05	0.00	0.40	0.84	44.01	0.00	0.40	0.84	44.01	0.00	9.99	44.01	0.00	9.99	9.99
	S.E.	0.00	0.00	0.00	0.00	1.05	0.00	0.40	0.84	44.01	0.00	0.40	0.84	44.01	0.00	9.69	44.01	0.00	9.69	9.69
	NO. TOWS	1	8	9	9	3	6	13	4	6	6	13	4	6	6	16	6	6	6	16
04JUL83	DENSITY	3.48	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	9	3	5	14	4	6	6	14	4	6	6	16	6	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-139 (CONTINUED).

WEEK BEGINNING MONDAY	ALEWIFE/BUEBACK HERRING				POST YOLK-SAC LARVAE				CORNWALL							
	INDIAN POINT		WEST POINT		REGION		SHOAL		REGION		SHOAL		REGION			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.10	0.08	9.67	11.34	17.07	15.13				
	S.E.	0.00	0.00	0.00	0.00	0.00	0.10	0.08	3.98	2.48	10.80	7.36				
	NO. TOWS	4	7	25	36	4	30	34	5	12	6	23				
09MAY83	DENSITY	34.09	14.95	29.85	27.72	40.56	178.10	159.13	69.32	77.74	27.19	42.94				
	S.E.	13.19	10.40	7.80	6.35	20.69	35.53	30.76	32.94	19.82	5.90	6.85				
	NO. TOWS	4	8	24	36	4	30	34	5	13	5	23				
16MAY83	DENSITY	90.31	89.86	169.60	152.02	98.31	115.89	113.46	1621.07	141.52	61.12	172.67				
	S.E.	7.41	57.61	36.92	30.21	37.51	19.21	17.35	853.35	67.31	16.83	53.75				
	NO. TOWS	4	7	25	36	7	30	37	5	10	5	20				
23MAY83	DENSITY	112.22	52.91	151.26	133.13	11.06	40.68	36.59	498.91	64.97	171.83	162.65				
	S.E.	55.45	33.96	77.57	60.78	2.77	16.04	13.83	290.47	14.72	93.83	66.00				
	NO. TOWS	3	6	13	22	7	23	30	5	9	6	20				
30MAY83	DENSITY	129.50	251.54	1026.38	847.89	1425.96	1689.82	1653.44	6019.99	432.88	2453.80	2128.46				
	S.E.	66.57	168.94	486.20	379.82	533.18	883.38	765.11	1439.25	122.85	1121.47	766.52				
	NO. TOWS	3	6	15	24	6	23	29	5	9	6	20				
06JUN83	DENSITY	1211.17	1170.00	3568.71	3041.48	165.83	5885.97	5097.17	13693.45	1117.31	2264.66	2624.82				
	S.E.	700.59	352.22	2085.47	1626.46	56.47	2335.51	2013.47	10995.86	721.06	777.35	848.75				
	NO. TOWS	4	6	14	24	7	23	30	5	9	5	19				
13JUN83	DENSITY	4356.65	1745.16	1276.64	1538.07	407.24	1128.04	1028.64	7523.68	334.94	3175.69	2679.83				
	S.E.	2280.55	698.05	380.60	345.69	227.35	301.50	261.80	4573.81	65.34	890.17	660.05				
	NO. TOWS	5	5	16	26	8	25	33	3	12	13	28				
20JUN83	DENSITY	1123.24	420.48	653.19	644.31	579.06	741.43	719.04	1937.06	788.17	1002.33	1000.11				
	S.E.	306.61	23.31	117.06	93.15	62.26	84.23	73.12	990.50	231.18	236.21	180.85				
	NO. TOWS	5	5	17	27	8	25	33	3	12	13	28				
27JUN83	DENSITY	76.88	42.52	47.36	48.37	310.58	731.02	673.05	1292.91	169.89	484.01	448.19				
	S.E.	45.12	30.18	14.49	12.58	64.59	181.02	156.31	206.53	33.80	85.32	59.81				
	NO. TOWS	5	6	16	27	8	25	33	3	12	13	28				
04JUL83	DENSITY	0.00	0.00	0.66	0.52	8.23	5.65	6.00	1074.31	658.62	35.02	259.39				
	S.E.	0.00	0.00	0.45	0.35	3.18	2.47	2.17	829.68	284.86	9.94	89.33				
	NO. TOWS	5	5	16	26	8	25	33	3	12	13	28				

N -- STRATUM NOT SAMPLED

TABLE B-139 (CONTINUED).

WEEK BEGINNING MONDAY	ALEMIFE/BLUEBACK HERRING										POST YOLK-SAC LARVAE									
	POUGHKEEPSIE					HYDE PARK					KINGSTON									
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION				
02MAY83	DENSITY	1.13	2.44	2.14	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00				
	S.E.	0.84	0.91	0.73	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00				
	NO. TOWS	9	10	19	N	10	11	21	N	6	7	13	N	6	7	13				
09MAY83	DENSITY	26.97	18.30	20.32	N	25.43	55.91	49.59	N	12.15	7.76	9.24	N	12.15	7.76	9.24				
	S.E.	6.94	5.40	4.45	N	8.46	30.83	24.51	N	5.31	2.04	2.25	N	5.31	2.04	2.25				
	NO. TOWS	10	10	20	N	10	10	20	N	6	7	13	N	6	7	13				
16MAY83	DENSITY	140.00	774.25	627.07	N	177.67	69.03	91.55	N	77.32	76.07	76.50	N	77.32	76.07	76.50				
	S.E.	44.76	296.46	227.90	N	59.42	21.15	20.80	N	28.06	25.37	19.29	N	28.06	25.37	19.29				
	NO. TOWS	10	10	20	N	8	11	19	N	6	7	13	N	6	7	13				
23MAY83	DENSITY	370.49	437.52	421.97	N	165.35	382.13	337.21	N	96.08	752.92	531.04	N	96.08	752.92	531.04				
	S.E.	130.00	112.59	91.57	N	67.05	97.95	78.88	N	39.93	196.80	131.02	N	39.93	196.80	131.02				
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10	N	4	6	10				
30MAY83	DENSITY	1584.28	6408.90	5289.31	N	9142.01	23088.46	20198.05	N	10909.05	26215.05	21044.54	N	10909.05	26215.05	21044.54				
	S.E.	626.83	2313.25	1782.39	N	2285.17	7824.17	6220.66	N	1974.17	5364.28	3614.24	N	1974.17	5364.28	3614.24				
	NO. TOWS	16	22	38	N	7	12	19	N	5	5	10	N	5	5	10				
06JUN83	DENSITY	1499.54	4048.67	3457.12	N	1625.36	3269.96	2929.12	N	402.22	3060.58	2162.57	N	402.22	3060.58	2162.57				
	S.E.	962.58	1468.31	1149.49	N	579.32	1390.82	1109.09	N	148.29	961.64	638.75	N	148.29	961.64	638.75				
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10	N	4	6	10				
13JUN83	DENSITY	757.90	4568.73	3684.39	N	517.41	4952.50	4033.33	N	2468.96	11145.78	8214.67	N	2468.96	11145.78	8214.67				
	S.E.	436.38	1135.42	877.80	N	276.72	1548.33	1228.78	N	615.28	5451.36	3615.82	N	615.28	5451.36	3615.82				
	NO. TOWS	7	15	22	N	5	9	14	N	5	5	10	N	5	5	10				
20JUN83	DENSITY	615.99	592.34	597.83	N	717.91	1548.90	1376.68	N	3421.45	1671.49	2262.64	N	3421.45	1671.49	2262.64				
	S.E.	150.76	84.60	73.79	N	101.99	294.56	234.47	N	1399.42	639.66	634.74	N	1399.42	639.66	634.74				
	NO. TOWS	8	14	22	N	5	9	14	N	5	6	11	N	5	6	11				
27JUN83	DENSITY	282.73	695.69	599.86	N	1241.56	574.29	712.58	N	1047.40	2158.72	1783.30	N	1047.40	2158.72	1783.30				
	S.E.	42.90	116.95	90.36	N	458.15	117.58	133.06	N	383.82	649.98	449.52	N	383.82	649.98	449.52				
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10	N	4	6	10				
04JUL83	DENSITY	76.13	275.84	229.50	N	424.17	384.96	393.08	N	285.45	1898.73	1353.75	N	285.45	1898.73	1353.75				
	S.E.	32.74	42.56	33.55	N	226.96	161.61	136.48	N	94.40	1289.48	854.48	N	94.40	1289.48	854.48				
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10	N	4	6	10				

N -- STRATUM NOT SAMPLED

TABLE B-139 (CONTINUED).

ALEWIFE/BLUEBACK HERRING POST YOLK-SAC LARVAE

WEEK BEGINNING MONDAY	SAUGERTIES			CATSKILL			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	3	3	3	3	6
09MAY83	DENSITY	N	0.98	3.30	0.98	0.00	0.47
	S.E.	N	0.98	3.30	0.98	0.00	0.47
	NO. TOWS	N	3	3	3	3	6
16MAY83	DENSITY	N	164.31	50.56	14.27	2.56	8.15
	S.E.	N	54.51	23.36	6.00	1.34	2.95
	NO. TOWS	N	4	3	3	3	6
23MAY83	DENSITY	N	266.13	234.11	2.22	6.21	4.30
	S.E.	N	129.46	107.29	2.22	3.97	2.33
	NO. TOWS	N	5	3	3	3	6
30MAY83	DENSITY	N	2183.34	16540.87	2900.57	1610.30	2226.93
	S.E.	N	595.19	3899.68	784.14	141.67	381.98
	NO. TOWS	N	5	3	3	3	6
06JUN83	DENSITY	N	212.09	2932.42	218.65	1285.76	775.78
	S.E.	N	66.09	188.66	138.65	504.96	271.83
	NO. TOWS	N	5	3	3	3	6
13JUN83	DENSITY	N	690.24	4931.39	1393.69	30143.73	16403.82
	S.E.	N	237.38	1950.01	576.47	12194.21	6372.44
	NO. TOWS	N	4	2	3	3	6
20JUN83	DENSITY	N	4383.11	4741.31	5407.71	10006.36	7808.62
	S.E.	N	932.76	1586.62	935.44	1891.32	1083.93
	NO. TOWS	N	3	2	3	3	6
27JUN83	DENSITY	N	1542.35	1319.97	8503.65	2772.81	5511.63
	S.E.	N	658.45	197.76	1712.79	729.99	902.93
	NO. TOWS	N	4	2	3	3	6
04JUL83	DENSITY	N	306.63	639.89	709.71	14239.48	7773.48
	S.E.	N	82.36	399.91	448.51	9086.12	4748.62
	NO. TOWS	N	4	2	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-139 (CONTINUED).

WEEK BEGINNING MONDAY	ALEWIFE/BLUEBACK HERRING			POST YOLK-SAC LARVAE				
	ALBANY			COMBINED				
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	N	0.00	0.35	0.89	1.48	1.22
	S.E.	N	N	0.00	0.14	0.19	0.70	0.46
	NO. TOWS	N	5	N	21	66	107	194
09MAY83	DENSITY	N	N	5.09	38.95	15.27	36.11	31.29
	S.E.	N	N	5.09	7.45	2.23	5.23	3.56
	NO. TOWS	N	5	N	21	69	104	194
16MAY83	DENSITY	N	N	0.67	94.16	79.01	175.06	143.57
	S.E.	N	N	0.67	32.13	11.62	45.96	30.48
	NO. TOWS	N	5	N	21	67	106	194
23MAY83	DENSITY	N	N	0.00	40.35	104.53	201.25	161.73
	S.E.	N	N	0.00	11.51	22.64	26.60	18.36
	NO. TOWS	N	3	N	19	68	99	186
30MAY83	DENSITY	N	N	258.41	358.35	2502.91	6507.88	4921.86
	S.E.	N	N	150.97	123.29	269.14	907.16	599.43
	NO. TOWS	N	3	N	19	68	99	186
06JUN83	DENSITY	N	N	121.75	711.42	546.45	2681.67	1964.71
	S.E.	N	N	71.38	404.97	138.04	451.31	300.91
	NO. TOWS	N	3	N	19	68	99	186
13JUN83	DENSITY	N	N	401.22	722.85	820.02	4590.29	3286.13
	S.E.	N	N	198.37	239.94	125.44	820.26	539.99
	NO. TOWS	N	3	N	16	63	108	187
20JUN83	DENSITY	N	N	2604.62	499.73	2109.11	1489.52	1544.06
	S.E.	N	N	752.23	155.96	228.79	169.85	125.76
	NO. TOWS	N	3	N	16	63	108	187
27JUN83	DENSITY	N	N	2661.76	52.11	1925.24	673.78	919.36
	S.E.	N	N	1101.15	7.95	288.82	67.28	83.44
	NO. TOWS	N	3	N	16	62	109	187
04JUL83	DENSITY	N	N	427.46	39.45	291.85	1049.83	764.75
	S.E.	N	N	89.80	30.15	68.53	519.52	341.56
	NO. TOWS	N	3	N	16	62	109	187

N -- STRATUM NOT SAMPLED

TABLE B-140
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	ALEWIFE/BUEBACK HERRING										YOUNG-OF-THE-YEAR									
	YONKERS					TAPPAN ZEE					CROTON-HAVERSTRAW									
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION				
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	NO. TOWS	3	3	3	6	3	4	3	10	6	3	6	6	3	6	15				
09MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	NO. TOWS	3	3	3	6	3	4	3	10	6	3	6	6	3	6	15				
16MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	NO. TOWS	3	3	3	6	3	4	3	10	6	3	6	6	3	6	15				
23MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	NO. TOWS	3	3	3	6	3	4	4	11	5	4	4	5	4	4	13				
30MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	NO. TOWS	3	3	3	6	3	3	4	10	5	4	3	5	5	3	13				
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	NO. TOWS	3	3	3	6	3	4	4	11	4	4	4	4	4	4	12				
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	NO. TOWS	1	8	8	9	3	5	6	14	4	6	4	4	6	6	16				
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	NO. TOWS	1	8	8	9	3	5	6	14	4	6	4	4	6	5	15				
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	NO. TOWS	1	8	8	9	3	4	6	13	4	6	4	4	6	6	16				
04JUL83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	NO. TOWS	1	8	8	9	3	5	6	14	4	6	4	4	6	6	16				

N -- STRATUM NOT SAMPLED

TABLE B-140 (CONTINUED).

ALEWIFE/BUEBACK HERRING YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY	INDIAN POINT			WEST POINT			CORNWALL					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 4	0.00 7	0.00 25	0.00 36	N N N	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
09MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 4	0.00 8	0.00 24	0.00 36	N N N	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
16MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 4	0.00 7	0.00 25	0.00 36	N N N	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
23MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 3	0.00 6	0.00 13	0.00 22	N N N	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
30MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 3	0.00 6	0.00 15	0.00 24	N N N	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 4	0.00 6	0.00 14	0.00 24	N N N	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 5	0.00 5	0.00 16	0.00 26	N N N	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 5	0.00 5	0.00 17	0.00 27	N N N	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 5	0.00 6	0.00 16	0.00 27	N N N	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
04JUL83	DENSITY	1.87	0.61	0.82	0.85	N	0.63	1.41	1.41	111.99	147.12	49.84
	S.E. NO. TOWS	1.87 5	0.61 5	0.51 16	0.43 26	N N	0.63 0.63	0.58 0.58	0.51 0.51	57.11 57.11	41.51 41.51	11.61 11.61

N -- STRATUM NOT SAMPLED

TABLE B-140 (CONTINUED).

ALEWIFE/BLEUEBACK HERRING YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY	POUGHKEEPSIE			HYDE PARK			KINGSTON					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	9	10	19	N	10	11	21	N	6	7
09MAY83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	10	10	20	N	10	10	20	N	6	7
16MAY83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	10	10	20	N	8	11	19	N	6	7
23MAY83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6
30MAY83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	16	22	38	N	7	12	19	N	5	10
06JUN83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6
13JUN83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	7	15	22	N	5	9	14	N	5	5
20JUN83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	8	14	22	N	5	9	14	N	5	6
27JUN83	DENSITY	N	5.99	0.00	N	1.39	0.00	0.00	N	0.77	0.00	0.26
	S.E.	N	3.80	0.00	N	0.88	0.00	0.00	N	0.77	0.00	0.26
	NO. TOWS	N	7	15	22	N	5	9	14	N	4	6
04JUL83	DENSITY	N	44.97	34.61	N	37.01	29.50	28.26	N	0.00	0.00	0.00
	S.E.	N	40.71	16.87	N	16.04	8.78	7.07	N	0.00	0.00	0.00
	NO. TOWS	N	7	15	22	N	5	9	14	N	4	6

N -- STRATUM NOT SAMPLED

TABLE B-140 (CONTINUED).

ALEMIFE/BUEBACK HERRING YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY	SAUCERTIES			CATSKILL			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	3	3	N	3	3	6
09MAY83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	3	3	N	3	3	6
16MAY83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	4	3	N	3	3	6
23MAY83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	N	3	3	6
30MAY83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	N	3	3	6
06JUN83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	N	3	3	6
13JUN83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	4	2	N	3	3	6
20JUN83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	3	2	N	3	3	6
27JUN83	DENSITY	0.76	0.00	N	10.32	0.00	4.93
	S.E.	0.76	0.00	N	6.14	0.00	2.93
	NO. TOWS	4	2	N	3	3	6
04JUL83	DENSITY	0.00	0.00	N	3.10	1.13	2.07
	S.E.	0.00	0.00	N	3.10	1.13	1.59
	NO. TOWS	4	2	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-140 (CONTINUED).

WEEK BEGINNING MONDAY	ALEWIFE/BUEBACK HERRING			ALBANY			YOUNG-OF-THE-YEAR		
	DENSITY S.E. NO. TOWS	SHOAL N	BOTTOM 0.00	CHANNEL N	REGION 0.00	SHOAL 0.00	COMBINED		REGION 0.00
							BOTTOM 0.00	CHANNEL 0.00	
02MAY83		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	5	N	5	21	66	107	194
09MAY83		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	5	N	5	21	69	104	194
16MAY83		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	5	N	5	21	67	106	194
23MAY83		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	3	N	3	19	68	99	186
30MAY83		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	3	N	3	19	68	99	186
06JUN83		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	3	N	3	19	68	99	186
13JUN83		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	3	N	3	16	63	108	187
20JUN83		N	0.00	N	0.00	0.00	0.00	0.01	0.01
		N	0.00	N	0.00	0.00	0.00	0.01	0.01
		N	3	N	3	16	63	108	187
27JUN83		N	2.01	N	2.01	0.00	3.00	0.10	0.80
		N	1.01	N	1.01	0.00	1.03	0.06	0.26
		N	3	N	3	16	62	109	187
04JUL83		N	0.00	N	0.00	4.18	17.29	8.68	10.35
		N	0.00	N	0.00	2.08	5.79	2.72	2.29
		N	3	N	3	16	62	109	187

N -- STRATUM NOT SAMPLED

TABLE B-141
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEFK, REGION AND STRATUM,
 FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	BLUEBACK HERRING											
	YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	3.49	5.39	0.00	2.36	84.56	25.68	0.00	36.51
	S.E. NO. TOWS	0.00 7	0.00 5	0.00 12	2.99 32	5.39 7	0.00 7	1.54 46	30.65 16	12.61 8	0.00 3	11.53 27
22AUG83	DENSITY	0.00	0.00	0.00	13.77	64.52	0.00	17.66	3.33	32.55	0.00	8.38
	S.E. NO. TOWS	0.00 7	0.00 5	0.00 12	3.44 29	24.90 9	0.00 8	4.98 46	1.05 16	16.09 8	0.00 3	3.56 27
05SEP83	DENSITY	6.18	0.92	1.53	2.89	10.68	1.77	3.91	9.27	11.53	1.21	6.42
	S.E. NO. TOWS	3.24 7	0.56 5	0.62 12	1.15 29	5.38 8	1.19 8	1.24 45	4.66 16	5.06 8	1.21 2	2.09 26
19SEP83	DENSITY	0.00	0.00	0.00	0.36	1.91	0.00	0.50	0.17	3.25	0.00	0.78
	S.E. NO. TOWS	0.00 6	0.00 5	0.00 11	0.21 31	0.80 8	0.00 8	0.17 47	0.17 15	1.88 8	0.00 3	0.42 26
03OCT83	DENSITY	4.83	0.43	0.94	0.53	4.68	1.19	1.62	0.92	8.04	0.00	2.11
	S.E. NO. TOWS	2.04 6	0.43 5	0.45 11	0.28 31	1.67 7	0.61 8	0.43 46	0.61 17	4.24 8	0.00 3	0.96 28
17OCT83	DENSITY	0.78	0.00	0.09	7.29	18.55	0.28	6.46	8.79	61.01	0.00	16.63
	S.E. NO. TOWS	0.78 7	0.00 5	0.09 12	1.88 30	11.47 8	0.28 8	2.33 46	3.83 16	19.37 7	0.00 3	4.48 26

N -- STRATUM NOT SAMPLED

TABLE B-141 (CONTINUED).

BLUEBACK HERRING

YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY	INDIAN POINT			WEST POINT			CORNWALL			REGION
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	
08AUG83	DENSITY	4.20	30.01	2.05	2.75	1.08	1.31	102.39	0.00	31.62
	S.E. NO. TOWS	1.68 6	8.77 5	2.05 3	2.08 4	1.08 3	0.98 7	27.07 6	0.00 3	8.09 14
22AUG83	DENSITY	2.65	2.21	0.00	5.45	0.00	0.75	20.16	0.00	7.33
	S.E. NO. TOWS	1.48 7	1.09 5	0.00 2	4.77 5	0.00 3	0.66 8	12.36 5	0.00 3	3.35 13
05SEP83	DENSITY	0.00	3.83	0.00	3.22	0.00	0.44	6.34	0.00	3.44
	S.E. NO. TOWS	0.00 6	2.43 6	0.00 3	1.33 5	0.00 3	0.18 8	5.80 5	0.00 3	1.79 13
19SEP83	DENSITY	2.62	1.20	0.00	6.37	0.00	0.88	23.58	6.31	10.54
	S.E. NO. TOWS	1.31 6	0.74 5	0.00 3	4.66 5	0.00 3	0.64 8	11.03 5	6.31 2	5.18 13
03OCT83	DENSITY	11.75	8.95	0.00	8.99	0.00	1.24	12.33	0.00	5.08
	S.E. NO. TOWS	7.74 6	4.39 5	0.00 3	6.66 4	0.00 2	0.92 6	3.39 6	0.00 4	1.06 15
17OCT83	DENSITY	23.90	86.62	0.00	170.15	1.53	24.78	231.12	1.43	76.98
	S.E. NO. TOWS	8.80 6	34.16 6	0.00 3	72.95 5	1.53 3	10.15 8	61.34 5	0.72 3	18.25 13

N -- STRATUM NOT SAMPLED

TABLE B-141 (CONTINUED).

BLUEBACK HERRING

YOUNG-OF-THE-YEAR

WEEK
BEGINNING
MONDAY

WEEK BEGINNING MONDAY	POUGHKEEPSIE			HYDE PARK			KINGSTON					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	211.03	31.05	72.81	N	445.68	4.94	96.29	N	867.39	60.92	333.36
	S.E.	80.84	27.24	28.10	N	130.43	2.63	27.11	N	77.29	18.06	28.72
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
22AUG83	DENSITY	113.88	13.70	36.95	N	127.77	9.72	34.19	N	125.41	29.05	61.60
	S.E.	20.49	3.29	5.39	N	24.26	0.67	5.06	N	45.76	6.96	16.13
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
05SEP83	DENSITY	39.80	0.00	9.24	N	116.14	32.99	50.23	N	235.86	56.61	117.16
	S.E.	19.67	0.00	4.56	N	25.96	14.92	13.00	N	49.11	36.36	29.24
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
19SEP83	DENSITY	103.39	5.05	27.87	N	155.25	3.20	34.71	N	388.71	0.99	131.97
	S.E.	33.92	3.07	8.22	N	47.33	2.00	9.94	N	93.01	0.67	31.42
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
03OCT83	DENSITY	116.74	13.24	37.26	N	300.70	38.36	92.73	N	767.91	0.00	259.41
	S.E.	51.43	8.34	13.54	N	65.81	19.00	20.32	N	261.05	0.00	88.19
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
17OCT83	DENSITY	159.80	0.65	37.58	N	960.41	1.10	199.92	N	369.78	1.86	126.15
	S.E.	71.03	0.65	16.49	N	338.98	0.64	70.25	N	53.50	1.23	18.09
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15

N -- STRATUM NOT SAMPLED

TABLE B-141 (CONTINUED).

WEEK BEGINNING MONDAY	BLUEBACK HERRING				YOUNG-OF-THE-YEAR				
	SAUGERTIES		CATSKILL		SHOAL		CHANNEL		REGION
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83		N	797.17	60.89	324.57	N	854.21	21.91	419.68
		N	85.06	20.54	33.19	N	113.54	11.90	54.61
		N	12	6	18	N	15	6	21
22AUG83		N	58.57	5.28	24.36	N	452.32	8.01	220.35
		N	22.23	5.28	8.65	N	97.57	6.47	46.75
		N	12	6	18	N	15	6	21
05SEP83		N	267.81	5.30	99.31	N	176.26	0.00	84.24
		N	51.68	2.40	18.57	N	63.92	0.00	30.55
		N	12	6	18	N	15	6	21
19SEP83		N	102.63	4.15	39.41	N	125.73	35.72	78.74
		N	33.76	1.68	12.14	N	41.05	35.72	27.07
		N	12	6	18	N	15	6	21
03OCT83		N	585.45	19.74	222.33	N	250.86	0.38	120.08
		N	115.37	12.72	42.11	N	77.48	0.38	37.03
		N	12	6	18	N	15	6	21
17OCT83		N	261.82	9.07	99.58	N	172.22	1.56	83.12
		N	32.82	6.54	12.48	N	33.69	1.56	16.12
		N	13	6	19	N	14	6	20

N -- STRATUM NOT SAMPLED

TABLE B-141 (CONTINUED).

WEEK BEGINNING MONDAY	BLUEBACK HERRING			YOUNG-OF-THE-YEAR						
				ALBANY			COMBINED			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	1045.48	N	1045.48		25.52	481.57	15.26	130.55
	S.E.	N	377.93	N	377.93		7.96	53.78	4.67	13.56
	NO. TOWS	N	8	N	8		66	85	49	200
22AUG83	DENSITY	N	304.19	N	304.19		9.74	151.80	5.64	41.87
	S.E.	N	68.63	N	68.63		1.96	17.29	0.86	4.28
	NO. TOWS	N	8	N	8		64	87	49	200
05SEP83	DENSITY	N	479.69	N	479.69		5.67	151.24	7.21	42.36
	S.E.	N	156.01	N	156.01		1.47	23.19	2.65	5.95
	NO. TOWS	N	8	N	8		63	87	49	199
19SEP83	DENSITY	N	0.31	N	0.31		0.42	87.33	3.85	23.97
	S.E.	N	0.31	N	0.31		0.15	11.74	2.12	3.20
	NO. TOWS	N	8	N	8		64	86	49	199
03OCT83	DENSITY	N	0.00	N	0.00		2.90	203.11	7.11	54.73
	S.E.	N	0.00	N	0.00		0.65	29.13	2.32	7.30
	NO. TOWS	N	8	N	8		65	85	50	200
17OCT83	DENSITY	N	52.34	N	52.34		17.07	206.12	1.39	53.11
	S.E.	N	14.70	N	14.70		5.53	24.78	0.56	6.11
	NO. TOWS	N	8	N	8		64	86	50	200

N -- STRATUM NOT SAMPLED

TABLE B-142
 CATCH PER UNIT EFFORT (NUMBER PER HAUL) BY WEEK AND REGION,
 BEACH SEINE SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	YK	TZ	CH	IP	WP	REGIONS					SG	CS	AL	COMBINED
						CW	PK	HP	KG	CG				
01AUG83	CPUE	0.60	11.86	26.00	211.20	113.50	133.80	1489.2	597.20	194.56	176.80	331.14	129.18	
	S.E. NO. HAULS	0.40 5	5.44 14	12.12 5	101.14 5	52.91 6	55.91 5	862.94 5	497.10 5	67.32 9	98.65 10	94.86 7	30.48 100	
15AUG83	CPUE	0.00	2.79	4.40	121.60	85.00	1303.8	707.20	73.60	239.22	371.30	76.14	144.82	
	S.E. NO. HAULS	0.00 5	1.42 14	3.43 5	101.23 5	38.76 6	1227.3 5	669.99 5	44.92 5	103.49 9	181.79 10	43.08 7	56.77 100	
29AUG83	CPUE	0.20	3.93	0.00	87.20	89.33	374.80	1812.8	552.00	414.22	48.40	170.00	126.29	
	S.E. NO. HAULS	0.20 5	3.93 14	0.00 5	49.04 5	38.44 6	228.41 5	960.03 5	370.64 5	185.03 9	21.21 10	73.64 7	30.06 100	
12SEP83	CPUE	0.20	0.58	0.00	1183.2	34.33	392.40	21.00	518.80	148.00	72.60	32.71	89.70	
	S.E. NO. HAULS	0.20 5	0.07 14	0.00 5	1166.2 5	10.23 6	355.72 5	8.23 5	460.20 5	58.46 9	38.90 10	14.90 7	33.87 100	
26SEP83	CPUE	0.00	0.00	0.00	76.20	51.00	121.60	962.00	177.00	128.33	22.20	89.00	48.33	
	S.E. NO. HAULS	0.00 5	0.00 14	0.00 5	48.90 5	33.66 7	56.44 5	692.60 5	52.06 5	88.34 9	10.75 10	43.03 7	11.81 101	
10OCT83	CPUE	0.00	0.04	0.43	276.00	36.33	152.00	155.75	396.67	14.33	10.00	8.57	37.45	
	S.E. NO. HAULS	0.00 5	0.00 24	0.43 7	269.53 5	21.49 6	146.55 5	113.92 4	145.42 6	12.23 9	6.42 10	3.75 7	10.66 102	

TABLE B-143
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	BLUEBACK HERRING												REGION			
	YONKERS						TAPPAN ZEE							CROTON-HAVERSTRAW		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION				
02MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	3	6	15	
09MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.22	
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.22	
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	3	6	15	
16MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	3	6	15	
23MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	3	N	3	6	3	4	4	11	5	4	4	4	4	13	
30MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	3	N	3	6	3	3	4	10	5	5	3	5	3	13	
06JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	3	N	3	6	3	4	4	11	4	4	4	4	4	12	
13JUN83	DENSITY	0.00	N	0.38	0.34	0.00	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	N	0.38	0.34	0.00	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	4	6	6	16	
20JUN83	DENSITY	0.00	N	0.36	0.32	1.06	0.32	1.06	0.00	0.00	0.00	0.40	0.63	0.00	0.14	
	S.E.	0.00	N	0.36	0.32	1.06	0.32	1.06	0.00	0.00	0.00	0.40	0.63	0.00	0.14	
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	4	6	5	15	
27JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	1	N	8	9	3	4	6	13	4	6	4	6	6	16	
04JUL83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.00	0.00	0.30	
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.00	0.00	0.30	
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	4	6	6	16	

N -- STRATUM NOT SAMPLED

TABLE B-143 (CONTINUED).

WEEK BEGINNING MONDAY	BLUEBACK HERRING											
	INDIAN POINT				WEST POINT				YEARLING			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	7	25	36	4	4	30	34	5	12	6
09MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	8	24	36	4	4	30	34	5	13	5
16MAY83	DENSITY	0.00	0.00	0.54	0.42	0.00	0.23	0.20	1.21	0.00	0.00	0.07
	S.E.	0.00	0.00	0.32	0.25	0.00	0.16	0.14	0.74	0.00	0.00	0.04
	NO. TOWS	4	7	25	36	7	30	37	5	10	5	20
23MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.83	0.00	0.00	0.11
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.83	0.00	0.00	0.11
	NO. TOWS	3	6	13	22	7	23	30	5	9	6	20
30MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.24	0.00	0.00	0.07
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.24	0.00	0.00	0.07
	NO. TOWS	3	6	15	24	6	23	29	5	9	6	20
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72	0.00	0.00	0.04
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72	0.00	0.00	0.04
	NO. TOWS	4	6	14	24	7	23	30	5	9	5	19
13JUN83	DENSITY	0.56	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.56	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	16	26	8	25	33	3	12	13	28
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	17	27	8	25	33	3	12	13	28
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	6	16	27	8	25	33	3	12	13	28
04JUL83	DENSITY	0.00	0.00	0.17	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.17	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	16	26	8	25	33	3	12	13	28

N -- STRATUM NOT SAMPLED

TABLE B-143 (CONTINUED).

WEEK BEGINNING MONDAY	BLUEBACK HERRING											
	POUGHKEEPSIE				HYDE PARK				KINGSTON			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	9	10	19	N	10	11	21	N	6	7	13
09MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	10	10	20	N	10	10	20	N	6	7	13
16MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	10	10	20	N	8	11	19	N	6	7	13
23MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10
30MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	16	22	38	N	7	12	19	N	5	5	10
06JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10
13JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.32	0.25	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.32	0.25	N	0.00	0.00	0.00
	NO. TOWS	7	15	22	N	5	9	14	N	5	5	10
20JUN83	DENSITY	0.36	0.00	0.08	N	0.57	0.00	0.12	N	0.00	0.00	0.00
	S.E.	0.36	0.00	0.08	N	0.57	0.00	0.12	N	0.00	0.00	0.00
	NO. TOWS	8	14	22	N	5	9	14	N	5	6	11
27JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10
04JUL83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10

N -- STRATUM NOT SAMPLED

TABLE B-143 (CONTINUED).

WEEK BEGINNING MONDAY	BLUEBACK HERRING						YEARLING					
	SAUCERTIES			CATSKILL			SAUCERTIES			CATSKILL		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	3	3	3	N	3	3	3	N	3	3	6
09MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	3	3	3	N	3	3	6	N	3	3	6
16MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	4	3	3	N	4	3	7	N	3	3	6
23MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	3	N	5	3	8	N	3	3	6
30MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	3	N	5	3	8	N	3	3	6
06JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	3	N	5	3	8	N	3	3	6
13JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	4	2	2	N	4	2	6	N	3	3	6
20JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	3	2	2	N	3	2	5	N	3	3	6
27JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	4	2	2	N	4	2	6	N	3	3	6
04JUL83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	4	2	2	N	4	2	6	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-143 (CONTINUED).

WEEK BEGINNING MONDAY	BLUEBACK HERRING									
	ALBANY					YEARLING				
	SHOAL	BOTTOM	CHANNEL	REGION	COMBINED	SHOAL	BOTTOM	CHANNEL	REGION	COMBINED
02MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	N	5	5	21	66	107	194	194
09MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.02	0.01	0.01
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.02	0.01	0.01
	NO. TOWS	5	N	5	5	21	69	104	194	194
16MAY83	DENSITY	0.00	N	0.00	0.00	0.04	0.00	0.09	0.06	0.06
	S.E.	0.00	N	0.00	0.00	0.03	0.00	0.04	0.03	0.03
	NO. TOWS	5	N	5	5	21	67	106	194	194
23MAY83	DENSITY	0.00	N	0.00	0.00	0.07	0.00	0.00	0.01	0.01
	S.E.	0.00	N	0.00	0.00	0.07	0.00	0.00	0.01	0.01
	NO. TOWS	3	N	3	3	19	68	99	186	186
30MAY83	DENSITY	0.00	N	0.00	0.00	0.05	0.15	0.00	0.04	0.04
	S.E.	0.00	N	0.00	0.00	0.05	0.15	0.00	0.04	0.04
	NO. TOWS	3	N	3	3	19	68	99	186	186
06JUN83	DENSITY	0.00	N	0.00	0.00	0.03	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.03	0.00	0.00	0.00	0.00
	NO. TOWS	3	N	3	3	19	68	99	186	186
13JUN83	DENSITY	0.00	N	0.00	0.00	0.03	0.00	0.08	0.06	0.06
	S.E.	0.00	N	0.00	0.00	0.03	0.00	0.06	0.04	0.04
	NO. TOWS	3	N	3	3	16	63	108	187	187
20JUN83	DENSITY	0.00	N	0.00	0.00	0.58	0.12	0.05	0.12	0.12
	S.E.	0.00	N	0.00	0.00	0.58	0.07	0.05	0.07	0.07
	NO. TOWS	3	N	3	3	16	63	108	187	187
27JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	N	3	3	16	62	109	187	187
04JUL83	DENSITY	0.00	N	0.00	0.00	0.20	0.00	0.02	0.03	0.03
	S.E.	0.00	N	0.00	0.00	0.20	0.00	0.02	0.02	0.02
	NO. TOWS	3	N	3	3	16	62	109	187	187

N -- STRATUM NOT SAMPLED

TABLE B-144
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	BLUEBACK HERRING												REGION
	YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW				
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	
08AUG83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	N	5	12	32	7	7	46	16	8	3	27
22AUG83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	N	5	12	29	9	8	46	16	8	3	27
05SEP83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	N	5	12	29	8	8	45	16	8	2	26
19SEP83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	N	5	11	31	8	8	47	15	8	3	26
03OCT83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	N	5	11	31	7	8	46	17	8	3	28
17OCT83	DENSITY	1.40	N	0.00	0.16	0.00	4.92	0.00	0.95	0.00	0.00	0.00	0.00
	S.E.	1.40	N	0.00	0.16	0.00	4.92	0.00	0.95	0.00	0.00	0.00	0.00
	NO. TOWS	7	N	5	12	30	8	8	46	16	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-144 (CONTINUED).

WEEK BEGINNING MONDAY	BLUEBACK HERRING											
	INDIAN POINT				WEST POINT				CORNWALL			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	4	3	7	5	6	3	14
22AUG83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	2	14	5	3	8	5	5	3	13
05SEP83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	6	3	15	5	3	8	5	5	3	13
19SEP83	DENSITY	0.92	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.92	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	5	3	8	6	5	2	13
03OCT83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	4	2	6	5	6	4	15
17OCT83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	6	3	15	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-144 (CONTINUED).

WEEK BEGINNING MONDAY	BLUEBACK HERRING															
	POUGHKEEPSIE					HYDE PARK					YEARLING					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15	N	9	6	15
22AUG83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15	N	9	6	15
05SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15	N	9	6	15
19SEP83	DENSITY	0.00	0.88	0.68	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.88	0.68	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15	N	9	6	15
03OCT83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15	N	9	6	15
17OCT83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15	N	9	6	15

N -- STRATUM NOT SAMPLED

TABLE B-144 (CONTINUED).

WEEK BEGINNING MONDAY	BLUEBACK HERRING			YEARLING			
	SAUGERTIES			CATSKILL			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	0.23	0.00	0.00	0.00	0.00
	S.E.	N	0.23	0.00	0.00	0.00	0.00
	NO. TOWS	N	12	6	15	6	21
22AUG83	DENSITY	N	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	12	6	15	6	21
05SEP83	DENSITY	N	0.00	0.00	0.43	0.00	0.21
	S.E.	N	0.00	0.00	0.30	0.00	0.14
	NO. TOWS	N	12	6	15	6	21
19SEP83	DENSITY	N	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	12	6	15	6	21
03OCT83	DENSITY	N	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	12	6	15	6	21
17OCT83	DENSITY	N	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	13	6	14	6	20

N -- STRATUM NOT SAMPLED

TABLE B-144 (CONTINUED).

WEEK BEGINNING MONDAY	BLUEBACK HERRING											
	ALBANY					YEARLING						
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	0.30	N	0.30	0.00	0.00	0.00	0.00	0.06	0.00	0.02
	S.E. NO. TOWS	N	0.30	N	0.30	0.00	0.00	0.00	0.00	0.05	0.00	0.01
22AUG83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
05SEP83	DENSITY	N	1.21	N	1.21	0.00	0.00	0.00	0.00	0.21	0.00	0.05
	S.E. NO. TOWS	N	0.90	N	0.90	0.00	0.00	0.00	0.00	0.12	0.00	0.03
19SEP83	DENSITY	N	0.00	N	0.00	0.05	0.00	0.05	0.00	0.00	0.14	0.09
	S.E. NO. TOWS	N	0.00	N	0.00	0.05	0.00	0.05	0.00	0.00	0.14	0.09
03OCT83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17OCT83	DENSITY	N	0.00	N	0.00	0.17	0.00	0.17	0.55	0.00	0.00	0.15
	S.E. NO. TOWS	N	0.00	N	0.00	0.17	0.00	0.17	0.55	0.00	0.00	0.14

N -- STRATUM NOT SAMPLED

TABLE B-145
 CATCH PER UNIT EFFORT (NUMBER PER HAUL) BY WEEK AND REGION,
 BEACH SEINE SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	YK	TZ	CH	IP	WP	REGIONS						AL	COMBINED
						CW	PK	HP	KG	SG	CS		
01AUG83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	S.E. NO. HAULS	0.04 5	0.04 14	0.00 5	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7	0.20 100
15AUG83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 14	0.00 5	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7	0.00 100
29AUG83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 14	0.00 5	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7	0.00 100
12SEP83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 14	0.00 5	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7	0.00 100
26SEP83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 14	0.00 5	0.00 5	0.00 5	0.00 7	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7	0.00 101
10OCT83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 14	0.00 7	0.00 5	0.00 5	0.00 6	0.00 5	0.00 4	0.00 9	0.00 10	0.00 7	0.00 102

TABLE B-146
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	BLUEBACK HERRING												REGION	REGION	
	YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW						
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION			
02MAY83	DENSITY	1.32	0.00	0.15	0.00	0.76	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	1.32	0.00	0.15	0.00	0.76	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	3	10	6	3	3	6	6	6	15
09MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	3	10	6	3	3	6	6	6	15
16MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	3	10	6	3	3	6	6	6	15
23MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	4	11	5	4	4	4	4	4	13
30MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	3	4	10	5	5	3	3	3	3	13
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	4	11	4	4	4	4	4	4	12
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	5	6	14	4	6	6	6	6	6	16
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	5	6	14	4	6	6	6	6	6	15
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.11	0.11
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.11	0.11
	NO. TOWS	1	8	9	3	4	6	13	4	6	6	6	6	6	16
04JUL83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	5	6	14	4	6	6	6	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-146 (CONTINUED).

BLUEBACK HERRING

WEEK
BEGINNING
MONDAY

WEEK BEGINNING MONDAY	INDIAN POINT			WEST POINT			CORNWALL					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	3.52	0.00	0.32	0.46	0.00	0.24	0.21	0.00	0.00	0.00	0.00
	S.E.	0.10	0.00	0.22	0.17	0.00	0.17	0.14	0.00	0.00	0.00	0.00
	NO. TOWS	4	7	25	36	4	30	34	5	12	6	23
09MAY83	DENSITY	0.00	0.43	0.27	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.43	0.18	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	8	24	36	4	30	34	5	13	5	23
16MAY83	DENSITY	0.00	0.00	0.13	0.10	0.55	0.00	0.08	0.00	0.98	0.00	0.26
	S.E.	0.00	0.00	0.13	0.10	0.55	0.00	0.08	0.00	0.98	0.00	0.26
	NO. TOWS	4	7	25	36	7	30	37	5	10	5	20
23MAY83	DENSITY	0.00	0.00	1.14	0.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.89	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	6	13	22	7	23	30	5	9	6	20
30MAY83	DENSITY	0.00	0.00	0.22	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.22	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	6	15	24	6	23	29	5	9	6	20
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	6	14	24	7	23	30	5	9	5	19
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	16	26	8	25	33	3	12	13	28
20JUN83	DENSITY	0.75	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.75	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	17	27	8	25	33	3	12	13	28
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	6	16	27	8	25	33	3	12	13	28
04JUL83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	16	26	8	25	33	3	12	13	28

N -- STRATUM NOT SAMPLED

TABLE B-146 (CONTINUED).

WEEK BEGINNING MONDAY	POUGHKEEPSIE						HYDE PARK			OLDER			KINGSTON			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	N	0.35	0.00	0.07	N	1.56	0.00	0.53	N	1.56	0.00	0.53
	S.E.	0.00	0.00	0.00	N	0.35	0.00	0.07	N	1.56	0.00	0.53	N	1.56	0.00	0.53
	NO. TOWS	9	10	19	N	10	11	21	N	6	7	13	N	6	7	13
09MAY83	DENSITY	0.00	0.00	0.00	N	0.30	0.00	0.06	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.30	0.00	0.06	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	10	10	20	N	10	10	20	N	6	7	13	N	6	7	13
16MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	1.71	0.00	0.58	N	1.71	0.00	0.58
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	1.24	0.00	0.42	N	1.24	0.00	0.42
	NO. TOWS	10	10	20	N	8	11	19	N	6	7	13	N	6	7	13
23MAY83	DENSITY	0.38	0.00	0.09	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.26	0.00	0.06	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10	N	4	6	10
30MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	16	22	38	N	7	12	19	N	5	5	10	N	5	5	10
06JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10	N	4	6	10
13JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	7	15	22	N	5	9	14	N	5	5	10	N	5	5	10
20JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	8	14	22	N	5	9	14	N	5	6	11	N	5	6	11
27JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10	N	4	6	10
04JUL83	DENSITY	0.53	0.00	0.12	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.53	0.00	0.12	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10	N	4	6	10

N -- STRATUM NOT SAMPLED

TABLE B-146 (CONTINUED).

WEEK BEGINNING MONDAY	BLUEBACK HERRING			SAUGERTIES			CATSKILL			REGION
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	
02MAY83	DENSITY	N	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	3	3	3	6	N	3	3	6
09MAY83	DENSITY	N	0.00	0.00	0.00	0.00	N	0.98	0.00	0.47
	S.E.	N	0.00	0.00	0.00	0.00	N	0.98	0.00	0.47
	NO. TOWS	N	3	3	3	6	N	3	3	6
16MAY83	DENSITY	N	0.00	0.00	0.00	0.00	N	1.05	0.00	0.50
	S.E.	N	0.00	0.00	0.00	0.00	N	1.05	0.00	0.50
	NO. TOWS	N	4	3	3	7	N	3	3	6
23MAY83	DENSITY	N	2.28	0.00	0.00	0.82	N	0.00	0.00	0.00
	S.E.	N	1.64	0.00	0.00	0.59	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	3	8	N	3	3	6
30MAY83	DENSITY	N	9.90	0.00	0.00	3.54	N	0.00	0.00	0.00
	S.E.	N	9.14	0.00	0.00	3.27	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	3	8	N	3	3	6
06JUN83	DENSITY	N	3.98	0.00	0.00	1.42	N	0.00	0.00	0.00
	S.E.	N	2.78	0.00	0.00	0.99	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	3	8	N	3	3	6
13JUN83	DENSITY	N	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	4	2	6	6	N	3	3	6
20JUN83	DENSITY	N	0.96	0.00	0.00	0.34	N	0.00	0.00	0.00
	S.E.	N	0.96	0.00	0.00	0.34	N	0.00	0.00	0.00
	NO. TOWS	N	3	2	5	5	N	3	3	6
27JUN83	DENSITY	N	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	4	2	6	6	N	3	3	6
04JUL83	DENSITY	N	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	4	2	6	6	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-146 (CONTINUED).

WEEK BEGINNING MONDAY	BLUEBACK, HERRING						OLDER					
	ALBANY			COMBINED			ALBANY			COMBINED		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	0.00	N	0.00	N	0.00	0.36	0.24	0.06	0.14	
	S.E.	N	0.00	N	0.00	N	0.00	0.16	0.16	0.03	0.05	
	NO. TOWS	N	5	N	5	N	5	21	66	107	194	
09MAY83	DENSITY	N	3.89	N	3.89	N	3.89	0.00	0.68	0.03	0.19	
	S.E.	N	2.46	N	2.46	N	2.46	0.00	0.34	0.02	0.09	
	NO. TOWS	N	5	N	5	N	5	21	69	104	194	
16MAY83	DENSITY	N	0.00	N	0.00	N	0.00	0.00	0.39	0.01	0.10	
	S.E.	N	0.00	N	0.00	N	0.00	0.00	0.19	0.01	0.05	
	NO. TOWS	N	5	N	5	N	5	21	67	106	194	
23MAY83	DENSITY	N	1.08	N	1.08	N	1.08	0.00	0.44	0.12	0.19	
	S.E.	N	1.08	N	1.08	N	1.08	0.00	0.23	0.10	0.09	
	NO. TOWS	N	3	N	3	N	3	19	68	99	186	
30MAY83	DENSITY	N	0.00	N	0.00	N	0.00	0.00	1.12	0.02	0.29	
	S.E.	N	0.00	N	0.00	N	0.00	0.00	1.04	0.02	0.25	
	NO. TOWS	N	3	N	3	N	3	19	68	99	186	
06JUN83	DENSITY	N	0.00	N	0.00	N	0.00	0.00	0.45	0.00	0.11	
	S.E.	N	0.00	N	0.00	N	0.00	0.00	0.32	0.00	0.08	
	NO. TOWS	N	3	N	3	N	3	19	68	99	186	
13JUN83	DENSITY	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00	0.00	
	S.E.	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	N	3	N	3	N	3	16	63	108	187	
20JUN83	DENSITY	N	0.00	N	0.00	N	0.00	0.04	0.11	0.00	0.03	
	S.E.	N	0.00	N	0.00	N	0.00	0.04	0.11	0.00	0.03	
	NO. TOWS	N	3	N	3	N	3	16	63	108	187	
27JUN83	DENSITY	N	0.00	N	0.00	N	0.00	0.00	0.03	0.00	0.01	
	S.E.	N	0.00	N	0.00	N	0.00	0.00	0.03	0.00	0.01	
	NO. TOWS	N	3	N	3	N	3	16	62	109	187	
04JUL83	DENSITY	N	0.00	N	0.00	N	0.00	0.00	0.07	0.00	0.02	
	S.E.	N	0.00	N	0.00	N	0.00	0.00	0.07	0.00	0.02	
	NO. TOWS	N	3	N	3	N	3	16	62	109	187	

N -- STRATUM NOT SAMPLED

TABLE B-147
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	BLUEBACK HERRING						OLDER					
	YONKERS		TAPPAN ZEE		CROTON-HAVERSTRAW		YONKERS		TAPPAN ZEE		CROTON-HAVERSTRAW	
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	5	12	32	7	7	16	8	3	27
22AUG83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	5	12	29	8	16	8	3	27	
05SEP83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	5	12	29	8	16	8	2	26	
19SEP83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	5	11	31	8	15	8	3	26	
03OCT83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	5	11	31	8	16	8	3	28	
17OCT83	DENSITY	0.00	0.00	0.00	0.00	0.09	0.00	0.03	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.09	0.00	0.03	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	5	12	30	8	16	7	3	26	

N -- STRATUM NOT SAMPLED

TABLE B-147 (CONTINUED).

WEEK BEGINNING MONDAY	BLUEBACK HERRING						OLDER					
	INDIAN POINT		WEST POINT		CORNWALL		INDIAN POINT		WEST POINT		CORNWALL	
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY S.E. NO. TOWS	0.00 0.00 6	0.00 0.00 5	0.00 0.00 3	0.00 0.00 14	N N N	0.00 0.00 4	0.00 0.00 3	0.00 0.00 7	0.00 0.00 5	0.00 0.00 6	0.00 0.00 14
22AUG83	DENSITY S.E. NO. TOWS	0.00 0.00 7	0.00 0.00 5	0.00 0.00 2	0.00 0.00 14	N N N	0.00 0.00 5	0.00 0.00 3	0.00 0.00 8	0.00 0.00 5	0.00 0.00 3	0.00 0.00 13
05SEP83	DENSITY S.E. NO. TOWS	0.00 0.00 6	0.00 0.00 6	0.00 0.00 3	0.00 0.00 15	N N N	0.00 0.00 5	0.00 0.00 3	0.00 0.00 8	0.00 0.00 5	0.00 0.00 3	0.00 0.00 13
19SEP83	DENSITY S.E. NO. TOWS	0.00 0.00 6	0.00 0.00 5	0.00 0.00 3	0.00 0.00 14	N N N	0.00 0.00 5	0.00 0.00 3	0.00 0.00 8	0.00 0.00 6	0.00 0.00 5	0.00 0.00 13
03OCT83	DENSITY S.E. NO. TOWS	0.00 0.00 6	0.00 0.00 5	0.00 0.00 3	0.00 0.00 14	N N N	0.00 0.00 4	0.00 0.00 2	0.00 0.00 6	0.00 0.00 5	0.00 0.00 4	0.00 0.00 15
17OCT83	DENSITY S.E. NO. TOWS	0.00 0.00 6	0.45 0.45 6	0.00 0.00 3	0.07 0.07 15	N N N	0.00 0.00 5	0.00 0.00 3	0.00 0.00 8	0.00 0.00 5	0.00 0.00 3	0.00 0.00 13

N -- STRATUM NOT SAMPLED

TABLE B-147 (CONTINUED).

WEEK BEGINNING MONDAY	BLUEBACK HERRING															
	POUGHKEEPSIE				HYDE PARK				OLDER				KINGSTON			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	N	15	6	15
22AUG83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	N	15	6	15
05SEP83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	N	15	6	15
19SEP83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	N	15	6	15
03OCT83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	N	15	6	15
17OCT83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	N	15	6	15

N -- STRATUM NOT SAMPLED

TABLE B-147 (CONTINUED).

WEEK BEGINNING MONDAY	BLUEBACK HERRING			SAUGERTIES			OLDER			CATSKILL			
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	12	6	18	N	15	6	21	N	15	6	21
22AUG83	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	12	6	18	N	15	6	21	N	15	6	21
05SEP83	0.00	N	0.00	0.00	0.00	N	0.17	0.00	0.08	N	0.17	0.00	0.08
	0.00	N	0.00	0.00	0.00	N	0.17	0.00	0.08	N	0.17	0.00	0.08
	NO. TOWS	N	12	6	18	N	15	6	21	N	15	6	21
19SEP83	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	12	6	18	N	15	6	21	N	15	6	21
03OCT83	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	12	6	18	N	15	6	21	N	15	6	21
17OCT83	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	13	6	19	N	14	6	20	N	14	6	20

N -- STRATUM NOT SAMPLED

TABLE B-147 (CONTINUED).

WEEK BEGINNING MONDAY	BLUEBACK HERRING			ALBANY			OLDER		
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
		N	0.00	0.00	N	0.00	0.00	0.00	0.00
08AUG83		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	8	N	8	66	85	49	200
22AUG83		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	8	N	8	64	87	49	200
05SEP83		N	0.00	N	0.00	0.00	0.02	0.00	0.01
		N	0.00	N	0.00	0.00	0.02	0.00	0.01
		N	8	N	8	63	87	49	199
19SEP83		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	8	N	8	64	86	49	199
03OCT83		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	8	N	8	65	85	50	200
17OCT83		N	0.00	N	0.00	0.05	0.03	0.00	0.01
		N	0.00	N	0.00	0.05	0.03	0.00	0.01
		N	8	N	8	64	86	50	200

N -- STRATUM NOT SAMPLED

TABLE B-148
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	ALEWIFE												YOUNG-OF-THE-YEAR		
	YONKERS			TAPPAN ZEE			SHOALS			CROTON-HAVERSTRAM			REGION		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION			
08AUG83	DENSITY	0.00	0.00	0.00	0.24	0.00	0.00	0.09	2.48	0.29	0.00	0.97			
	S.E.	0.00	0.00	0.00	0.13	0.00	0.00	0.05	1.39	0.29	0.00	0.51			
	NO. TOWS	7	5	12	32	7	7	46	16	8	3	27			
22AUG83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	1.26	0.00	0.33			
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.65	0.00	0.15			
	NO. TOWS	7	5	12	29	9	8	46	16	8	3	27			
05SEP83	DENSITY	53.91	0.00	6.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	S.E.	53.91	0.00	6.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	NO. TOWS	7	5	12	29	8	8	45	16	8	2	26			
19SEP83	DENSITY	0.87	0.00	0.10	0.09	0.00	0.00	0.03	0.19	1.93	0.00	0.49			
	S.E.	0.55	0.00	0.06	0.09	0.00	0.00	0.03	0.19	1.59	0.00	0.36			
	NO. TOWS	6	5	11	31	8	8	47	15	8	3	26			
03OCT83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.22			
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68	0.00	0.15			
	NO. TOWS	6	5	11	31	7	8	46	17	8	3	28			
17OCT83	DENSITY	0.41	0.00	0.05	0.37	0.25	0.00	0.19	0.00	2.88	0.00	0.63			
	S.E.	0.41	0.00	0.05	0.18	0.25	0.00	0.08	0.00	2.05	0.00	0.45			
	NO. TOWS	7	5	12	30	8	8	46	16	7	3	26			

N -- STRATUM NOT SAMPLED

TABLE B-148 (CONTINUED).

WEEK BEGINNING MONDAY	ALEWIFE										YOUNG-OF-THE-YEAR									
	INDIAN POINT			WEST POINT			CORNWALL				CORNWALL			REGION						
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.45	0.00	1.02	0.83	N	0.00	0.00	0.00	4.22	0.00	0.00	0.00	0.00	0.00	0.24				0.24
	S.E.	0.45	0.00	1.02	0.80	N	0.00	0.00	0.00	2.04	0.00	0.00	0.00	0.00	0.00	0.12				0.12
	NO. TOWS	6	5	3	14	N	4	3	7	5	6	3	7	5	3	14				14
22AUG83	DENSITY	0.42	0.54	0.00	0.11	N	0.00	0.00	0.00	7.30	0.00	0.00	0.00	2.33	0.00	1.04				1.04
	S.E.	0.42	0.54	0.00	0.09	N	0.00	0.00	0.00	4.38	0.00	0.00	0.00	2.33	0.00	0.66				0.66
	NO. TOWS	7	5	2	14	N	5	3	8	5	5	3	8	5	3	13				13
05SEP83	DENSITY	0.00	0.00	0.00	0.00	N	0.53	0.00	0.07	0.47	0.00	0.00	0.07	0.45	0.00	0.15				0.15
	S.E.	0.00	0.00	0.00	0.00	N	0.53	0.00	0.07	0.47	0.00	0.00	0.07	0.45	0.00	0.12				0.12
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	8	5	3	13				13
19SEP83	DENSITY	0.59	0.00	0.00	0.04	N	0.92	0.00	0.13	0.89	0.00	0.00	0.13	0.47	0.00	0.17				0.17
	S.E.	0.59	0.00	0.00	0.04	N	0.92	0.00	0.13	0.56	0.00	0.00	0.13	0.47	0.00	0.13				0.13
	NO. TOWS	6	5	3	14	N	5	3	8	6	5	3	8	5	2	13				13
03OCT83	DENSITY	5.30	0.00	0.00	0.32	N	0.51	0.00	0.07	4.37	0.00	0.00	0.07	0.00	0.00	0.25				0.25
	S.E.	4.78	0.00	0.00	0.29	N	0.51	0.00	0.07	3.20	0.00	0.00	0.07	0.00	0.00	0.19				0.19
	NO. TOWS	6	5	3	14	N	4	2	6	5	6	2	6	6	4	15				15
17OCT83	DENSITY	0.41	0.42	0.00	0.09	N	2.29	0.00	0.32	32.22	0.00	0.00	0.32	0.55	0.00	2.01				2.01
	S.E.	0.41	0.42	0.00	0.07	N	2.29	0.00	0.32	31.59	0.00	0.00	0.32	0.55	0.00	1.84				1.84
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	8	5	3	13				13

N -- STRATUM NOT SAMPLED

TABLE B-148 (CONTINUED).

WEEK BEGINNING MONDAY	ALEWIFE											
	POUGHKEEPSIE				HYDE PARK				KINGSTON			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	6.51	2.08	3.11	N	11.60	0.00	2.40	N	18.59	0.75	6.78
	S.E.	3.49	2.08	1.79	N	4.36	0.00	0.90	N	3.88	0.48	1.35
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
22AUG83	DENSITY	4.47	0.00	1.04	N	3.55	0.00	0.73	N	9.29	0.36	3.37
	S.E.	3.22	0.00	0.75	N	1.62	0.00	0.34	N	4.64	0.36	1.58
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
05SEP83	DENSITY	2.04	0.00	0.47	N	1.70	0.66	0.88	N	11.83	3.22	6.13
	S.E.	1.55	0.00	0.36	N	0.80	0.66	0.55	N	4.15	3.22	2.55
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
19SEP83	DENSITY	1.33	0.00	0.31	N	2.25	0.50	0.86	N	1.99	0.00	0.67
	S.E.	0.86	0.00	0.20	N	1.19	0.50	0.47	N	0.81	0.00	0.27
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
03OCT83	DENSITY	2.70	0.00	0.63	N	1.35	1.90	1.79	N	28.81	0.00	9.73
	S.E.	1.19	0.00	0.28	N	0.60	1.90	1.51	N	13.27	0.00	4.48
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
17OCT83	DENSITY	0.47	0.00	0.11	N	6.02	0.00	1.25	N	7.84	0.00	2.65
	S.E.	0.47	0.00	0.11	N	2.71	0.00	0.56	N	1.44	0.00	0.49
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15

N -- STRATUM NOT SAMPLED

TABLE B-148 (CONTINUED).

WEEK BEGINNING MONDAY	ALEWIFE			YOUNG-OF-THE-YEAR			
	SAUGERTIES			CATSKILL			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	12.10	2.29	N	8.56	0.00	4.09
	S.E.	3.02	1.71	N	2.22	0.00	1.06
	NO. TOWS	12	6	N	15	6	21
22AUG83	DENSITY	4.62	1.06	N	15.35	1.67	8.21
	S.E.	1.81	1.06	N	5.25	1.67	2.66
	NO. TOWS	12	6	N	15	6	21
05SEP83	DENSITY	3.81	0.00	N	2.05	0.00	0.98
	S.E.	2.61	0.00	N	0.82	0.00	0.39
	NO. TOWS	12	6	N	15	6	21
19SEP83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	12	6	N	15	6	21
03OCT83	DENSITY	16.70	0.72	N	1.13	0.00	0.54
	S.E.	3.79	0.72	N	0.81	0.00	0.39
	NO. TOWS	12	6	N	15	6	21
17OCT83	DENSITY	3.29	0.41	N	1.15	0.00	0.55
	S.E.	0.71	0.41	N	0.47	0.00	0.23
	NO. TOWS	13	6	N	14	6	20

N -- STRATUM NOT SAMPLED

TABLE B-148 (CONTINUED).

WEEK BEGINNING MONDAY	ALEWIFE			YOUNG-OF-THE-YEAR			
	ALBANY			COMBINED			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	20.56	N	0.91	8.33	0.65	2.56
	S.E.	7.68	N	0.35	1.25	0.36	0.39
	NO. TOWS	8	N	66	85	49	200
22AUG83	DENSITY	7.18	N	0.32	5.40	0.20	1.48
	S.E.	3.65	N	0.16	1.07	0.13	0.28
	NO. TOWS	8	N	64	87	49	200
05SEP83	DENSITY	4.49	N	6.45	2.72	0.26	1.47
	S.E.	1.88	N	6.43	0.57	0.21	0.66
	NO. TOWS	8	N	63	87	49	199
19SEP83	DENSITY	0.00	N	0.26	0.67	0.04	0.22
	S.E.	0.00	N	0.10	0.18	0.04	0.05
	NO. TOWS	8	N	64	86	49	199
03OCT83	DENSITY	0.00	N	0.46	5.04	0.22	1.42
	S.E.	0.00	N	0.29	1.24	0.18	0.33
	NO. TOWS	8	N	65	85	50	200
17OCT83	DENSITY	0.00	N	1.44	2.01	0.03	0.66
	S.E.	0.00	N	1.15	0.30	0.03	0.14
	NO. TOWS	8	N	64	86	50	200

N -- STRATUM NOT SAMPLED

TABLE B-149
 CATCH PER UNIT EFFORT (NUMBER PER HAUL) BY WEEK AND REGION,
 BEACH SEINE SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	ALEWIFE	YOUNG-OF-THE-YEAR										AL	COMBINED
		YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG		
01AUG83	CPUE	0.00	0.21	0.00	4.80	23.40	1.17	0.40	1.20	5.56	2.50	0.00	1.71
	S.E. NO. HAULS	0.00 5	0.17 24	0.00 14	3.50 5	22.15 5	1.17 6	0.24 5	0.80 5	2.61 9	1.53 10	0.00 7	0.52 100
15AUG83	CPUE	0.00	0.00	0.00	0.00	8.40	1.17	0.80	0.80	1.33	0.50	0.14	0.61
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 5	3.41 5	1.17 6	0.80 5	0.80 5	0.69 9	0.40 10	0.14 7	0.17 100
29AUG83	CPUE	0.20	0.00	1.64	2.60	1.20	0.67	0.60	0.00	16.00	0.20	0.00	2.20
	S.E. NO. HAULS	0.20 5	0.00 24	1.64 14	2.60 5	1.20 5	0.67 6	0.60 5	0.00 5	11.23 9	0.20 10	0.00 7	1.20 100
12SEP83	CPUE	0.00	0.08	0.00	0.00	1.40	1.83	3.40	9.80	4.89	1.40	1.14	1.61
	S.E. NO. HAULS	0.00 5	0.06 24	0.00 14	0.00 5	1.40 5	1.83 6	2.93 5	4.79 5	2.01 9	1.19 10	1.14 7	0.40 100
26SEP83	CPUE	0.00	0.00	0.00	0.00	4.60	0.14	2.80	1.60	5.89	0.80	0.29	1.05
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 5	2.27 5	0.14 7	2.80 5	0.81 5	4.79 9	0.59 10	0.29 7	0.52 101
10OCT83	CPUE	0.00	0.00	0.00	0.57	0.60	0.00	0.80	1.00	2.11	0.40	0.00	0.40
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.57 7	0.40 5	0.00 6	0.80 5	0.63 6	2.11 9	0.27 10	0.00 7	0.23 102

TABLE B-150
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	ALEWIFE												YEARLING					
	YONKERS						TAPPAN ZEE						CROTON-HAVERSTRAW					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION		
02MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	NO. TOWS	3	N	3	6	3	4	3	10	3	6	10	6	3	6	15		
09MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	NO. TOWS	3	N	3	6	4	3	10	6	3	6	15	6	3	6	15		
16MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.48		
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.48		
	NO. TOWS	3	N	3	6	4	3	10	6	3	6	15	6	3	6	15		
23MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	NO. TOWS	3	N	3	6	4	3	11	5	4	4	13	5	4	4	13		
30MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	NO. TOWS	3	N	3	6	3	3	10	5	5	3	13	5	5	3	13		
06JUN83	DENSITY	0.91	N	0.00	0.11	0.00	0.00	0.98	0.00	0.00	0.00	0.37	0.87	0.00	0.00	0.32		
	S.E.	0.91	N	0.00	0.11	0.00	0.00	0.98	0.00	0.00	0.00	0.37	0.87	0.00	0.00	0.32		
	NO. TOWS	3	N	3	6	4	3	3	4	4	11	4	4	4	4	12		
13JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	NO. TOWS	1	N	8	9	5	6	3	5	6	14	4	4	6	6	16		
20JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.23	0.00	0.00	0.00	0.00		
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.23	0.00	0.00	0.00	0.00	0.00		
	NO. TOWS	1	N	8	9	5	6	3	5	6	14	4	4	6	5	15		
27JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62	0.00	0.14		
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62	0.00	0.14		
	NO. TOWS	1	N	8	9	4	6	3	4	6	13	4	4	6	6	16		
04JUL83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	NO. TOWS	1	N	8	9	5	6	3	5	6	14	4	4	6	6	16		

N -- STRATUM NOT SAMPLED

TABLE B-150 (CONTINUED).

WEEK BEGINNING MONDAY	ALEWIFE												YEARLING			
	INDIAN POINT				WEST POINT				CORNWALL							
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	7	25	36	4	30	34	5	4	30	34	5	12	6	23
09MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	8	24	36	4	30	34	5	4	30	34	5	13	5	23
16MAY83	DENSITY	1.77	0.00	0.42	0.43	0.00	0.22	0.19	0.00	0.00	0.22	0.19	0.00	0.00	0.00	0.00
	S.E.	1.77	0.00	0.31	0.26	0.00	0.15	0.13	0.00	0.00	0.15	0.13	0.00	0.00	0.00	0.00
	NO. TOWS	4	7	25	36	7	30	37	5	7	30	37	5	10	5	20
23MAY83	DENSITY	0.00	0.00	0.50	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.50	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	6	13	22	7	23	30	5	7	23	30	5	9	6	20
30MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	6	15	24	6	23	29	5	6	23	29	5	9	6	20
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.63	0.00	0.09	0.72	0.00	0.00	0.09	0.72	0.00	0.00	0.04
	S.E.	0.00	0.00	0.00	0.00	0.63	0.00	0.09	0.72	0.00	0.00	0.09	0.72	0.00	0.00	0.04
	NO. TOWS	4	6	14	24	7	23	30	5	7	23	30	5	9	5	19
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	16	26	8	25	33	3	8	25	33	3	12	13	28
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.42	0.00	0.06	0.00	0.42	0.00	0.06	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.42	0.00	0.06	0.00	0.42	0.00	0.06	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	17	27	8	25	33	3	8	25	33	3	12	13	28
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	6	16	27	8	25	33	3	8	25	33	3	12	13	28
04JUL83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	16	26	8	25	33	3	8	25	33	3	12	13	28

N -- STRATUM NOT SAMPLED

TABLE B-150 (CONTINUED).

WEEK BEGINNING MONDAY		YEARLING											
		ALEWIFE				HYDE PARK				KINGSTON			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	9	10	19	N	10	11	21	N	6	7	13
09MAY83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	10	10	20	N	10	10	20	N	6	7	13
16MAY83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	10	10	20	N	8	11	19	N	6	7	13
23MAY83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6	10
30MAY83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	16	22	38	N	7	12	19	N	5	5	10
06JUN83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6	10
13JUN83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	7	15	22	N	5	9	14	N	5	5	10
20JUN83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.63	0.00	0.21
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.63	0.00	0.21
	NO. TOWS	N	8	14	22	N	5	9	14	N	5	6	11
27JUN83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	7	15	22	N	5	9	14	N	4	6	10
04JUL83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	7	15	22	N	5	9	14	N	4	6	10

N -- STRATUM NOT SAMPLED

TABLE B-150 (CONTINUED).

WEEK BEGINNING MONDAY	ALEWIFE		YEARLING					
			SAUGERTIES			CATSKILL		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	3	3	N	3	3	6
09MAY83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	3	3	N	3	3	6
16MAY83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	4	3	N	3	3	6
23MAY83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	N	3	3	6
30MAY83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	N	3	3	6
06JUN83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	N	3	3	6
13JUN83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	4	2	N	3	3	6
20JUN83	DENSITY	N	0.00	0.00	N	2.11	0.00	1.01
	S.E.	N	0.00	0.00	N	2.11	0.00	1.01
	NO. TOWS	N	3	2	N	3	3	6
27JUN83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	4	2	N	3	3	6
04JUL83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	4	2	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-150 (CONTINUED).

WEEK BEGINNING MONDAY	ALEWIFE			YEARLING			
	ALBANY			COMBINED			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	N	0.00	0.00	0.00	0.00
	S.E.	N	N	0.00	0.00	0.00	0.00
	NO. TOWS	N	5	N	21	66	194
09MAY83	DENSITY	N	N	0.00	0.00	0.00	0.00
	S.E.	N	N	0.00	0.00	0.00	0.00
	NO. TOWS	N	5	N	21	69	194
16MAY83	DENSITY	N	0.00	N	0.42	0.00	0.09
	S.E.	N	0.00	N	0.34	0.00	0.04
	NO. TOWS	N	5	N	21	67	194
23MAY83	DENSITY	N	0.00	N	0.00	0.00	0.04
	S.E.	N	0.00	N	0.00	0.00	0.04
	NO. TOWS	N	3	N	19	68	186
30MAY83	DENSITY	N	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	3	N	19	68	186
06JUN83	DENSITY	N	0.00	N	0.88	0.03	0.09
	S.E.	N	0.00	N	0.58	0.03	0.06
	NO. TOWS	N	3	N	19	68	186
13JUN83	DENSITY	N	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	3	N	16	63	187
20JUN83	DENSITY	N	0.00	N	0.00	0.37	0.12
	S.E.	N	0.00	N	0.00	0.30	0.08
	NO. TOWS	N	3	N	16	63	187
27JUN83	DENSITY	N	0.00	N	0.00	0.04	0.01
	S.E.	N	0.00	N	0.00	0.04	0.01
	NO. TOWS	N	3	N	16	62	187
04JUL83	DENSITY	N	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	3	N	16	62	187

N -- STRATUM NOT SAMPLED

TABLE B-151
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY		ALEWIFE			YONKERS			TAPPAN ZEE			CROTON-HAVERSTRAW			REGION
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	
08AUG83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	N	5	12	32	7	7	46	16	8	3	27	
22AUG83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	N	5	12	29	9	8	46	16	8	3	27	
05SEP83	DENSITY	0.36	N	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.36	N	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	N	5	12	29	8	8	45	16	8	2	26	
19SEP83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	N	5	11	31	8	8	47	15	8	3	26	
03OCT83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	N	5	11	31	7	8	46	17	8	3	28	
17OCT83	DENSITY	0.69	N	0.00	0.08	0.00	0.49	0.00	0.10	0.00	0.00	0.00	0.00	0.00
	S.E.	0.69	N	0.00	0.08	0.00	0.49	0.00	0.10	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	N	5	12	30	8	8	46	16	7	3	26	

N -- STRATUM NOT SAMPLED

TABLE B-151 (CONTINUED).

WEEK BEGINNING MONDAY	ALEWIFE												YEARLING					
	INDIAN POINT				WEST POINT				CORNWALL				SHOAL		REGION			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION		
08AUG83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.00	0.11		
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.00	0.11		
	NO. TOWS	6	5	3	14	4	3	7	5	6	3	14	5	6	3	14		
22AUG83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	NO. TOWS	7	5	2	14	5	3	8	5	5	3	13	5	5	3	13		
05SEP83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	NO. TOWS	6	6	3	15	5	3	8	5	5	3	13	5	5	3	13		
19SEP83	DENSITY	0.00	0.00	0.00	0.00	0.53	0.00	0.00	0.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00		
	S.E.	0.00	0.00	0.00	0.00	0.53	0.00	0.00	0.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00		
	NO. TOWS	6	5	3	14	5	3	8	6	5	2	13	6	5	2	13		
03OCT83	DENSITY	0.38	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.86	0.00	0.23		
	S.E.	0.38	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54	0.00	0.14		
	NO. TOWS	6	5	3	14	4	2	6	5	4	4	15	5	6	4	15		
17OCT83	DENSITY	0.00	0.43	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	S.E.	0.00	0.43	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	NO. TOWS	6	6	3	15	5	3	8	5	5	3	13	5	5	3	13		

N -- STRATUM NOT SAMPLED

TABLE B-151 (CONTINUED).

WEEK BEGINNING MONDAY	YEARLING											
	ALEWIFE				HYDE PARK				KINGSTON			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.55	0.00	0.13	N	0.89	0.00	0.19	N	1.05	0.00	0.36
	S.E.	0.55	0.00	0.13	N	0.58	0.00	0.12	N	0.58	0.00	0.20
	NO. TOWS	N	5	8	N	6	4	10	N	9	6	15
22AUG83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	8	N	6	4	10	N	9	6	15
05SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	8	N	6	4	10	N	9	6	15
19SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	8	N	6	4	10	N	9	6	15
03OCT83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	8	N	6	4	10	N	9	6	15
17OCT83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	8	N	6	4	10	N	9	6	15

N -- STRATUM NOT SAMPLED

TABLE B-151 (CONTINUED).

WEEK BEGINNING MONDAY	ALEWIFE			SAUGERTIES			YEARLING			CATSKILL			
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
			N	0.19	0.00	0.07	N	0.00	0.00	0.00	N	0.50	0.35
08AUG83		N	0.19	0.00	0.07	N	0.00 <td>0.00</td> <td>0.00</td> <td>N</td> <td>0.27</td> <td>0.35</td> <td>0.23</td>	0.00	0.00	N	0.27	0.35	0.23
		N	0.19	0.00	0.07	N	0.00	0.00	0.00	N	15	6	21
		N	12	6	18	N	15	6	21				
22AUG83		N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	15	6	21
		N	12	6	18	N	15	6	21				
05SEP83		N	1.13	0.00	0.41	N	0.26	0.00	0.12	N	0.26	0.00	0.12
		N	0.94	0.00	0.34	N	0.26	0.00	0.12	N	15	6	21
		N	12	6	18	N	15	6	21				
19SEP83		N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	15	6	21
		N	12	6	18	N	15	6	21				
03OCT83		N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	15	6	21
		N	12	6	18	N	15	6	21				
17OCT83		N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	14	6	20
		N	13	6	19	N	14	6	20				

N -- STRATUM NOT SAMPLED

TABLE B-151 (CONTINUED).

WEEK BEGINNING MONDAY	ALEWIFE			ALBANY			YEARLING			
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
		N	0.00	N	0.00	N	0.00	0.00	0.33	0.02
08AUG83		N	0.00	N	0.00	N	0.00	0.33	0.02	0.09
		N	0.00	N	0.00	N	0.00	0.10	0.02	0.03
		N	8	N	8	N	66	85	49	200
22AUG83		N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
		N	8	N	8	N	64	87	49	200
05SEP83		N	0.31	N	0.31	N	0.04	0.20	0.00	0.05
		N	0.31	N	0.31	N	0.04	0.12	0.00	0.03
		N	8	N	8	N	63	87	49	199
19SEP83		N	0.00	N	0.00	N	0.00	0.03	0.00	0.01
		N	0.00	N	0.00	N	0.00	0.03	0.00	0.01
		N	8	N	8	N	64	86	49	199
03OCT83		N	0.00	N	0.00	N	0.02	0.06	0.00	0.02
		N	0.00	N	0.00	N	0.02	0.04	0.00	0.01
		N	8	N	8	N	65	85	50	200
17OCT83		N	0.00	N	0.00	N	0.08	0.08	0.00	0.03
		N	0.00	N	0.00	N	0.08	0.06	0.00	0.02
		N	8	N	8	N	64	86	50	200

N -- STRATUM NOT SAMPLED

TABLE B-152
 CATCH PER UNIT EFFORT (NUMBER PER HAUL) BY WEEK AND REGION,
 BEACH SEINE SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	YK	TZ	CH	ALEWIFE							YEARLING						
				IP	WP	CW	PK	HP	KG	SG	CS	AL	COMBINED				
01AUG83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7	0.00 100	0.00	0.00	
15AUG83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7	0.00 100	0.00	0.00		
29AUG83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7	0.00 100	0.00	0.00		
12SEP83	CPUE	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.20	
	S.E. NO. HAULS	0.00 5	0.04 24	0.00 14	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7	0.00 100	0.00	0.00		
26SEP83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 5	0.00 5	0.00 7	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7	0.00 101	0.00	0.00		
10OCT83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 7	0.00 5	0.00 6	0.00 5	0.00 4	0.00 6	0.00 9	0.00 7	0.00 102	0.00	0.00		

TABLE B-153
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	ALEWIFE												OLDER							
	YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW				YONKERS		TAPPAN ZEE		CROTON-HAVERSTRAW			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	4	3	10	3	4	3	10	6	3	6	15	3	6	15
09MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	4	3	10	3	4	3	10	6	3	6	15	3	6	15
16MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	4	3	10	3	4	3	10	6	3	6	15	3	6	15
23MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	4	3	11	4	4	11	5	4	4	13	4	4	4	13
30MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	3	4	10	3	3	4	5	5	3	13	3	5	3	13
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	6	3	4	4	11	4	4	11	4	4	4	12	4	4	4	12
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	9	3	5	6	14	3	5	6	14	4	6	16	3	6	6	16
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	9	3	5	6	14	3	5	6	14	4	6	15	3	6	5	15
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	9	3	4	6	13	3	4	6	13	4	6	16	3	6	6	16
04JUL83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	9	3	5	6	14	3	5	6	14	4	6	16	3	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-153 (CONTINUED).

ALEWIFE OLDER

WEEK BEGINNING MONDAY	INDIAN POINT			WEST POINT			CORNWALL					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	7	25	36	N	4	30	34	5	12	6
09MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	8	24	36	N	4	30	34	5	13	5
16MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	7	25	36	N	7	30	37	5	10	5
23MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	6	13	22	N	7	23	30	5	9	6
30MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	6	15	24	N	6	23	29	5	9	6
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	5
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	17	27	N	8	25	33	3	12	13
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	6	16	27	N	8	25	33	3	12	13
04JUL83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13

N -- STRATUM NOT SAMPLED

TABLE B-153 (CONTINUED).

WEEK BEGINNING MONDAY	POUGHKEEPSIE			ALEWIFE			HYDE PARK			OLDER			KINGSTON				
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	
	DENSITY S.E. NO. TOWS	0.00 0.00 9	0.00 0.00 10	0.00 0.00 19	N	0.00 0.00 10	0.00 0.00 11	0.00 0.00 21	N	0.00 0.00 10	0.00 0.00 11	0.00 0.00 20	N	0.00 0.00 10	0.00 0.00 11	0.00 0.00 21	N
02MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 9	0.00 0.00 10	0.00 0.00 19	N	0.00 0.00 10	0.00 0.00 11	0.00 0.00 21	N	0.00 0.00 10	0.00 0.00 11	0.00 0.00 20	N	0.00 0.00 10	0.00 0.00 11	0.00 0.00 21	N
09MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 10	0.00 0.00 10	0.00 0.00 20	N	0.00 0.00 10	0.00 0.00 10	0.00 0.00 20	N	0.00 0.00 10	0.00 0.00 10	0.00 0.00 20	N	0.00 0.00 10	0.00 0.00 10	0.00 0.00 20	N
16MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 10	0.00 0.00 10	0.00 0.00 20	N	0.00 0.00 8	0.00 0.00 11	0.00 0.00 19	N	0.00 0.00 8	0.00 0.00 11	0.00 0.00 19	N	0.00 0.00 6	0.00 0.00 7	0.00 0.00 13	N
23MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 16	0.00 0.00 22	0.00 0.00 38	N	0.00 0.00 16	0.00 0.00 22	0.00 0.00 38	N	0.00 0.00 7	0.00 0.00 12	0.00 0.00 19	N	0.00 0.00 4	0.00 0.00 6	0.00 0.00 10	N
30MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 16	0.00 0.00 22	0.00 0.00 38	N	0.00 0.00 16	0.00 0.00 22	0.00 0.00 38	N	0.00 0.00 7	0.00 0.00 12	0.00 0.00 19	N	0.00 0.00 5	0.00 0.00 5	0.00 0.00 10	N
06JUN83	DENSITY S.E. NO. TOWS	0.00 0.00 16	0.00 0.00 22	0.00 0.00 38	N	0.00 0.00 16	0.00 0.00 22	0.00 0.00 38	N	0.00 0.00 7	0.00 0.00 12	0.00 0.00 19	N	0.00 0.00 4	0.00 0.00 6	0.00 0.00 10	N
13JUN83	DENSITY S.E. NO. TOWS	0.00 0.00 7	0.00 0.00 15	0.00 0.00 22	N	0.00 0.00 7	0.00 0.00 15	0.00 0.00 22	N	0.00 0.00 5	0.00 0.00 9	0.00 0.00 14	N	0.00 0.00 5	0.00 0.00 5	0.00 0.00 10	N
20JUN83	DENSITY S.E. NO. TOWS	0.00 0.00 8	0.00 0.00 14	0.00 0.00 22	N	0.00 0.00 8	0.00 0.00 14	0.00 0.00 22	N	0.00 0.00 5	0.00 0.00 9	0.00 0.00 14	N	0.00 0.00 5	0.00 0.00 6	0.00 0.00 11	N
27JUN83	DENSITY S.E. NO. TOWS	0.00 0.00 7	0.00 0.00 15	0.00 0.00 22	N	0.00 0.00 7	0.00 0.00 15	0.00 0.00 22	N	0.00 0.00 5	0.00 0.00 9	0.00 0.00 14	N	0.00 0.00 4	0.00 0.00 6	0.00 0.00 10	N
04JUL83	DENSITY S.E. NO. TOWS	0.00 0.00 7	0.00 0.00 15	0.00 0.00 22	N	0.00 0.00 7	0.00 0.00 15	0.00 0.00 22	N	0.00 0.00 5	0.00 0.00 9	0.00 0.00 14	N	0.00 0.00 4	0.00 0.00 6	0.00 0.00 10	N

N -- STRATUM NOT SAMPLED

TABLE B-153 (CONTINUED).

WEEK BEGINNING MONDAY	ALEWIFE			SAUCERTIES			SHOAL			CATSKILL			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	3	3	N	3	3	6	3	3	N	3	3	6
09MAY83	DENSITY	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	3	3	N	3	3	6	3	3	N	3	3	6
16MAY83	DENSITY	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	4	3	N	4	3	7	3	3	N	3	3	6
23MAY83	DENSITY	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	N	5	3	8	3	3	N	3	3	6
30MAY83	DENSITY	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	N	5	3	8	3	3	N	3	3	6
06JUN83	DENSITY	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	N	5	3	8	3	3	N	3	3	6
13JUN83	DENSITY	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	4	2	N	4	2	6	3	3	N	3	3	6
20JUN83	DENSITY	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	3	2	N	3	2	5	3	3	N	3	3	6
27JUN83	DENSITY	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	4	2	N	4	2	6	3	3	N	3	3	6
04JUL83	DENSITY	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	4	2	N	4	2	6	3	3	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-153 (CONTINUED).

WEEK BEGINNING MONDAY	ALEWIFE			ALBANY			OLDER			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
	NO. TOWS	N	5	N	5	N	5	21	66	194
09MAY83	DENSITY	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
	NO. TOWS	N	5	N	5	N	5	21	69	194
16MAY83	DENSITY	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
	NO. TOWS	N	5	N	5	N	5	21	67	194
23MAY83	DENSITY	N	0.00	N	0.00	N	0.00	0.00	0.17	0.04
	S.E.	N	0.00	N	0.00	N	0.00	0.00	0.17	0.04
	NO. TOWS	N	3	N	3	N	3	19	68	186
30MAY83	DENSITY	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
	NO. TOWS	N	3	N	3	N	3	19	68	186
06JUN83	DENSITY	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
	NO. TOWS	N	3	N	3	N	3	19	68	186
13JUN83	DENSITY	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
	NO. TOWS	N	3	N	3	N	3	16	63	187
20JUN83	DENSITY	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
	NO. TOWS	N	3	N	3	N	3	16	63	187
27JUN83	DENSITY	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
	NO. TOWS	N	3	N	3	N	3	16	62	187
04JUL83	DENSITY	N	0.00	N	0.00	N	0.00	0.00	0.02	0.00
	S.E.	N	0.00	N	0.00	N	0.00	0.00	0.02	0.00
	NO. TOWS	N	3	N	3	N	3	16	62	187

N -- STRATUM NOT SAMPLED

TABLE B-154 (CONTINUED).

WEEK BEGINNING MONDAY	ALEWIFE						OLDER					
	INDIAN POINT			WEST POINT			CORNWALL			CORNWALL		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	4	3	7	5	6	3	14
22AUG83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	2	14	5	3	8	5	5	3	13
05SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	6	3	15	5	3	8	5	5	3	13
19SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	5	3	8	6	5	2	13
03OCT83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	4	2	6	5	6	4	15
17OCT83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	6	3	15	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-154 (CONTINUED).

WEEK BEGINNING MONDAY	POUGHKEEPSIE						HYDE PARK			OLDER			KINGSTON												
	SHOAL		BOTTOM		CHANNEL		REGION		SHOAL		BOTTOM		CHANNEL		REGION		SHOAL		BOTTOM		CHANNEL		REGION		
	DENSITY	S.E.	NO. TOWS	DENSITY	S.E.	NO. TOWS	DENSITY	S.E.	NO. TOWS	DENSITY	S.E.	NO. TOWS	DENSITY	S.E.	NO. TOWS	DENSITY	S.E.	NO. TOWS	DENSITY	S.E.	NO. TOWS	DENSITY	S.E.	NO. TOWS	
08AUG83	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	N	5	3	N	8	8	N	4	4	N	6	6	N	10	10	N	9	9	N	6	6	N	15	15	15
22AUG83	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	N	5	3	N	8	8	N	6	4	N	6	6	N	10	10	N	9	9	N	6	6	N	15	15	15
05SEP83	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	N	5	3	N	8	8	N	6	4	N	6	6	N	10	10	N	9	9	N	6	6	N	15	15	15
19SEP83	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	N	5	3	N	8	8	N	6	4	N	6	6	N	10	10	N	9	9	N	6	6	N	15	15	15
03OCT83	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	N	5	3	N	8	8	N	6	4	N	6	6	N	10	10	N	9	9	N	6	6	N	15	15	15
17OCT83	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	N	5	3	N	8	8	N	6	4	N	6	6	N	10	10	N	9	9	N	6	6	N	15	15	15

N -- STRATUM NOT SAMPLED

TABLE B-154 (CONTINUED).

WEEK BEGINNING MONDAY	ALEWIFE			ALBANY			OLDER			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	
	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	
08AUG83	N	0.00	N	0.00	0.00	0.00	0.00	0.03	0.00	0.01
	N	0.00	N	0.00	0.00	0.00	0.00	0.03	0.00	0.01
	N	8	N	8	8	66	85	49	200	
22AUG83	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	8	N	8	64	87	49	200		
05SEP83	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	8	N	8	63	87	49	199		
19SEP83	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	8	N	8	64	86	49	199		
03OCT83	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	8	N	8	65	85	50	200		
17OCT83	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	8	N	8	64	86	50	200		

N -- STRATUM NOT SAMPLED

TABLE B-155
 CATCH PER UNIT EFFORT (NUMBER PER HAUL) BY WEEK AND REGION,
 BEACH SEINE SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	ALEWIFE	OLDER										AL	COMBINED			
		YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG			CS		
01AUG83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7	0.00 100	0.00	0.00
15AUG83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7	0.00 100	0.00	0.00	0.00
29AUG83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7	0.00 100	0.00	0.00	0.00
12SEP83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7	0.00 100	0.00	0.00	0.00
26SEP83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 5	0.00 5	0.00 7	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7	0.00 101	0.00	0.00	0.00
10OCT83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 7	0.00 5	0.00 6	0.00 5	0.00 4	0.00 9	0.00 10	0.00 7	0.00 102	0.00	0.00	0.00

TABLE B-156
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	YOUNG-OF-THE-YEAR											
	BAY ANCHOVY				TAPPAN ZEE				CROTON-HAVERSTRAW			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	255.07	145.67	158.36	312.42	59.14	142.47	190.66	719.27	149.29	58.52	319.62
	S.E.	77.43	105.18	93.42	82.73	35.01	109.82	56.94	195.78	55.83	29.33	73.51
	NO. TOWS	7	5	12	32	7	7	46	16	8	3	27
22AUG83	DENSITY	159.55	38.25	52.32	350.85	1518.46	386.81	591.59	741.78	1435.63	254.50	692.22
	S.E.	46.55	12.34	12.17	58.07	363.13	121.12	89.95	93.86	254.40	144.62	88.93
	NO. TOWS	7	5	12	29	9	8	46	16	8	3	27
05SEP83	DENSITY	539.65	215.80	253.37	1044.84	1773.67	1692.02	1463.02	1053.75	1511.23	1123.64	1183.42
	S.E.	124.74	64.80	59.08	121.13	300.21	750.53	330.22	195.40	439.28	99.08	126.96
	NO. TOWS	7	5	12	29	8	8	45	16	8	2	26
19SEP83	DENSITY	243.22	33.56	57.88	972.70	309.61	130.95	483.76	575.47	1375.73	73.54	543.24
	S.E.	116.54	14.98	18.92	265.43	112.85	21.76	103.14	142.13	453.00	42.96	113.77
	NO. TOWS	6	5	11	31	8	8	47	15	8	3	26
03OCT83	DENSITY	173.13	99.15	107.74	646.93	421.85	398.79	497.08	546.21	828.34	320.25	514.51
	S.E.	36.04	9.61	9.47	101.53	209.53	90.29	67.88	86.01	292.86	195.76	108.34
	NO. TOWS	6	5	11	31	7	8	46	17	8	3	28
17OCT83	DENSITY	95.21	133.55	129.10	172.45	146.24	12.28	98.70	395.08	425.74	23.73	247.71
	S.E.	53.34	51.62	46.05	21.20	57.31	6.51	13.94	105.19	131.66	15.34	48.51
	NO. TOWS	7	5	12	30	8	8	46	16	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-156 (CONTINUED).

YOUNG-OF-THE-YEAR

BAY ANCHOVY

WEEK
BEGINNING
MONDAY

WEEK BEGINNING MONDAY	DENSITY S.E. NO. TOWS	INDIAN POINT			WEST POINT			CORNWALL			REGION	
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL		BOTTOM
08AUG83	92.53 37.55 6	97.22 40.47 5	447.75 259.10 3	370.06 202.00 14	N	184.65 73.06 4	41.44 20.15 3	61.19 20.08 7	286.98 80.37 5	306.57 72.48 6	14.79 7.29 3	107.37 20.25 14
22AUG83	41.52 13.95 7	91.73 45.03 5	48.43 45.62 2	54.96 36.28 14	N	109.02 32.17 5	10.83 10.83 3	24.37 10.34 8	276.18 97.68 5	121.75 53.28 5	23.18 10.34 3	63.78 16.67 13
05SEP83	69.91 26.72 6	45.72 20.32 6	42.09 23.65 3	44.36 18.79 15	N	157.05 37.34 5	137.96 102.14 3	140.59 88.20 8	110.51 51.41 5	89.33 84.82 5	51.02 32.44 3	64.55 31.50 13
19SEP83	294.33 142.76 6	196.74 143.33 5	2.75 2.75 3	51.49 24.64 14	N	78.36 65.83 5	8.75 8.75 3	18.35 11.81 8	82.98 17.55 6	138.70 60.54 5	72.82 72.82 2	90.75 51.95 13
03OCT83	13.75 5.63 6	87.54 31.27 5	17.51 11.02 3	28.51 9.95 14	N	35.39 28.61 4	20.09 4.68 2	22.20 5.64 6	304.32 38.04 5	250.87 49.48 6	101.30 53.36 4	152.44 38.56 15
17OCT83	17.42 4.64 6	499.47 309.10 6	12.67 12.67 3	91.02 50.54 15	N	126.02 63.62 5	0.00 0.00 3	17.38 8.77 8	2488.32 1777.67 5	287.04 70.51 5	46.88 18.02 3	251.55 105.37 13

N -- STRATUM NOT SAMPLED

TABLE B-156 (CONTINUED).

YOUNG-OF-THE-YEAR

BAY ANCHOVY

WEEK
BEGINNING
MONDAY

	POUGHKEEPSIE			HYDE PARK			KINGSTON					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	11.38	0.69	3.17	N	4.57	1.49	2.13	N	29.76	86.03	67.02
	S.E.	10.82	0.69	2.57	N	0.85	0.94	0.76	N	8.61	53.84	35.77
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
22AUG83	DENSITY	67.10	0.00	15.57	N	0.00	0.00	0.00	N	0.91	0.00	0.31
	S.E.	28.90	0.00	6.71	N	0.00	0.00	0.00	N	0.91	0.00	0.31
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
05SEP83	DENSITY	299.41	86.14	135.63	N	0.00	0.00	0.00	N	22.41	26.20	24.92
	S.E.	81.56	47.20	40.89	N	0.00	0.00	0.00	N	7.71	26.20	17.54
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
19SEP83	DENSITY	324.54	197.62	227.08	N	30.02	22.24	23.85	N	4.25	9.80	7.92
	S.E.	155.56	112.63	93.73	N	8.61	15.64	12.53	N	1.07	6.16	4.10
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
03OCT83	DENSITY	279.02	100.28	141.76	N	21.43	17.97	18.69	N	276.69	22.64	108.46
	S.E.	151.64	44.90	49.27	N	4.71	2.80	2.42	N	267.94	6.35	90.61
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
17OCT83	DENSITY	149.42	16.79	47.57	N	21.43	6.61	9.68	N	5.78	2.48	3.59
	S.E.	66.63	16.79	20.14	N	21.43	3.83	5.38	N	1.51	2.06	1.46
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15

N -- STRATUM NOT SAMPLED

TABLE B-156 (CONTINUED).

WEEK BEGINNING MONDAY	BAY ANCHOVY			YOUNG-OF-THE-YEAR			
	SAUGERTIES			CATSKILL			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	25.27	13.62	17.79	11.57	4.83	8.05
	S.F.	6.26	4.94	3.89	2.80	2.55	1.89
	NO. TOWS	N 12	N 6	N 18	N 15	N 6	N 21
22AUG83	DENSITY	0.64	0.00	0.23	0.00	20.86	10.89
	S.F.	0.45	0.00	0.16	0.00	20.86	10.89
	NO. TOWS	N 12	N 6	N 18	N 15	N 6	N 21
05SEP83	DENSITY	0.19	0.00	0.07	1.71	0.00	0.82
	S.F.	0.19	0.00	0.07	0.90	0.00	0.43
	NO. TOWS	N 12	N 6	N 18	N 15	N 6	N 21
19SEP83	DENSITY	5.37	10.62	8.74	9.06	0.00	4.33
	S.F.	3.23	6.71	4.46	3.64	0.00	1.74
	NO. TOWS	N 12	N 6	N 18	N 15	N 6	N 21
03OCT83	DENSITY	0.00	8.46	5.43	3.24	1.50	2.33
	S.F.	0.00	5.46	3.50	0.99	0.76	0.62
	NO. TOWS	N 12	N 6	N 18	N 15	N 6	N 21
17OCT83	DENSITY	2.14	0.00	0.77	2.11	0.00	1.01
	S.F.	0.97	0.00	0.35	1.10	0.00	0.53
	NO. TOWS	N 13	N 6	N 19	N 14	N 6	N 20

N -- STRATUM NOT SAMPLED

TABLE B-156 (CONTINUED).

WEEK BEGINNING MONDAY	BAY ANCHOVY			ALBANY			YOUNG-OF-THE-YEAR			COMBINED			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS
08AUG83	N	0.57	N	0.57	N	390.60	0.57	59.79	97.13	116.83	23.06	200	200
	N	0.37	N	0.37	N	66.18	0.37	8.49	33.55	23.06	200	200	200
	N		N		N			85	49	200	200	200	200
22AUG83	N	0.00	N	0.00	N	402.36	0.00	281.34	60.77	148.40	14.58	200	200
	N	0.00	N	0.00	N	39.55	0.00	43.63	13.88	14.58	200	200	200
	N		N		N	64		87	49	200	200	200	200
05SEP83	N	0.00	N	0.00	N	897.65	0.00	342.81	271.77	350.71	49.01	199	199
	N	0.00	N	0.00	N	82.67	0.00	43.89	71.77	49.01	199	199	199
	N		N		N	63		87	49	199	199	199	199
19SEP83	N	0.61	N	0.61	N	718.91	0.61	184.68	59.51	155.00	21.03	199	199
	N	0.61	N	0.61	N	149.81	0.61	36.59	18.34	21.03	199	199	199
	N		N		N	64		86	49	199	199	199	199
03OCT83	N	0.00	N	0.00	N	517.79	0.00	179.60	93.58	156.36	14.98	200	200
	N	0.00	N	0.00	N	59.38	0.00	41.78	14.08	14.98	200	200	200
	N		N		N	65		85	50	200	200	200	200
17OCT83	N	0.00	N	0.00	N	292.46	0.00	117.72	27.99	75.98	10.35	200	200
	N	0.00	N	0.00	N	70.67	0.00	23.42	7.76	10.35	200	200	200
	N		N		N	64		86	50	200	200	200	200

N -- STRATUM NOT SAMPLED

TABLE B-157
 CATCH PER UNIT EFFORT (NUMBER PER HAUL) BY WEEK AND REGION,
 BEACH SEINE SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	YK	TZ	CH	IP	WP	REGIONS							AL	COMBINED			
						BAY ANCHOVY									SG	CS	AL
						CW	PK	HP	KG	SG	CS	AL					
01AUG83	CPU	12.40	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.74		
	S.E.	6.65	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31		
	NO. HAULS	5	24	14	5	5	6	5	5	9	10	7	100				
15AUG83	CPU	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06		
	S.E.	0.00	0.17	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05		
	NO. HAULS	5	24	14	5	5	6	5	9	10	7	100					
29AUG83	CPU	0.20	34.50	0.00	0.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.26		
	S.E.	0.20	31.63	0.00	0.00	2.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.45		
	NO. HAULS	5	24	14	5	5	6	5	9	10	7	100					
12SEP83	CPU	0.00	2.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78		
	S.E.	0.00	1.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46		
	NO. HAULS	5	24	14	5	5	6	5	9	10	7	100					
26SEP83	CPU	0.00	0.29	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10		
	S.E.	0.00	0.15	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05		
	NO. HAULS	5	24	14	5	5	7	5	9	10	7	101					
10OCT83	CPU	5.80	0.92	8.79	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.92		
	S.E.	2.08	0.79	8.79	0.00	0.00	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.41		
	NO. HAULS	5	24	14	7	5	6	5	9	10	7	102					

TABLE B-158
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	BAY ANCHOVY												YEARLING											
	YONKERS						TAPPAN ZEE						CROTON-HAVERSTRAW											
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION								
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00								
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00								
	NO. TOWS	3	3	3	6	3	4	3	10	3	6	10	6	3	6	15								
09MAY83	DENSITY	2.87	1.52	1.68	1.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.21	0.00	0.49								
	S.E.	1.44	1.52	1.35	1.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.21	0.00	0.49								
	NO. TOWS	3	3	6	6	3	4	3	10	3	6	10	6	3	6	15								
16MAY83	DENSITY	17.18	53.29	49.10	49.10	2.44	0.99	13.28	6.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00								
	S.E.	7.52	30.20	26.71	26.71	2.44	0.99	13.28	5.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00								
	NO. TOWS	3	3	6	6	3	4	3	10	6	6	10	6	3	6	15								
23MAY83	DENSITY	44.76	74.60	71.14	71.14	14.13	0.93	0.82	5.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00								
	S.E.	10.77	35.25	31.19	31.19	11.89	0.93	0.82	4.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00								
	NO. TOWS	3	3	6	6	3	4	4	11	5	4	11	5	4	4	13								
30MAY83	DENSITY	121.59	132.85	131.55	131.55	3.93	3.13	24.37	12.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00								
	S.E.	41.85	102.16	90.44	90.44	3.93	3.13	14.07	6.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00								
	NO. TOWS	3	3	6	6	3	3	4	10	5	3	10	5	5	3	13								
06JUN83	DENSITY	30.52	57.19	54.09	54.09	16.29	18.49	5.31	12.01	0.00	0.00	0.00	0.00	0.89	0.00	0.56								
	S.E.	15.26	57.19	50.58	50.58	14.85	16.41	5.31	6.84	0.00	0.00	0.00	0.00	0.89	0.00	0.41								
	NO. TOWS	3	3	6	6	3	4	4	11	4	4	11	4	4	4	12								
13JUN83	DENSITY	1081.86	107.72	220.73	220.73	33.33	4.77	33.81	28.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00								
	S.E.	0.00	62.42	55.18	55.18	16.75	2.72	31.16	14.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00								
	NO. TOWS	1	8	9	9	3	5	6	14	4	4	14	4	6	6	16								
20JUN83	DENSITY	211.08	202.47	203.47	203.47	42.95	36.30	168.28	95.41	4.16	12.20	21.73	13.22	4.70	8.00	3.60								
	S.E.	0.00	47.70	42.16	42.16	32.72	5.67	54.37	26.42	2.56	4.70	8.00	3.60	4.70	8.00	3.60								
	NO. TOWS	1	8	9	9	3	5	6	14	4	6	5	15	6	5	15								
27JUN83	DENSITY	686.62	149.24	211.58	211.58	61.38	41.24	8.95	35.01	49.91	21.49	25.58	33.56	9.67	13.79	8.21								
	S.E.	0.00	101.04	89.31	89.31	39.02	17.99	3.03	15.22	15.04	9.67	13.79	8.21	9.67	13.79	8.21								
	NO. TOWS	1	8	9	9	3	4	6	13	4	6	6	16	6	6	16								
04JUL83	DENSITY	10.44	38.65	35.38	35.38	664.89	150.39	37.19	296.42	46.72	312.69	8.31	89.30	128.81	3.20	28.86								
	S.E.	0.00	13.36	11.81	11.81	426.60	48.78	22.26	161.89	14.42	128.81	3.20	28.86	128.81	3.20	28.86								
	NO. TOWS	1	8	9	9	3	5	6	14	6	6	6	16	6	6	16								

N -- STRATUM NOT SAMPLED

TABLE B-158 (CONTINUED).

WEEK BEGINNING MONDAY	BAY ANCHOVY												
	INDIAN POINT				WEST POINT				CORNWALL				
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	
02MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 4	0.00 0.00 7	0.00 0.00 25	0.00 0.00 36	N N N	0.00 0.00 4	0.00 0.00 30	0.00 0.00 34	0.00 0.00 5	0.00 0.00 12	0.00 0.00 6	0.00 0.00 23
09MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 4	0.00 0.00 8	0.14 0.14 24	0.11 0.11 36	N N N	0.00 0.00 4	0.00 0.00 30	0.00 0.00 34	0.00 0.00 5	0.00 0.00 13	0.00 0.00 5	0.00 0.00 23
16MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 4	0.00 0.00 7	0.00 0.00 25	0.00 0.00 36	N N N	0.00 0.00 7	0.00 0.00 30	0.00 0.00 37	0.00 0.00 5	0.00 0.00 10	0.00 0.00 5	0.00 0.00 20
23MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 3	0.00 0.00 6	0.00 0.00 13	0.00 0.00 22	N N N	0.00 0.00 7	0.00 0.00 23	0.00 0.00 30	0.00 0.00 5	0.00 0.00 9	0.00 0.00 6	0.00 0.00 20
30MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 3	0.00 0.00 6	0.00 0.00 15	0.00 0.00 24	N N N	0.00 0.00 6	0.00 0.00 23	0.00 0.00 29	0.00 0.00 5	0.00 0.00 9	0.00 0.00 6	0.00 0.00 20
06JUN83	DENSITY S.E. NO. TOWS	0.00 0.00 4	0.00 0.00 6	0.00 0.00 14	0.00 0.00 24	N N N	0.00 0.00 7	0.00 0.00 23	0.00 0.00 30	0.00 0.00 5	0.00 0.00 9	0.00 0.00 5	0.00 0.00 19
13JUN83	DENSITY S.E. NO. TOWS	0.00 0.00 5	0.00 0.00 5	0.00 0.00 16	0.00 0.00 26	N N N	0.00 0.00 8	0.00 0.00 25	0.00 0.00 33	0.00 0.00 3	0.00 0.00 12	0.00 0.00 13	0.00 0.00 28
20JUN83	DENSITY S.E. NO. TOWS	0.00 0.00 5	1.40 1.40 5	2.56 1.16 17	2.22 0.93 27	N N N	0.00 0.00 8	0.00 0.00 25	0.00 0.00 33	0.00 0.00 3	0.00 0.00 12	0.00 0.00 13	0.00 0.00 28
27JUN83	DENSITY S.E. NO. TOWS	6.25 6.25 5	2.36 2.36 6	2.04 0.78 16	2.35 0.81 27	N N N	0.00 0.00 8	0.00 0.00 25	0.00 0.00 33	0.00 0.00 3	0.00 0.00 12	0.00 0.00 13	0.00 0.00 28
04JUL83	DENSITY S.E. NO. TOWS	3.63 1.18 5	12.99 4.54 5	8.28 3.04 16	8.76 2.48 26	N N N	7.81 3.85 8	0.65 0.28 25	1.64 0.58 33	0.00 0.00 3	0.71 0.37 12	0.00 0.00 13	0.19 0.10 28

N -- STRATUM NOT SAMPLED

TABLE B-158 (CONTINUED).

WEEK BEGINNING MONDAY	BAY ANCHOVY						YEARLING					
	POUGHKEEPSIE			HYDE PARK			KINGSTON			KINGSTON		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	9	10	19	N	10	11	21	N	6	7	13
09MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	10	10	20	N	10	10	20	N	6	7	13
16MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	10	10	20	N	8	11	19	N	6	7	13
23MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10
30MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	16	22	38	N	7	12	19	N	5	5	10
06JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10
13JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	7	15	22	N	5	9	14	N	5	5	10
20JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	8	14	22	N	5	9	14	N	5	6	11
27JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10
04JUL83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10

N -- STRATUM NOT SAMPLED

TABLE B-158 (CONTINUED).

WEEK BEGINNING MONDAY	BAY ANCHOVY			ALBANY			YEARLING			
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
		N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
02MAY83		N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
		N	5	N	5	N	5	21	66	194
09MAY83		N	0.00	N	0.00	N	0.00	0.34	0.13	0.22
		N	0.00	N	0.00	N	0.00	0.17	0.13	0.21
		N	5	N	5	N	5	21	69	194
16MAY83		N	0.00	N	0.00	N	0.00	3.38	0.11	8.49
		N	0.00	N	0.00	N	0.00	1.61	0.11	4.29
		N	5	N	5	N	5	21	67	194
23MAY83		N	0.00	N	0.00	N	0.00	13.06	0.10	10.23
		N	0.00	N	0.00	N	0.00	6.62	0.10	4.80
		N	3	N	3	N	3	19	68	186
30MAY83		N	0.00	N	0.00	N	0.00	16.66	0.35	20.35
		N	0.00	N	0.00	N	0.00	5.44	0.35	13.97
		N	3	N	3	N	3	19	68	186
06JUN83		N	0.00	N	0.00	N	0.00	12.78	2.12	8.28
		N	0.00	N	0.00	N	0.00	8.31	1.84	7.80
		N	3	N	3	N	3	19	68	186
13JUN83		N	0.00	N	0.00	N	0.00	147.30	0.53	17.80
		N	0.00	N	0.00	N	0.00	9.14	0.30	8.98
		N	3	N	3	N	3	16	63	187
20JUN83		N	0.00	N	0.00	N	0.00	49.64	4.85	44.34
		N	0.00	N	0.00	N	0.00	17.88	0.70	8.23
		N	3	N	3	N	3	16	63	187
27JUN83		N	0.00	N	0.00	N	0.00	127.88	6.01	22.42
		N	0.00	N	0.00	N	0.00	21.62	2.09	13.77
		N	3	N	3	N	3	16	62	187
04JUL83		N	0.00	N	0.00	N	0.00	375.77	36.32	10.03
		N	0.00	N	0.00	N	0.00	232.94	9.30	2.77
		N	3	N	3	N	3	16	62	187

N -- STRATUM NOT SAMPLED

TABLE B-159
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	BAY ANCHOVY										YEARLING									
	YONKERS					TAPPAN ZEE					CROTON-HAVERSTRAW					REGION				
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	146.14	N	129.52	131.45	169.00	103.51	115.98	133.63	77.14	313.84	101.37	139.28							
	S.E.	37.36	N	30.53	27.33	28.94	27.97	31.01	18.05	16.11	113.74	22.24	27.32							
	NO. TOWS	7	N	5	12	32	7	7	46	16	8	3	27							
22AUG83	DENSITY	0.00	N	0.00	0.00	32.76	7.83	2.31	14.89	13.24	18.66	0.95	9.33							
	S.E.	0.00	N	0.00	0.00	9.91	1.83	2.31	3.89	2.90	3.75	0.95	1.40							
	NO. TOWS	7	N	5	12	29	9	8	46	16	8	3	27							
05SEP83	DENSITY	39.96	N	1.65	6.10	70.35	18.23	26.29	41.40	13.07	9.22	9.67	10.81							
	S.E.	11.95	N	1.02	1.65	12.03	2.58	10.58	6.45	2.93	2.52	9.67	4.19							
	NO. TOWS	7	N	5	12	29	8	8	45	16	8	2	26							
19SEP83	DENSITY	5.99	N	0.00	0.69	1.99	2.58	0.00	1.25	10.84	1.99	0.00	4.40							
	S.E.	3.95	N	0.00	0.46	0.98	1.11	0.00	0.43	3.96	0.66	0.00	1.45							
	NO. TOWS	6	N	5	11	31	8	8	47	15	8	3	26							
03OCT83	DENSITY	21.97	N	1.35	3.74	6.01	3.99	6.09	5.65	5.65	3.51	0.00	2.83							
	S.E.	5.41	N	0.91	1.02	0.87	1.15	2.03	0.96	1.75	1.18	0.00	0.69							
	NO. TOWS	6	N	5	11	31	7	8	46	17	8	3	28							
17OCT83	DENSITY	10.65	N	2.54	3.48	1.84	3.34	0.28	1.46	1.53	3.97	0.00	1.43							
	S.E.	4.21	N	1.56	1.46	0.51	1.85	0.28	0.42	1.14	1.16	0.00	0.49							
	NO. TOWS	7	N	5	12	30	8	8	46	16	7	3	26							

N -- STRATUM NOT SAMPLED

TABLE B-159 (CONTINUED).

WEEK BEGINNING MONDAY	BAY ANCHOVY										YEARLING							
	INDIAN POINT					WEST POINT					CORNWALL							
	DENSITY S.E. NO. TOWS	SHOAL BOTTOM	CHANNEL	REGION	SHOAL	DENSITY S.E. NO. TOWS	SHOAL BOTTOM	CHANNEL	REGION	SHOAL	DENSITY S.E. NO. TOWS	SHOAL BOTTOM	CHANNEL	REGION	DENSITY S.E. NO. TOWS	SHOAL BOTTOM	CHANNEL	REGION
08AUG83	57.41 34.94 6	42.94 34.72 5	54.20 36.93 3	52.59 29.39 14	N	12.77 4.34 4	10.81 10.81 3	11.08 9.34 7	43.17 20.77 5	10.69 2.91 6	0.00 0.00 3	5.32 1.43 14						
22AUG83	4.23 1.43 7	1.57 1.07 5	0.00 0.00 2	0.51 0.19 14	N	0.00 0.00 5	0.00 0.00 3	0.00 0.00 8	164.68 69.47 5	0.00 0.00 5	0.00 0.00 3	9.54 4.03 13						
05SEP83	9.77 2.86 6	7.87 2.73 6	0.00 0.00 3	1.85 0.47 15	N	12.28 3.00 5	27.17 8.38 3	25.12 7.23 8	67.57 19.05 5	18.87 6.39 5	3.15 1.63 3	11.02 2.30 13						
19SEP83	3.65 1.20 6	0.00 0.00 5	0.00 0.00 3	0.22 0.07 14	N	11.43 5.04 5	2.02 2.02 3	3.32 1.88 8	14.28 6.90 6	10.20 3.75 5	0.00 0.00 2	3.51 1.07 13						
03OCT83	3.06 2.63 6	3.35 2.37 5	0.00 0.00 3	0.72 0.41 14	N	3.78 1.27 4	2.20 2.20 2	2.42 1.91 6	10.96 2.98 5	15.31 1.30 6	0.58 0.58 4	5.06 0.55 15						
17OCT83	2.33 1.41 6	1.24 0.86 6	0.00 0.00 3	0.34 0.16 15	N	2.99 1.36 5	0.00 0.00 3	0.41 0.19 8	20.05 9.91 5	6.29 2.24 5	0.00 0.00 3	2.82 0.82 13						

N -- STRATUM NOT SAMPLED

TABLE B-159 . (CONTINUED).

WEEK BEGINNING MONDAY .	POUGHKEEPSIE			HYDE PARK			YEARLING			KINGSTON			
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83		N	19.43	5.50	8.73	N	0.84	0.00	0.17	N	0.48	0.58	0.55
		N	17.00	4.58	5.29	N	0.56	0.00	0.12	N	0.48	0.58	0.42
		N		3	8	N	6	4	10	N	9	6	15
22AUG83		N	33.60	0.00	7.80	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N	21.10	0.00	4.90	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N		3	8	N	6	4	10	N	9	6	15
05SEP83		N	20.20	12.51	14.29	N	0.00	0.00	0.00	N	1.56	0.46	0.83
		N	6.16	12.51	9.71	N	0.00	0.00	0.00	N	0.90	0.46	0.43
		N		3	8	N	6	4	10	N	9	6	15
19SEP83		N	13.91	0.88	3.91	N	1.14	0.00	0.24	N	0.00	0.00	0.00
		N	6.11	0.88	1.57	N	0.79	0.00	0.16	N	0.00	0.00	0.00
		N		3	8	N	6	4	10	N	9	6	15
03OCT83		N	23.94	0.73	6.12	N	0.38	0.56	0.53	N	0.00	0.00	0.00
		N	10.79	0.73	2.57	N	0.38	0.56	0.45	N	0.00	0.00	0.00
		N		3	8	N	6	4	10	N	9	6	15
17OCT83		N	10.97	0.00	2.54	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N	5.63	0.00	1.31	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N		3	8	N	6	4	10	N	9	6	15

N -- STRATUM NOT SAMPLED

TABLE B-159 (CONTINUED).

WEEK BEGINNING MONDAY	BAY ANCHOVY			YEARLING			
	SAUGERTIES			CATSKILL			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	12	6	N	18	6	21
22AUG83	DENSITY	0.00	0.00	N	0.00	0.42	0.22
	S.E.	0.00	0.00	N	0.00	0.42	0.22
	NO. TOWS	12	6	N	15	6	21
05SEP83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	12	6	N	18	6	21
19SEP83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	12	6	N	15	6	21
03OCT83	DENSITY	0.00	0.00	N	0.00	0.00	0.08
	S.E.	0.00	0.00	N	0.17	0.00	0.08
	NO. TOWS	12	6	N	15	6	21
17OCT83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	13	6	N	14	6	20

N -- STRATUM NOT SAMPLED

TABLE B-159 (CONTINUED).

WEEK BEGINNING MONDAY	BAY ANCHOVY			ALBANY			YEARLING			COMBINED			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
	DENSITY	DENSITY	DENSITY	DENSITY	DENSITY	DENSITY	DENSITY	DENSITY	DENSITY	DENSITY	DENSITY	DENSITY	REGION
08AUG83	N	0.00	N	0.00	N	0.00	133.18	36.38	40.65	48.70			
	N	0.00	N	0.00	N	0.00	17.00	7.93	6.69	5.09			
	N	8	N	8	N	8	66	85	49	200			
22AUG83	N	0.00	N	0.00	N	0.00	27.31	6.24	0.28	4.40			
	N	0.00	N	0.00	N	0.00	6.01	2.65	0.22	0.89			
	N	8	N	8	N	8	64	87	49	200			
05SEP83	N	0.00	N	0.00	N	0.00	49.35	7.58	8.48	12.27			
	N	0.00	N	0.00	N	0.00	6.80	0.96	2.42	1.74			
	N	8	N	8	N	8	63	87	49	199			
19SEP83	N	0.00	N	0.00	N	0.00	5.15	3.47	0.38	1.60			
	N	0.00	N	0.00	N	0.00	1.22	0.85	0.28	0.30			
	N	8	N	8	N	8	64	86	49	199			
03OCT83	N	0.00	N	0.00	N	0.00	7.84	5.09	1.21	2.81			
	N	0.00	N	0.00	N	0.00	0.93	1.36	0.37	0.42			
	N	8	N	8	N	8	65	85	50	200			
17OCT83	N	0.00	N	0.00	N	0.00	3.51	2.62	0.37	1.23			
	N	0.00	N	0.00	N	0.00	0.74	0.75	0.21	0.24			
	N	8	N	8	N	8	64	86	50	200			

N -- STRATUM NOT SAMPLED

TABLE B-160
 CATCH PER UNIT EFFORT (NUMBER PER HAUL) BY WEEK AND REGION,
 BEACH SEINE SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	YK	TZ	CH	BAY ANCHOVY							YEARLING						
				IP	WP	CW	PK	HP	KG	SG	CS	AL	COMBINED				
01AUG83	CPUE S.E. NO. HAULS	4.63 1.42 24 5	0.00 0.00 14	0.00 0.00 5	0.00 0.00 6	0.00 0.00 5	0.00 0.00 5	0.00 0.00 5	0.00 0.00 9	0.00 0.00 10	0.00 0.00 7	0.00 0.00 7	1.73 3.98 100				
15AUG83	CPUE S.E. NO. HAULS	0.21 0.12 24 5	0.00 0.00 14	0.00 0.00 5	0.00 0.00 6	0.00 0.00 5	0.00 0.00 5	0.00 0.00 9	0.00 0.00 10	0.00 0.00 7	0.00 0.00 7	0.06 0.46 100					
29AUG83	CPUE S.E. NO. HAULS	0.00 0.00 24 5	0.00 0.00 14	0.00 0.00 5	0.00 0.00 6	0.00 0.00 5	0.00 0.00 5	0.00 0.00 9	0.00 0.00 10	0.00 0.00 7	0.00 0.00 7	0.00 0.00 100					
12SEP83	CPUE S.E. NO. HAULS	0.20 0.20 24 5	0.00 0.00 14	0.00 0.00 5	0.00 0.00 6	0.00 0.00 5	0.00 0.00 5	0.00 0.00 9	0.00 0.00 10	0.00 0.00 7	0.00 0.00 7	0.10 0.73 100					
26SEP83	CPUE S.E. NO. HAULS	0.40 0.40 24 5	0.00 0.00 14	0.00 0.00 5	0.00 0.00 7	0.00 0.00 5	0.00 0.00 5	0.00 0.00 9	0.00 0.00 10	0.00 0.00 7	0.00 0.00 7	0.02 0.63 101					
10OCT83	CPUE S.E. NO. HAULS	2.00 2.00 24 5	0.00 0.00 14	0.00 0.00 7	0.00 0.00 6	0.00 0.00 5	0.00 0.00 4	0.00 0.00 9	0.00 0.00 10	0.00 0.00 7	0.00 0.00 7	0.09 1.41 102					

TABLE B-161
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	YONKERS						BAY ANCHOVY			OLDER			CROTON-HAVERSTRAW					
	SHOAL		BOTTOM		CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
	DENSITY	S.E.	DENSITY	S.E.	DENSITY	DENSITY	DENSITY	DENSITY	DENSITY	DENSITY	DENSITY	DENSITY	DENSITY	DENSITY	DENSITY	DENSITY	DENSITY	DENSITY
02MAY83	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3	3	N	3	6	3	4	3	10	6	3	3	6	15	6	3	6	15
09MAY83	15.85	0.00	N	0.00	1.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3	3	N	3	6	3	4	3	10	6	3	3	6	15	6	3	6	15
16MAY83	2.51	40.79	N	0.00	36.35	0.00	0.00	10.86	4.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3	3	N	3	6	3	4	3	10	6	3	3	6	15	6	3	6	15
23MAY83	5.95	0.00	N	0.00	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3	3	N	3	6	3	4	3	11	5	4	4	4	13	5	4	4	13
30MAY83	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3	3	N	3	6	3	3	4	10	5	3	5	3	13	5	3	3	13
06JUN83	0.00	0.00	N	0.00	0.00	0.00	0.83	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3	3	N	3	6	3	4	4	11	4	4	4	4	12	4	4	4	12
13JUN83	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1	8	N	3	9	3	5	6	14	4	6	6	6	16	4	6	6	16
20JUN83	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1	8	N	3	9	3	5	6	14	4	6	6	6	15	4	6	6	15
27JUN83	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1	8	N	3	9	3	4	6	13	4	6	6	6	16	4	6	6	16
04JUL83	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1	8	N	3	9	3	5	6	14	4	6	6	6	16	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-161 (CONTINUED).

WEEK BEGINNING MONDAY	BAY ANCHOVY			OLDER			CORNWALL					
	INDIAN POINT			WEST POINT			SHOAL					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	7	25	36	N	4	30	34	5	12	6
09MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	8	24	36	N	4	30	34	5	13	5
16MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	7	25	36	N	7	30	37	5	10	5
23MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	6	13	22	N	7	23	30	5	9	6
30MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	6	15	24	N	6	23	29	5	9	6
06JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	5
13JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13
20JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	17	27	N	8	25	33	3	12	13
27JUN83	DENSITY	0.00	0.00	0.20	N	0.00	0.00	0.16	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.20	N	0.00	0.00	0.16	N	0.00	0.00	0.00
	NO. TOWS	5	6	16	27	N	8	25	33	3	12	13
04JUL83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13

N -- STRATUM NOT SAMPLED

TABLE B-161 (CONTINUED).

WEEK BEGINNING MONDAY	BAY ANCHOVY						POUGHKEEPSIE						HYDE PARK						OLDER						KINGSTON							
	SHOAL		BOTTOM		CHANNEL		REGION		SHOAL		BOTTOM		CHANNEL		REGION		SHOAL		BOTTOM		CHANNEL		REGION		SHOAL		BOTTOM		CHANNEL		REGION	
	DENSITY	S.E.	NO. TOWS	DENSITY	S.E.	NO. TOWS	DENSITY	S.E.	NO. TOWS	DENSITY	S.E.	NO. TOWS	DENSITY	S.E.	NO. TOWS	DENSITY	S.E.	NO. TOWS	DENSITY	S.E.	NO. TOWS	DENSITY	S.E.	NO. TOWS	DENSITY	S.E.	NO. TOWS	DENSITY	S.E.	NO. TOWS	DENSITY	S.E.
02MAY83	N	0.00	9	N	0.00	10	0.00	19	N	0.00	11	0.00	21	N	0.00	6	N	0.00	7	N	0.00	13	N	0.00	6	N	0.00	7	N	0.00	13	
09MAY83	N	0.00	10	N	0.00	10	0.00	20	N	0.00	10	0.00	20	N	0.00	6	N	0.00	7	N	0.00	13	N	0.00	6	N	0.00	7	N	0.00	13	
16MAY83	N	0.00	10	N	0.00	10	0.00	20	N	0.00	11	0.00	19	N	0.00	6	N	0.00	7	N	0.00	13	N	0.00	6	N	0.00	7	N	0.00	13	
23MAY83	N	0.00	16	N	0.00	22	0.00	38	N	0.00	12	0.00	19	N	0.00	4	N	0.00	6	N	0.00	10	N	0.00	4	N	0.00	6	N	0.00	10	
30MAY83	N	0.00	16	N	0.00	22	0.00	38	N	0.00	12	0.00	19	N	0.00	5	N	0.00	6	N	0.00	10	N	0.00	5	N	0.00	6	N	0.00	10	
06JUN83	N	0.00	16	N	0.00	22	0.00	38	N	0.00	12	0.00	19	N	0.00	4	N	0.00	6	N	0.00	10	N	0.00	4	N	0.00	6	N	0.00	10	
13JUN83	N	0.00	7	N	0.00	15	0.00	22	N	0.00	9	0.00	14	N	0.00	5	N	0.00	6	N	0.00	10	N	0.00	5	N	0.00	6	N	0.00	10	
20JUN83	N	0.00	8	N	0.00	14	0.00	22	N	0.00	9	0.00	14	N	0.00	5	N	0.00	6	N	0.00	10	N	0.00	5	N	0.00	6	N	0.00	10	
27JUN83	N	0.00	7	N	0.00	15	0.00	22	N	0.00	9	0.00	14	N	0.00	4	N	0.00	6	N	0.00	10	N	0.00	4	N	0.00	6	N	0.00	10	
04JUL83	N	0.00	7	N	0.00	15	0.00	22	N	0.00	9	0.00	14	N	0.00	4	N	0.00	6	N	0.00	10	N	0.00	4	N	0.00	6	N	0.00	10	

N -- STRATUM NOT SAMPLED

TABLE B-161 (CONTINUED).

WEEK BEGINNING MONDAY	BAY ANCHOVY			SAUGERTIES			CATSKILL			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	3	3	N	3	6	N	3	3	6
09MAY83	DENSITY	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	3	3	N	3	6	N	3	3	6
16MAY83	DENSITY	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	4	3	N	4	7	N	3	3	6
23MAY83	DENSITY	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	N	5	8	N	3	3	6
30MAY83	DENSITY	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	N	5	8	N	3	3	6
06JUN83	DENSITY	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	N	5	8	N	3	3	6
13JUN83	DENSITY	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	4	2	N	4	6	N	3	3	6
20JUN83	DENSITY	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	3	2	N	3	5	N	3	3	6
27JUN83	DENSITY	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	4	2	N	4	6	N	3	3	6
04JUL83	DENSITY	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	4	2	N	4	6	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-161 (CONTINUED).

WEEK BEGINNING MONDAY	BAY ANCHOVY			ALBANY			OLDER				
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
		N	0.00	N	0.00	N	0.00	0.00	0.00	0.00	0.00
02MAY83		N	0.00	N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	5	N	5	N	5	21	66	107	194
09MAY83		N	0.00	N	0.00	N	0.00	1.89	0.00	0.00	0.19
		N	0.00	N	0.00	N	0.00	1.89	0.00	0.00	0.19
		N	5	N	5	N	5	21	69	104	194
16MAY83		N	0.00	N	0.00	N	0.00	0.30	0.00	6.56	4.34
		N	0.00	N	0.00	N	0.00	0.30	0.00	2.80	1.84
		N	5	N	5	N	5	21	67	106	194
23MAY83		N	0.00	N	0.00	N	0.00	0.71	0.00	0.00	0.07
		N	0.00	N	0.00	N	0.00	0.71	0.00	0.00	0.07
		N	3	N	3	N	3	19	68	99	186
30MAY83		N	0.00	N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	3	N	3	N	3	19	68	99	186
06JUN83		N	0.00	N	0.00	N	0.00	0.00	0.09	0.00	0.02
		N	0.00	N	0.00	N	0.00	0.00	0.09	0.00	0.02
		N	3	N	3	N	3	19	68	99	186
13JUN83		N	0.00	N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	3	N	3	N	3	16	63	108	187
20JUN83		N	0.00	N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	3	N	3	N	3	16	63	108	187
27JUN83		N	0.00	N	0.00	N	0.00	0.00	0.00	0.02	0.01
		N	0.00	N	0.00	N	0.00	0.00	0.00	0.02	0.01
		N	3	N	3	N	3	16	62	109	187
04JUL83		N	0.00	N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	3	N	3	N	3	16	62	109	187

N -- STRATUM NOT SAMPLED

TABLE B-162
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	BAY ANCHOVY						OLDER					
	YONKERS		TAPPAN ZEE		CROTON-HAVERSTRAW		YONKERS		TAPPAN ZEE		CROTON-HAVERSTRAW	
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	N	5	12	32	7	7	46	16	8	3
22AUG83	DENSITY	0.00	N	0.00	0.62	0.00	0.00	0.24	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.62	0.00	0.00	0.24	0.00	0.00	0.00	0.00
	NO. TOWS	7	N	5	29	9	8	46	16	8	3	27
05SEP83	DENSITY	0.00	N	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.48	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	N	5	12	29	8	45	16	8	2	26
19SEP83	DENSITY	0.00	N	0.00	0.09	0.00	0.00	0.03	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.09	0.00	0.00	0.03	0.00	0.00	0.00	0.00
	NO. TOWS	6	N	5	31	8	8	47	15	8	3	26
03OCT83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	N	5	11	31	7	46	17	8	3	28
17OCT83	DENSITY	0.00	N	0.46	0.33	0.00	0.00	0.12	0.36	0.00	0.00	0.13
	S.E.	0.00	N	0.46	0.33	0.00	0.00	0.12	0.36	0.00	0.00	0.13
	NO. TOWS	7	N	5	12	8	8	46	16	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-162 (CONTINUED).

WEEK BEGINNING MONDAY	BAY ANCHOVY															
	INDIAN POINT				WEST POINT				OLDER				CORNWALL			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	4	3	7	5	6	3	14	5	6	3	14
22AUG83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	2	14	5	3	8	5	5	3	13	5	5	3	13
05SEP83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.72	0.00	0.00	0.72
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.72	0.00	0.00	0.72
	NO. TOWS	6	6	3	15	5	3	8	5	5	3	13	5	5	3	13
19SEP83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.86	0.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.86	0.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	5	3	8	6	5	2	13	6	5	2	13
03OCT83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	4	2	6	5	6	4	15	5	6	4	15
17OCT83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	6	3	15	5	3	8	5	5	3	13	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-162 (CONTINUED).

WEEK BEGINNING MONDAY	BAY ANCHOVY						OLDER					
	POUGHKEEPSIE			HYDE PARK			SHOAL			KINGSTON		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	N	9	6	15
22AUG83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	N	9	6	15
05SEP83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	N	9	6	15
19SEP83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	N	9	6	15
03OCT83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	N	9	6	15
17OCT83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	N	9	6	15

N -- STRATUM NOT SAMPLED

TABLE B-162 (CONTINUED).

WEEK BEGINNING MONDAY	BAY ANCHOVY			SAUCERTIES			OLDER			CATSKILL					
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
			N	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00
08AUG83		N	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N	12	N	12	6	18	N	15	6	21	N	15	6	21
22AUG83		N	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N	12	N	12	6	18	N	15	6	21	N	15	6	21
05SEP83		N	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N	12	N	12	6	18	N	15	6	21	N	15	6	21
19SEP83		N	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N	12	N	12	6	18	N	15	6	21	N	15	6	21
03OCT83		N	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N	12	N	12	6	18	N	15	6	21	N	15	6	21
17OCT83		N	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
		N	13	N	13	6	19	N	14	6	20	N	14	6	20

N -- STRATUM NOT SAMPLED

TABLE B-162 (CONTINUED).

WEEK BEGINNING MONDAY	BAY ANCHOVY			ALBANY			OLDER				
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
			N	0.00	N	0.00	N	0.00	0.00	0.00	0.00
08AUG83		N	0.00	N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	8	N	8	N	8	66	85	49	200
22AUG83		N	0.00	N	0.00	N	0.00	0.34	0.00	0.00	0.03
		N	0.00	N	0.00	N	0.00	0.34	0.00	0.00	0.03
		N	8	N	8	N	8	64	87	49	200
05SEP83		N	0.00	N	0.00	N	0.00	0.00	0.18	0.07	0.09
		N	0.00	N	0.00	N	0.00	0.00	0.18	0.07	0.06
		N	8	N	8	N	8	63	87	49	199
19SEP83		N	0.00	N	0.00	N	0.00	0.05	0.00	0.10	0.07
		N	0.00	N	0.00	N	0.00	0.05	0.00	0.10	0.07
		N	8	N	8	N	8	64	86	49	199
03OCT83		N	0.00	N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	8	N	8	N	8	65	85	50	200
17OCT83		N	0.00	N	0.00	N	0.00	0.27	0.00	0.06	0.07
		N	0.00	N	0.00	N	0.00	0.20	0.00	0.06	0.05
		N	8	N	8	N	8	64	86	50	200

N -- STRATUM NOT SAMPLED

TABLE B-163
 CATCH PER UNIT EFFORT (NUMBER PER HAUL) BY WEEK AND REGION,
 BEACH SEINE SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY		BAY ANCHOVY										AL	COMBINED				
		YK	TZ	CH	IP	WP	REGIONS			SG	CS						
											CW	PK	HP	KG			
01AUG83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. HAULS	5	24	14	5	5	5	5	5	5	6	5	5	5	5	10	100
15AUG83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. HAULS	5	24	14	5	5	5	5	5	5	6	5	5	5	5	10	100
29AUG83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. HAULS	5	24	14	5	5	5	5	5	5	6	5	5	5	5	10	100
12SEP83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. HAULS	5	24	14	5	5	5	5	5	5	6	5	5	5	5	10	100
26SEP83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. HAULS	5	24	14	5	5	5	5	5	5	7	5	5	5	5	10	101
10OCT83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. HAULS	5	24	14	7	5	5	5	5	5	6	5	4	6	7	10	102

TABLE B-164
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	WEAKFISH										YOUNG-OF-THE-YEAR			
	YONKERS			TAPPAN ZEE			CROTON-IAVERSTRAW			REGION				
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	14.80		6.98	7.89	11.31	1.00	2.81	5.67	4.73	8.73	8.73	0.00	3.65
	S.E.	4.12		6.26	5.55	2.97	1.00	2.10	1.45	1.68	4.97	4.97	0.00	1.25
	NO. TOWS	7		5	12	32	7	7	46	16	8	8	3	27
22AUG83	DENSITY	3.58		0.00	0.42	21.12	4.04	0.00	8.77	1.45	5.76	5.76	0.00	1.79
	S.E.	3.58		0.00	0.42	4.58	1.52	0.00	1.76	0.65	1.53	1.53	0.00	0.41
	NO. TOWS	7		5	12	29	9	8	46	16	8	8	3	27
05SEP83	DENSITY	6.29		0.86	1.49	1.92	2.17	1.06	1.60	5.67	1.81	1.81	2.42	3.47
	S.E.	2.59		0.54	0.56	0.45	0.90	0.75	0.40	2.18	0.99	0.99	2.42	1.30
	NO. TOWS	7		5	12	29	8	8	45	16	8	8	2	26
19SEP83	DENSITY	2.98		0.00	0.35	0.53	0.33	0.00	0.26	0.38	2.35	2.35	0.00	0.66
	S.E.	2.48		0.00	0.29	0.32	0.33	0.00	0.14	0.26	1.09	1.09	0.00	0.26
	NO. TOWS	6		5	11	31	8	8	47	15	8	8	3	26
03OCT83	DENSITY	8.75		0.00	1.01	0.42	5.85	0.33	1.43	0.65	0.94	0.94	0.00	0.45
	S.E.	2.42		0.00	0.28	0.18	4.15	0.33	0.82	0.30	0.63	0.63	0.00	0.18
	NO. TOWS	6		5	11	31	7	8	46	17	8	8	3	28
17OCT83	DENSITY	6.27		3.76	4.05	0.82	2.48	0.00	0.79	0.00	0.38	0.38	0.00	0.08
	S.E.	3.10		3.76	3.34	0.38	1.42	0.00	0.31	0.00	0.38	0.38	0.00	0.08
	NO. TOWS	7		5	12	30	8	8	46	16	7	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-164 (CONTINUED).

WEAKFISH

YOUNG-01 - THE-YEAR

WEEK
BEGINNING
MONDAY

WEEK BEGINNING MONDAY	DENSITY S.E. NO. TOWS	INDIAN POINT			WEST POINT			CORNWALL			REGION	
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL		BOTTOM
08AUG83	4.30 1.65 6	6.26 3.32 5	16.26 11.94 3	13.94 9.32 14	N	6.58 3.04 4	0.64 0.64 3	1.46 0.69 7	2.36 2.36 5	4.10 2.20 6	0.00 0.00 3	1.22 0.59 14
22AUG83	0.00 0.00 7	2.68 1.48 5	0.00 0.00 2	0.43 0.24 14	N	11.76 3.23 5	0.00 0.00 3	1.62 0.45 8	15.42 15.42 5	0.47 0.47 5	0.00 0.00 3	1.02 0.90 13
05SEP83	5.77 2.44 6	3.99 1.84 6	0.00 0.00 3	0.99 0.33 15	N	1.07 0.65 5	0.89 0.89 3	0.91 0.77 8	1.90 0.88 5	5.44 2.52 5	0.66 0.66 3	1.99 0.80 13
19SEP83	0.00 0.00 6	0.00 0.00 5	0.00 0.00 3	0.00 0.00 14	N	1.48 1.48 5	0.00 0.00 3	0.20 0.20 8	3.45 2.32 6	0.48 0.48 5	0.00 0.00 2	0.33 0.18 13
03OCT83	0.89 0.89 6	9.08 9.08 5	0.00 0.00 3	1.51 1.46 14	N	0.51 0.51 4	0.00 0.00 2	0.07 0.07 6	1.65 1.65 5	0.45 0.45 6	0.00 0.00 4	0.21 0.15 15
17OCT83	0.00 0.00 6	1.59 0.77 6	0.00 0.00 3	0.26 0.12 15	N	0.56 0.56 5	0.00 0.00 3	0.08 0.08 8	2.04 1.47 5	3.19 2.63 5	0.00 0.00 3	0.96 0.70 13

N -- STRATIUM NOT SAMPLED

TABLE B-164 (CONTINUED).

WEAKFISH

POUGHKEEPSIE

HYDE PARK

KINGSTON

WEEK
BEGINNING
MONDAY

	POUGHKEEPSIE			HYDE PARK			KINGSTON			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	N	6	4	N	9	6	15
22AUG83	DENSITY	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	N	6	4	N	9	6	15
05SEP83	DENSITY	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.F.	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	N	6	4	N	9	6	15
19SEP83	DENSITY	0.98	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.F.	0.98	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	N	6	4	N	9	6	15
03OCT83	DENSITY	1.51	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.F.	0.99	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	N	6	4	N	9	6	15
17OCT83	DENSITY	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	N	6	4	N	9	6	15

N -- STRATUM NOT SAMPLED

TABLE B-164 (CONTINUED).

WEEK BEGINNING MONDAY	WEAKFISH			YOUNG-OF-THE-YEAR					
				SAUGERTIES			CATSKILL		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	
08AUG83	DENSITY	N	0.00	0.30	0.19	N	0.00	0.00	0.00
	S.E.	N	0.00	0.30	0.19	N	0.00	0.00	0.00
	NO. TOWS	N	12	6	18	N	15	6	21
22AUG83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	12	6	18	N	15	6	21
05SEP83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	12	6	18	N	15	6	21
19SEP83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	12	6	18	N	15	6	21
03OCT83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	12	6	18	N	15	6	21
17OCT83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	13	6	19	N	14	6	20

N -- STRATUM NOT SAMPLED

TABLE B-164 (CONTINUED).

WEEK BEGINNING MONDAY	WEAKFISH			YOUNG-OF-THE-YEAR					
				ALBANY			COMBINED		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	
08AUG83	DENSITY	0.00	N	0.00	9.41	1.61	3.08	3.34	
	S.E.	0.00	N	0.00	1.75	0.43	1.57	1.05	
	NO. TOWS	8	N	8	66	85	49	200	
22AUG83	DENSITY	0.00	N	0.00	12.87	1.59	0.00	1.65	
	S.E.	0.00	N	0.00	2.60	0.27	0.00	0.26	
	NO. TOWS	8	N	8	64	87	49	200	
05SEP83	DENSITY	0.00	N	0.00	3.56	1.00	0.46	0.90	
	S.E.	0.00	N	0.00	0.67	0.23	0.18	0.15	
	NO. TOWS	8	N	8	63	87	49	199	
19SEP83	DENSITY	0.00	N	0.00	0.86	0.40	0.00	0.18	
	S.E.	0.00	N	0.00	0.36	0.16	0.00	0.05	
	NO. TOWS	8	N	8	64	86	49	199	
03OCT83	DENSITY	0.00	N	0.00	1.54	1.50	0.03	0.54	
	S.E.	0.00	N	0.00	0.32	0.73	0.03	0.18	
	NO. TOWS	8	N	8	65	85	50	200	
17OCT83	DENSITY	0.00	N	0.00	1.27	0.64	0.51	0.62	
	S.E.	0.00	N	0.00	0.43	0.24	0.51	0.34	
	NO. TOWS	8	N	8	64	86	50	200	

N -- STRATUM NOT SAMPLED

TABLE B-165
 CATCH PER UNIT EFFORT (NUMBER PER HAUL) BY WEEK AND REGION,
 BEACH SEINE SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	YK	TZ	CH	IP	WP	REGIONS						AL	COMBINED
						CW	PK	HP	KG	SG	CS		
01AUG83	CPUE	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12
	S.E.	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12
	NO. HAULS	24	14	5	5	5	6	5	5	9	10	7	100
15AUG83	CPUE	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	S.E.	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	NO. HAULS	24	14	5	5	5	6	5	5	9	10	7	100
29AUG83	CPUE	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	S.E.	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	NO. HAULS	24	14	5	5	5	6	5	5	9	10	7	100
12SEP83	CPUE	3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18
	S.E.	0.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
	NO. HAULS	5	14	5	5	5	6	5	5	9	10	7	100
26SEP83	CPUE	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	S.E.	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	NO. HAULS	5	14	5	5	5	7	5	5	9	10	7	101
10OCT83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. HAULS	5	14	7	5	5	6	5	4	9	10	7	102

WEAKFISH
 YOUNG-OF-THE-YEAR

TABLE B-166
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WHITE CATFISH YOUNG-OF-THE-YEAR

WEEK
 BEGINNING
 MONDAY

WEEK BEGINNING MONDAY	YONKERS			TAPPAN ZEE			CROTON-HAVERSTRAM					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	3	6	4	3	10	6	3	6	15
09MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	3	10	6	3	6	15
16MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	3	10	6	3	6	15
23MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	4	11	5	4	4	13
30MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	3	4	10	5	5	3	13
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	4	11	4	4	4	12
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	5	6	14	4	6	6	16
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	5	6	14	4	6	5	15
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	4	6	13	4	6	6	16
04JUL83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-166 (CONTINUED).

WHITE CATFISH

YOUNG-OF-THE-YEAR

WEEK
BEGINNING
MONDAY

WEEK BEGINNING MONDAY	DENSITY S.E. NO. TOWS	INDIAN POINT			WEST POINT			CORNWALL				
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL
02MAY83	0.00 0.00 4	0.00 0.00 7	0.00 0.00 25	0.00 0.00 36	N N N	0.00 0.00 4	0.00 0.00 30	0.00 0.00 34	0.00 0.00 5	0.00 0.00 12	0.00 0.00 6	0.00 0.00 23
09MAY83	0.00 0.00 4	0.00 0.00 8	0.00 0.00 24	0.00 0.00 36	N N N	0.00 0.00 4	0.00 0.00 30	0.00 0.00 34	0.00 0.00 5	0.00 0.00 13	0.00 0.00 5	0.00 0.00 23
16MAY83	0.00 0.00 4	0.00 0.00 7	0.00 0.00 25	0.00 0.00 36	N N N	0.00 0.00 7	0.00 0.00 30	0.00 0.00 37	0.00 0.00 5	0.00 0.00 10	0.00 0.00 5	0.00 0.00 20
23MAY83	0.00 0.00 3	0.00 0.00 6	0.00 0.00 13	0.00 0.00 22	N N N	0.00 0.00 7	0.00 0.00 23	0.00 0.00 30	0.00 0.00 5	0.00 0.00 9	0.00 0.00 6	0.00 0.00 20
30MAY83	0.00 0.00 3	0.00 0.00 6	0.00 0.00 15	0.00 0.00 24	N N N	0.00 0.00 6	0.00 0.00 23	0.00 0.00 29	0.00 0.00 5	0.00 0.00 9	0.00 0.00 6	0.00 0.00 20
06JUN83	0.00 0.00 4	0.00 0.00 6	0.00 0.00 14	0.00 0.00 24	N N N	0.00 0.00 7	0.00 0.00 23	0.00 0.00 30	0.00 0.00 5	0.00 0.00 9	0.00 0.00 5	0.00 0.00 19
13JUN83	0.00 0.00 5	0.00 0.00 5	0.00 0.00 16	0.00 0.00 26	N N N	0.00 0.00 8	0.00 0.00 25	0.00 0.00 33	0.00 0.00 3	0.00 0.00 12	0.00 0.00 13	0.00 0.00 28
20JUN83	0.00 0.00 5	0.00 0.00 5	0.00 0.00 17	0.00 0.00 27	N N N	0.00 0.00 8	0.00 0.00 25	0.00 0.00 33	0.00 0.00 3	0.00 0.00 12	0.00 0.00 13	0.00 0.00 28
27JUN83	0.00 0.00 5	0.00 0.00 6	0.00 0.00 16	0.00 0.00 27	N N N	0.00 0.00 8	0.00 0.00 25	0.00 0.00 33	0.00 0.00 3	0.26 0.26 12	0.00 0.00 13	0.07 0.07 28
04JUL83	0.00 0.00 5	0.00 0.00 5	0.00 0.00 16	0.00 0.00 26	N N N	0.00 0.00 8	0.11 0.11 25	0.10 0.10 33	0.00 0.00 3	0.00 0.00 12	0.00 0.00 13	0.00 0.00 28

N -- STRATUM NOT SAMPLED

TABLE B-166 (CONTINUED).

WHITE CATFISH

YOUNG-OF-THE-YEAR

WEEK
BEGINNING
MONDAY

	POUGHKEEPSIE			HYDE PARK			KINGSTON					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	9	10	19	N	10	11	21	N	6	7	13
09MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	10	10	20	N	10	10	20	N	6	7	13
16MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	10	10	20	N	8	11	19	N	6	7	13
23MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10
30MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	16	22	38	N	7	12	19	N	5	5	10
06JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10
13JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	7	15	22	N	5	9	14	N	5	5	10
20JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	8	14	22	N	5	9	14	N	5	6	11
27JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10
04JUL83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10

N -- STRATUM NOT SAMPLED

TABLE B-166 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE CATFISH			YOUNG-OF-THE-YEAR			
	SAUGERTIES			CATSKILL			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	3	3	N	3	3	6
09MAY83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	3	3	N	3	3	6
16MAY83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	4	3	N	3	3	6
23MAY83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	N	3	3	6
30MAY83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	N	3	3	6
06JUN83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	N	3	3	6
13JUN83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	4	2	N	3	3	6
20JUN83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	3	2	N	3	3	6
27JUN83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	4	2	N	3	3	6
04JUL83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	4	2	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-166 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE CATFISH			ALBANY			YOUNG-OF-THE-YEAR		
	SHOAL			CHANNEL			REGION		
	DENSITY S.E. NO. TOWS	BOTTOM	SHOAL	DENSITY S.E. NO. TOWS	BOTTOM	CHANNEL	DENSITY S.E. NO. TOWS	BOTTOM	CHANNEL
02MAY83	0.00 0.00 5	N N N	0.00 0.00 21	0.00 0.00 5	N N N	0.00 0.00 194	0.00 0.00 66	0.00 0.00 107	0.00 0.00 194
09MAY83	0.00 0.00 5	N N N	0.00 0.00 21	0.00 0.00 5	N N N	0.00 0.00 194	0.00 0.00 69	0.00 0.00 104	0.00 0.00 194
16MAY83	0.00 0.00 5	N N N	0.00 0.00 21	0.00 0.00 5	N N N	0.00 0.00 194	0.00 0.00 67	0.00 0.00 106	0.00 0.00 194
23MAY83	0.00 0.00 3	N N N	0.00 0.00 19	0.00 0.00 3	N N N	0.00 0.00 186	0.00 0.00 68	0.00 0.00 99	0.00 0.00 186
30MAY83	0.00 0.00 3	N N N	0.00 0.00 19	0.00 0.00 3	N N N	0.00 0.00 186	0.00 0.00 68	0.00 0.00 99	0.00 0.00 186
06JUN83	0.00 0.00 3	N N N	0.00 0.00 19	0.00 0.00 3	N N N	0.00 0.00 186	0.00 0.00 68	0.00 0.00 99	0.00 0.00 186
13JUN83	0.00 0.00 3	N N N	0.00 0.00 16	0.00 0.00 3	N N N	0.00 0.00 187	0.00 0.00 63	0.00 0.00 108	0.00 0.00 187
20JUN83	0.00 0.00 3	N N N	0.00 0.00 16	0.00 0.00 3	N N N	0.00 0.00 187	0.00 0.00 63	0.00 0.00 108	0.00 0.00 187
27JUN83	0.00 0.00 3	N N N	0.00 0.00 16	0.00 0.00 3	N N N	0.00 0.00 187	0.02 0.02 62	0.00 0.00 109	0.00 0.00 187
04JUL83	0.00 0.00 3	N N N	0.00 0.00 16	0.00 0.00 3	N N N	0.00 0.00 187	0.00 0.00 62	0.00 0.00 109	0.00 0.00 187

N -- STRATUM NOT SAMPLED

TABLE B-167
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	WHITE CATFISH											
	YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	32	7	7	46	16	8	3	27
22AUG83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	29	9	8	46	16	8	3	27
05SEP83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	29	8	8	45	16	8	2	26
19SEP83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	11	31	8	8	47	15	8	3	26
03OCT83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	11	31	7	8	46	17	8	3	28
17OCT83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	30	8	8	46	16	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-167 (CONTINUED).

WHITE CATFISH

YOUNG-OF-THE-YEAR

WEEK
BEGINNING
MONDAY

	INDIAN POINT			WEST POINT			CORNWALL					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	4	3	7	5	6	3	14
22AUG83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.48	0.00	0.00	0.03
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.48	0.00	0.00	0.03
	NO. TOWS	7	5	2	14	5	3	8	5	5	3	13
05SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.51	0.45	0.00	0.15
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.51	0.45	0.00	0.12
	NO. TOWS	6	6	3	15	5	3	8	5	5	3	13
19SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	5	3	8	6	5	2	13
03OCT83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	4	2	6	5	6	4	15
17OCT83	DENSITY	0.00	0.00	0.00	N	0.56	0.00	0.08	1.12	0.55	0.00	0.21
	S.E.	0.00	0.00	0.00	N	0.56	0.00	0.08	0.69	0.55	0.00	0.15
	NO. TOWS	6	6	3	15	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-167 (CONTINUED).

WHITE CATFISH

WEEK
BEGINNING
MONDAY

	POUGHKEEPSIE			HYDE PARK			KINGSTON					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.55	0.00	0.13	N	0.38	0.00	0.08	N	1.57	0.00	0.53
	S.E.	0.55	0.00	0.13	N	0.38	0.00	0.08	N	0.54	0.00	0.18
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
22AUG83	DENSITY	1.04	0.00	0.24	N	0.88	0.00	0.18	N	0.54	0.00	0.18
	S.E.	0.64	0.00	0.15	N	0.88	0.00	0.18	N	0.54	0.00	0.18
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
05SEP83	DENSITY	0.00	0.00	0.00	N	0.29	0.00	0.06	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.29	0.00	0.06	N	0.00	0.00	0.00
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
19SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.43	0.00	0.14
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.43	0.00	0.14
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
03OCT83	DENSITY	1.02	0.73	0.80	N	0.44	0.00	0.09	N	1.29	0.00	0.44
	S.E.	0.63	0.73	0.58	N	0.44	0.00	0.09	N	0.51	0.00	0.17
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
17OCT83	DENSITY	0.45	0.00	0.10	N	0.00	0.00	0.00	N	0.25	0.00	0.08
	S.E.	0.45	0.00	0.10	N	0.00	0.00	0.00	N	0.25	0.00	0.08
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15

N -- STRATUM NOT SAMPLED

TABLE B-167 (CONTINUED).

WHITE CATFISH YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY	SAUGERTIES			CATSKILL			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	1.81	0.00	N	5.29	0.00	2.53
	S.E.	0.82	0.00	N	1.09	0.00	0.52
	NO. TOWS	12	6	N	15	6	21
22AUG83	DENSITY	0.00	0.00	N	0.55	0.00	0.26
	S.E.	0.00	0.00	N	0.29	0.00	0.14
	NO. TOWS	12	6	N	15	6	21
05SEP83	DENSITY	0.38	0.00	N	0.00	0.00	0.00
	S.E.	0.26	0.00	N	0.00	0.00	0.00
	NO. TOWS	12	6	N	15	6	21
19SEP83	DENSITY	1.01	0.00	N	0.46	0.00	0.22
	S.E.	0.46	0.00	N	0.34	0.00	0.16
	NO. TOWS	12	6	N	15	6	21
03OCT83	DENSITY	0.96	0.44	N	1.88	0.00	0.90
	S.E.	0.44	0.44	N	0.91	0.00	0.44
	NO. TOWS	12	6	N	15	6	21
17OCT83	DENSITY	1.67	0.00	N	0.16	0.00	0.08
	S.E.	0.57	0.00	N	0.16	0.00	0.08
	NO. TOWS	13	6	N	14	6	20

N -- STRATUM NOT SAMPLED

TABLE B-167 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE CATFISH			ALBANY			YOUNG-OF-THE-YEAR						
	SHOAL			BOTTOM			CHANNEL			COMBINED			
	DENSITY	S.E.	NO. TOWS	DENSITY	S.E.	NO. TOWS	DENSITY	S.E.	NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	N			4.79	N	8	4.79	0.00	0.00	0.00	1.78	0.00	0.44
	N			2.25	N	8	2.25	0.00	0.00	0.00	0.35	0.00	0.09
	N				N	8		66			85	49	200
22AUG83	N			1.15	N	8	1.15	0.02	0.02	0.02	0.45	0.00	0.11
	N			0.79	N	8	0.79	0.02	0.02	0.02	0.15	0.00	0.04
	N				N	8		64			87	49	200
05SEP83	N			0.00	N	8	0.00	0.02	0.02	0.02	0.09	0.00	0.02
	N			0.00	N	8	0.00	0.02	0.02	0.02	0.05	0.00	0.01
	N				N	8		63			87	49	199
19SEP83	N			0.93	N	8	0.93	0.00	0.00	0.00	0.33	0.00	0.08
	N			0.65	N	8	0.65	0.00	0.00	0.00	0.12	0.00	0.03
	N				N	8		64			86	49	199
03OCT83	N			0.35	N	8	0.35	0.00	0.00	0.00	0.68	0.15	0.26
	N			0.35	N	8	0.35	0.00	0.00	0.00	0.17	0.12	0.09
	N				N	8		65			85	50	200
17OCT83	N			0.89	N	8	0.89	0.04	0.04	0.04	0.47	0.00	0.12
	N			0.44	N	8	0.44	0.03	0.03	0.03	0.12	0.00	0.03
	N				N	8		64			86	50	200

N -- STRATUM NOT SAMPLED

TABLE B-168
 CATCH PER UNIT EFFORT (NUMBER PER HAUL) BY WEEK AND REGION,
 BEACH SEINE SURVEY, HUDSON RIVER ESTUARY, 1983.

WHITE CATFISH YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY	YK	TZ	CH	IP	WP	REGIONS					AL	COMBINED
						CW	PK	HP	KG	SG		
01AUG83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 14	0.00 5	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7
15AUG83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 14	0.00 5	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7
29AUG83	CPUE	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 14	0.00 5	0.20 5	0.00 6	0.00 5	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7
12SEP83	CPUE	0.13	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
	S.E. NO. HAULS	0.00 5	0.00 14	0.20 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7
26SEP83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 14	0.00 5	0.00 5	0.00 7	0.00 5	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7
10OCT83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 14	0.00 7	0.00 5	0.00 6	0.00 5	0.00 4	0.00 6	0.00 9	0.00 10	0.00 7

TABLE B-169
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	WHITE CATFISH											
	YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.90	0.00	0.10	0.00	0.00	0.00	0.00	0.61	0.00	0.00	0.22
	S.E.	0.90	0.00	0.10	0.00	0.00	0.00	0.00	0.61	0.00	0.00	0.22
	NO. TOWS	3	3	6	3	4	3	10	6	3	6	15
09MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	3	10	6	3	6	15
16MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	3	10	6	3	6	15
23MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	4	11	5	4	4	13
30MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	3	4	10	5	5	3	13
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	4	11	4	4	4	12
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.10
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.10
	NO. TOWS	1	8	9	3	5	6	14	4	6	6	16
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	5	6	14	4	6	5	15
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	4	6	13	4	6	6	16
04JUL83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-169 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE CATFISH												YEARLING			
	INDIAN POINT				WEST POINT				CORNWALL							
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	7	25	36	4	30	34	5	12	6	23	5	6	23	23
09MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	8	24	36	4	30	34	5	13	5	23	5	5	23	23
16MAY83	DENSITY	0.86	2.15	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.00	0.09
	S.E.	0.86	2.15	0.00	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.00	0.09
	NO. TOWS	4	7	25	36	7	30	37	5	10	5	20	5	5	20	20
23MAY83	DENSITY	0.00	1.40	0.00	0.22	0.51	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	1.40	0.00	0.22	0.51	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	6	13	22	7	23	30	5	9	6	20	5	6	20	20
30MAY83	DENSITY	0.00	0.00	0.00	0.00	0.49	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.49	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	6	15	24	6	23	29	5	9	6	20	5	6	20	20
06JUN83	DENSITY	0.00	1.18	0.00	0.19	1.11	0.00	0.15	0.00	1.02	0.00	0.27	0.00	1.02	0.00	0.27
	S.E.	0.00	0.75	0.00	0.12	0.73	0.00	0.10	0.00	1.02	0.00	0.27	0.00	1.02	0.00	0.27
	NO. TOWS	4	6	14	24	7	23	30	5	9	5	19	5	5	19	19
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.12	0.10	0.00	0.52	0.00	0.14	0.00	0.52	0.00	0.14
	S.E.	0.00	0.00	0.00	0.00	0.00	0.12	0.10	0.00	0.35	0.00	0.09	0.00	0.35	0.00	0.09
	NO. TOWS	5	5	16	26	8	25	33	3	12	13	28	3	12	13	28
20JUN83	DENSITY	0.75	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.48	0.00	0.13	0.00	0.48	0.00	0.13
	S.E.	0.75	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.32	0.00	0.09	0.00	0.32	0.00	0.09
	NO. TOWS	5	5	17	27	8	25	33	3	12	13	28	3	12	13	28
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.06	0.26	0.00	0.13	0.00	0.26	0.00	0.13
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.06	0.26	0.00	0.09	0.00	0.26	0.00	0.09
	NO. TOWS	5	6	16	27	8	25	33	3	12	13	28	3	12	13	28
04JUL83	DENSITY	1.86	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.76	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	16	26	8	25	33	3	12	13	28	3	12	13	28

N -- STRATUM NOT SAMPLED

TABLE B-169 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE CATFISH										YEARLING					
	POUGHKEEPSIE					HYDE PARK					KINGSTON					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	9	10	19	N	10	11	21	N	6	7	N	6	7	13
09MAY83	DENSITY	N	0.30	0.00	0.07	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.30	0.00	0.07	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	10	10	20	N	10	10	20	N	6	7	N	6	7	13
16MAY83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	10	10	20	N	8	11	19	N	6	7	N	6	7	13
23MAY83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6	N	4	6	10
30MAY83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	16	22	38	N	7	12	19	N	5	5	N	5	5	10
06JUN83	DENSITY	N	0.20	0.00	0.05	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.20	0.00	0.05	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6	N	4	6	10
13JUN83	DENSITY	N	0.39	0.00	0.09	N	0.00	0.00	N	0.00	0.00	0.00	N	0.78	0.00	0.26
	S.E.	N	0.39	0.00	0.09	N	0.00	0.00	N	0.00	0.00	0.00	N	0.78	0.00	0.26
	NO. TOWS	N	7	15	22	N	5	9	14	N	5	5	N	5	5	10
20JUN83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	8	14	22	N	5	9	14	N	5	6	N	5	6	11
27JUN83	DENSITY	N	0.98	0.00	0.23	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.64	0.00	0.15	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	7	15	22	N	5	9	14	N	4	6	N	4	6	10
04JUL83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	7	15	22	N	5	9	14	N	4	6	N	4	6	10

N -- STRATUM NOT SAMPLED

TABLE B-169 (CONTINUED).

WEEK BEGINNING MORNDAY	WHITE CATFISH			YEARLING			
	SAUGERTIES			CATSKILL			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	3	N	3	3	6
09MAY83	DENSITY	N	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	3	N	3	3	6
16MAY83	DENSITY	N	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	4	N	3	3	6
23MAY83	DENSITY	N	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	N	3	3	6
30MAY83	DENSITY	N	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	N	3	3	6
06JUN83	DENSITY	N	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	N	3	3	6
13JUN83	DENSITY	N	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	4	N	2	3	6
20JUN83	DENSITY	N	0.00	N	0.00	0.00	0.50
	S.E.	N	0.00	N	0.00	0.00	0.50
	NO. TOWS	N	3	N	2	3	6
27JUN83	DENSITY	N	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	4	N	2	3	6
04JUL83	DENSITY	N	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	4	N	2	3	6

N -- STRATUM NOT SAMPLED

TABLE B-169 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE CATFISH			ALBANY			YEARLING			
	SHOAL			CHANNEL			REGION			
	DENSITY S.E. NO. TOWS	BOTTOM	CHANNEL	DENSITY S.E. NO. TOWS	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	N	0.00	N	0.00	0.00	0.00	0.25	0.00	0.00	0.02
	N	0.00	N	0.00	0.00	0.00	0.18	0.00	0.00	0.02
	N	5	N	5	5	5	21	66	107	194
09MAY83	N	0.00	N	0.00	0.00	0.00	0.00	0.04	0.00	0.01
	N	0.00	N	0.00	0.00	0.00	0.00	0.04	0.00	0.01
	N	5	N	5	5	5	21	69	104	194
16MAY83	N	0.00	N	0.00	0.00	0.00	0.05	0.15	0.00	0.04
	N	0.00	N	0.00	0.00	0.00	0.05	0.13	0.00	0.03
	N	5	N	5	5	5	21	67	106	194
23MAY83	N	0.00	N	0.00	0.00	0.00	0.00	0.11	0.00	0.03
	N	0.00	N	0.00	0.00	0.00	0.00	0.09	0.00	0.02
	N	3	N	3	3	3	19	68	99	186
30MAY83	N	0.00	N	0.00	0.00	0.00	0.00	0.02	0.00	0.01
	N	0.00	N	0.00	0.00	0.00	0.00	0.02	0.00	0.01
	N	3	N	3	3	3	19	68	99	186
06JUN83	N	0.00	N	0.00	0.00	0.00	0.00	0.22	0.00	0.05
	N	0.00	N	0.00	0.00	0.00	0.00	0.09	0.00	0.02
	N	3	N	3	3	3	19	68	99	186
13JUN83	N	0.00	N	0.00	0.00	0.00	0.00	0.18	0.01	0.05
	N	0.00	N	0.00	0.00	0.00	0.00	0.09	0.01	0.02
	N	3	N	3	3	3	16	63	108	187
20JUN83	N	0.00	N	0.00	0.00	0.00	0.04	0.18	0.00	0.05
	N	0.00	N	0.00	0.00	0.00	0.04	0.15	0.00	0.04
	N	3	N	3	3	3	16	63	108	187
27JUN83	N	0.00	N	0.00	0.00	0.00	0.04	0.14	0.00	0.04
	N	0.00	N	0.00	0.00	0.00	0.04	0.08	0.00	0.02
	N	3	N	3	3	3	16	62	109	187
04JUL83	N	0.00	N	0.00	0.00	0.00	0.11	0.00	0.00	0.01
	N	0.00	N	0.00	0.00	0.00	0.04	0.00	0.00	0.00
	N	3	N	3	3	3	16	62	109	187

N -- STRATUM NOT SAMPLED

TABLE B-170
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	WHITE CATFISH												YEARLING
	YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW				
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	
08AUG83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	32	7	7	46	16	8	3	27	27
22AUG83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
	NO. TOWS	7	5	12	29	9	8	46	16	8	3	27	27
05SEP83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	29	8	8	45	16	8	2	26	26
19SEP83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	11	31	8	8	47	15	8	3	26	26
03OCT83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	11	31	7	8	46	17	8	3	28	28
17OCT83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	30	8	8	46	16	7	3	26	26

N -- STRATUM NOT SAMPLED

TABLE B-170 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE CATFISH											
	INDIAN POINT				WEST POINT				YEARLING			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	4	3	7	5	6	3	14
22AUG83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	2	14	5	3	8	5	5	3	13
05SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	6	3	15	5	3	8	5	5	3	13
19SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	2.96	0.90	0.00	0.41
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	1.88	0.90	0.00	0.26
	NO. TOWS	6	5	3	14	5	3	8	6	5	2	13
03OCT83	DENSITY	0.81	0.00	0.00	N	0.00	0.00	0.00	0.54	0.00	0.00	0.03
	S.E.	0.81	0.00	0.00	N	0.00	0.00	0.00	0.54	0.00	0.00	0.03
	NO. TOWS	6	5	3	14	4	2	6	5	6	4	15
17OCT83	DENSITY	0.00	0.00	0.00	N	1.15	0.00	0.16	2.49	4.96	0.00	1.45
	S.E.	0.00	0.00	0.00	N	1.15	0.00	0.16	1.55	3.15	0.00	0.83
	NO. TOWS	6	6	3	15	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-170 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE CATFISH											
	POUGHKEEPSIE				HYDE PARK				YEARLING			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.F.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	6	4	10	N	9	6	15
22AUG83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.F.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	6	4	10	N	9	6	15
05SEP83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.F.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	6	4	10	N	9	6	15
19SEP83	DENSITY	N	0.49	0.00	N	0.11	0.00	0.24	N	2.02	0.00	0.68
	S.F.	N	0.49	0.00	N	0.11	0.00	0.24	N	0.82	0.00	0.28
	NO. TOWS	N	5	3	8	6	4	10	N	9	6	15
03OCT83	DENSITY	N	0.00	0.00	N	0.00	1.90	1.60	N	0.00	0.00	0.00
	S.F.	N	0.00	0.00	N	0.00	1.90	1.51	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	6	4	10	N	9	6	15
17OCT83	DENSITY	N	1.40	0.00	N	0.33	0.00	0.18	N	0.25	0.37	0.33
	S.F.	N	0.57	0.00	N	0.13	0.00	0.18	N	0.25	0.37	0.26
	NO. TOWS	N	5	3	8	6	4	10	N	9	6	15

N -- STRATUM NOT SAMPLED

TABLE B-170 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE CATFISH			SAUGERTIES			YEARLING			CATSKILL								
	SHOAI			BOTTOM CHANNEL			REGION			SHOAL			BOTTOM CHANNEL			REGION		
	DENSITY S.E. NO. TOWS	N	0.00 0.00 12	0.00 0.00 6	0.00 0.00 18	N	0.00 0.00 15	0.00 0.00 6	0.00 0.00 18	N	0.00 0.00 15	0.00 0.00 6	0.00 0.00 21	N	0.00 0.00 15	0.00 0.00 6	0.00 0.00 21	
08AUG83	DENSITY S.E. NO. TOWS	N	0.00 0.00 12	0.00 0.00 6	0.00 0.00 18	N	0.00 0.00 15	0.00 0.00 6	0.00 0.00 18	N	0.00 0.00 15	0.00 0.00 6	0.00 0.00 21	N	0.00 0.00 15	0.00 0.00 6	0.00 0.00 21	
22AUG83	DENSITY S.E. NO. TOWS	N	0.00 0.00 12	0.00 0.00 6	0.00 0.00 18	N	0.00 0.00 15	0.00 0.00 6	0.00 0.00 18	N	0.00 0.00 15	0.00 0.00 6	0.00 0.00 21	N	0.00 0.00 15	0.00 0.00 6	0.00 0.00 21	
05SEP83	DENSITY S.E. NO. TOWS	N	0.00 0.00 12	0.00 0.00 6	0.00 0.00 18	N	0.00 0.00 15	0.00 0.00 6	0.00 0.00 18	N	0.00 0.00 15	0.00 0.00 6	0.00 0.00 21	N	0.00 0.00 15	0.00 0.00 6	0.00 0.00 21	
19SEP83	DENSITY S.E. NO. TOWS	N	0.80 0.34 12	0.00 0.00 6	0.29 0.12 18	N	0.65 0.29 15	0.00 0.00 6	0.29 0.12 18	N	0.65 0.29 15	0.00 0.00 6	0.31 0.14 21	N	0.65 0.29 15	0.00 0.00 6	0.31 0.14 21	
03OCT83	DENSITY S.E. NO. TOWS	N	0.00 0.00 12	0.00 0.00 6	0.00 0.00 18	N	0.57 0.42 15	0.00 0.00 6	0.00 0.00 18	N	0.57 0.42 15	0.00 0.00 6	0.27 0.20 21	N	0.57 0.42 15	0.00 0.00 6	0.27 0.20 21	
17OCT83	DENSITY S.E. NO. TOWS	N	1.18 0.47 13	0.00 0.00 6	0.42 0.17 19	N	0.00 0.00 14	0.00 0.00 6	0.42 0.17 19	N	0.00 0.00 14	0.00 0.00 6	0.00 0.00 20	N	0.00 0.00 14	0.00 0.00 6	0.00 0.00 20	

N -- STRATUM NOT SAMPLED

TABLE B-170 (CONTINUED).

WLEK BEGINNING MONDAY	WHITE CATFISH			YEARLING			
	ALBANY			COMBINED			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	N	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00
	NO. TOWS	8	N	8	85	49	200
22AUG83	DENSITY	0.00	N	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00
	NO. TOWS	8	N	8	87	49	200
05SEP83	DENSITY	0.00	N	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00
	NO. TOWS	8	N	8	87	49	199
19SEP83	DENSITY	0.31	N	0.31	0.11	0.00	0.15
	S.E.	0.31	N	0.31	0.07	0.00	0.04
	NO. TOWS	8	N	8	64	49	199
03OCT83	DENSITY	6.52	N	6.52	0.07	0.17	0.35
	S.E.	5.37	N	5.37	0.05	0.17	0.20
	NO. TOWS	8	N	8	85	50	200
17OCT83	DENSITY	1.54	N	1.54	0.09	0.02	0.26
	S.E.	1.24	N	1.24	0.06	0.02	0.07
	NO. TOWS	8	N	8	86	50	200

N -- STRATUM NOT SAMPLED

TABLE B-171
 CATCH PER UNIT EFFORT (NUMBER PER HAUL) BY WEEK AND REGION,
 BEACH SEINE SURVEY, HUDSON RIVER ESTUARY, 1983.

WHITE CATFISH YEARLING

WEEK BEGINNING MONDAY	YK	TZ	CH	IP	WP	REGIONS					SG	CS	AL	COMBINED
						CW	PK	HP	KG	SG				
01AUG83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 5	0.00 9	0.00 10	0.00 7	0.00 100
15AUG83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 9	0.00 9	0.00 10	0.00 7	0.00 100
29AUG83	CPUE	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
	S.E. NO. HAULS	0.00 5	0.08 24	0.00 14	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 9	0.00 9	0.00 10	0.00 7	0.29 100
12SEP83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 5	0.00 5	0.00 6	0.00 5	0.00 5	0.00 9	0.00 9	0.00 10	0.00 7	0.00 100
26SEP83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 5	0.00 5	0.00 7	0.00 5	0.00 5	0.00 9	0.00 9	0.00 10	0.00 7	0.00 101
10OCT83	CPUE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	0.00 5	0.00 24	0.00 14	0.00 7	0.00 5	0.00 6	0.00 5	0.00 4	0.00 9	0.00 9	0.00 10	0.00 7	0.00 102

TABLE B-172
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	WHITE CATFISH											
	YONKERS				TAPPAN ZEE				OLDER			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	1.32	N	0.00	0.15	0.00	0.00	0.00	0.00	0.61	0.00	0.22
	S.E.	1.32	N	0.00	0.15	0.00	0.00	0.00	0.00	0.61	0.00	0.22
	NO. TOWS	3	3	3	6	3	3	10	6	3	6	15
09MAY83	DENSITY	0.00	N	0.00	0.00	1.14	0.00	0.22	0.00	3.73	0.00	0.82
	S.E.	0.00	N	0.00	0.00	1.14	0.00	0.22	0.00	2.17	0.00	0.48
	NO. TOWS	3	3	3	6	4	3	10	6	3	6	15
16MAY83	DENSITY	0.00	N	0.00	0.00	1.09	0.00	0.21	0.54	0.00	0.00	0.20
	S.E.	0.00	N	0.00	0.00	1.09	0.00	0.21	0.54	0.00	0.00	0.20
	NO. TOWS	3	3	3	6	4	3	10	6	3	6	15
23MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	3	6	4	4	11	5	4	4	13
30MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	3	6	3	4	10	5	5	3	13
06JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.74	0.00	0.16
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.74	0.00	0.16
	NO. TOWS	3	3	3	6	4	4	11	4	4	4	12
13JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	8	9	5	6	14	4	6	6	16
20JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	8	9	5	6	14	4	6	5	15
27JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	8	9	4	6	13	4	6	6	16
04JUL83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	8	9	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-172 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE CATFISH											
	INDIAN POINT				WEST POINT				CORNWALL			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	7	25	36	4	30	34	5	12	6	23
09MAY83	DENSITY	0.92	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.92	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	8	24	36	4	30	34	5	13	5	23
16MAY83	DENSITY	1.66	1.07	0.00	N	0.27	0.00	0.06	0.00	0.00	0.00	0.00
	S.E.	1.66	1.07	0.00	N	0.20	0.00	0.06	0.00	0.00	0.00	0.00
	NO. TOWS	4	7	25	36	7	30	37	5	10	5	20
23MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	6	13	22	7	23	30	5	9	6	20
30MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	6	15	24	6	23	29	5	9	6	20
06JUN83	DENSITY	0.00	0.58	0.00	N	0.09	0.00	0.07	0.00	0.43	0.00	0.11
	S.E.	0.00	0.58	0.00	N	0.09	0.00	0.07	0.00	0.43	0.00	0.11
	NO. TOWS	4	6	14	24	7	23	30	5	9	5	19
13JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	16	26	8	25	33	3	12	13	28
20JUN83	DENSITY	0.75	0.00	0.00	N	0.05	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.75	0.00	0.00	N	0.05	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	17	27	8	25	33	3	12	13	28
27JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	6	16	27	8	25	33	3	12	13	28
04JUL83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	16	26	8	25	33	3	12	13	28

N -- STRATUM NOT SAMPLED

TABLE B-172 (CONTINUED).

WEEK BEGINNING MONDAY	POUGHKEEPSIE			HYDE PARK			OLDER			KINGSTON		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	N	0.35	0.00	0.07	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.35	0.00	0.07	N	0.00	0.00	0.00
	NO. TOWS	N	9	10	19	N	10	11	21	N	6	7
09MAY83	DENSITY	0.62	0.00	0.14	N	0.93	0.00	0.19	N	0.00	0.00	0.00
	S.E.	0.41	0.00	0.10	N	0.67	0.00	0.14	N	0.00	0.00	0.00
	NO. TOWS	N	10	10	20	N	10	10	20	N	6	7
16MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.62	0.00	0.21
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.62	0.00	0.21
	NO. TOWS	N	10	10	20	N	8	11	19	N	6	7
23MAY83	DENSITY	0.00	0.00	0.00	N	0.81	0.00	0.17	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.81	0.00	0.17	N	0.00	0.00	0.00
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6
30MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	16	22	38	N	7	12	19	N	5	5
06JUN83	DENSITY	0.18	0.00	0.04	N	0.44	0.00	0.09	N	0.00	0.00	0.00
	S.E.	0.18	0.00	0.04	N	0.44	0.00	0.09	N	0.00	0.00	0.00
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6
13JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	7	15	22	N	5	9	14	N	5	5
20JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	8	14	22	N	5	9	14	N	5	6
27JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	7	15	22	N	5	9	14	N	4	6
04JUL83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	7	15	22	N	5	9	14	N	4	6

N -- STRATUM NOT SAMPLED

TABLE B-172 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE CATFISH			SAUGERTIES			OLDER		
	DENSITY S.E. NO. TOWS	SHOAL		BOTTOM CHANNEL		REGION	SHOAL	CATSKILL	
		NO.	NO.	NO.	NO.	NO.		BOTTOM	CHANNEL
02MAY83	0.00 0.00 3	N	0.00 0.00 3	0.00 0.00 3	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 3	0.00 0.00 6
09MAY83	0.00 0.00 3	N	0.00 0.00 3	0.00 0.00 6	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 3	0.00 0.00 6
16MAY83	0.00 0.00 4	N	0.00 0.00 4	0.00 0.00 3	0.00 0.00 7	N	0.00 0.00 3	0.00 0.00 3	0.00 0.00 6
23MAY83	0.00 0.00 5	N	0.00 0.00 5	0.00 0.00 3	0.00 0.00 8	N	0.00 0.00 3	0.00 0.00 3	0.00 0.00 6
30MAY83	0.00 0.00 5	N	0.00 0.00 5	0.00 0.00 3	0.00 0.00 8	N	0.00 0.00 3	0.00 0.00 3	0.00 0.00 6
06JUN83	0.00 0.00 5	N	0.00 0.00 5	0.00 0.00 3	0.00 0.00 8	N	0.00 0.00 3	0.00 0.00 3	0.00 0.00 6
13JUN83	0.00 0.00 4	N	0.00 0.00 4	0.00 0.00 2	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 3	0.00 0.00 6
20JUN83	0.00 0.00 3	N	0.00 0.00 3	0.00 0.00 2	0.00 0.00 5	N	0.00 0.00 3	0.00 0.00 3	0.00 0.00 6
27JUN83	0.00 0.00 4	N	0.00 0.00 4	0.00 0.00 2	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 3	0.00 0.00 6
04JUL83	0.00 0.00 4	N	0.00 0.00 4	0.00 0.00 2	0.00 0.00 6	N	0.00 0.00 3	0.00 0.00 3	0.00 0.00 6

N -- STRATUM NOT SAMPLED

TABLE B-172 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE CATFISH						OLDER					
	ALBANY			COMBINED			ALBANY			COMBINED		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	0.00	N	0.00	N	0.00	0.30	0.02	0.00	0.04	0.04
	S.E.	N	0.00	N	0.00	N	0.00	0.22	0.02	0.00	0.02	0.02
	NO. TOWS	N	5	N	5	N	5	21	66	107	194	194
09MAY83	DENSITY	N	0.00	N	0.00	N	0.00	0.05	0.48	0.00	0.12	0.12
	S.E.	N	0.00	N	0.00	N	0.00	0.05	0.19	0.00	0.05	0.05
	NO. TOWS	N	5	N	5	N	5	21	69	104	194	194
16MAY83	DENSITY	N	0.00	N	0.00	N	0.00	0.22	0.26	0.00	0.09	0.09
	S.E.	N	0.00	N	0.00	N	0.00	0.16	0.15	0.00	0.04	0.04
	NO. TOWS	N	5	N	5	N	5	21	67	106	194	194
23MAY83	DENSITY	N	0.00	N	0.00	N	0.00	0.00	0.05	0.00	0.01	0.01
	S.E.	N	0.00	N	0.00	N	0.00	0.00	0.05	0.00	0.01	0.01
	NO. TOWS	N	3	N	3	N	3	19	68	99	186	186
30MAY83	DENSITY	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	3	N	3	N	3	19	68	99	186	186
06JUN83	DENSITY	N	0.00	N	0.00	N	0.00	0.00	0.18	0.00	0.04	0.04
	S.E.	N	0.00	N	0.00	N	0.00	0.00	0.08	0.00	0.02	0.02
	NO. TOWS	N	3	N	3	N	3	19	68	99	186	186
13JUN83	DENSITY	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	3	N	3	N	3	16	63	108	187	187
20JUN83	DENSITY	N	0.00	N	0.00	N	0.00	0.04	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	N	0.00	0.04	0.00	0.00	0.00	0.00
	NO. TOWS	N	3	N	3	N	3	16	63	108	187	187
27JUN83	DENSITY	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	3	N	3	N	3	16	62	109	187	187
04JUL83	DENSITY	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	3	N	3	N	3	16	62	109	187	187

N -- STRATUM NOT SAMPLED

TABLE B-173
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	WHITE CATFISH											
	YONKERS				TAPPAN ZEE				OLDER			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.05
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.05
	NO. TOWS	7	5	12	32	7	7	46	16	8	3	27
22AUG83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	29	9	8	46	16	8	3	27
05SEP83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	29	8	8	45	16	8	2	26
19SEP83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	11	31	8	8	47	15	8	3	26
03OCT83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
	NO. TOWS	6	5	11	31	7	8	46	17	8	3	28
17OCT83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	30	8	8	46	16	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-173 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE CATFISH											
	INDIAN POINT			WEST POINT			OLDER			CORNWALL		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.52	0.00	0.00	0.03
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.52	0.00	0.00	0.03
	NO. TOWS	6	5	3	14	4	3	7	5	6	3	14
22AUG83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	2	14	5	3	8	5	5	3	13
05SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	6	3	15	5	3	8	5	5	3	13
19SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	5	3	8	6	5	2	13
03OCT83	DENSITY	0.40	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.40	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	4	2	6	5	6	4	15
17OCT83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	1.54	0.00	0.00	0.09
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	1.05	0.00	0.00	0.06
	NO. TOWS	6	6	3	15	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-173 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE CATFISH											
	POUGHKEEPSIE				HYDE PARK				KINGSTON			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.26	0.00	0.09
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.26	0.00	0.09
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
22AUG83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
05SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
19SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.81	0.00	0.27
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.58	0.00	0.20
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
03OCT83	DENSITY	0.00	0.00	0.00	N	0.44	0.00	0.09	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.44	0.00	0.09	N	0.00	0.00	0.00
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
17OCT83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15

N -- STRATUM NOT SAMPLED

TABLE B-173 (CONTINUED).

WELK BEGINNING MONDAY	WHITE CATFISH			SAUGERTIES			OLDER						
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	0.00 0.00 12	N	0.00 0.00 6	0.00 0.00 18	0.00 0.00 18	N	0.00 0.00 15	0.00 0.00 6	0.00 0.00 21	N	0.00 0.00 15	0.00 0.00 6	0.00 0.00 21
22AUG83	0.00 0.00 12	N	0.00 0.00 6	0.00 0.00 18	0.00 0.00 18	N	0.00 0.00 15	0.00 0.00 6	0.00 0.00 21	N	0.00 0.00 15	0.00 0.00 6	0.00 0.00 21
05SEP83	0.00 0.00 12	N	0.00 0.00 6	0.00 0.00 18	0.00 0.00 18	N	0.00 0.00 15	0.00 0.00 6	0.00 0.00 21	N	0.00 0.00 15	0.00 0.00 6	0.00 0.00 21
19SEP83	0.00 0.00 12	N	0.00 0.00 6	0.00 0.00 18	0.00 0.00 18	N	0.00 0.00 15	0.00 0.00 6	0.00 0.00 21	N	0.00 0.00 15	0.00 0.00 6	0.00 0.00 21
03OCT83	0.00 0.00 12	N	0.00 0.00 6	0.00 0.00 18	0.00 0.00 18	N	0.16 0.16 15	0.00 0.00 6	0.08 0.08 21	N	0.16 0.16 15	0.00 0.00 6	0.00 0.00 20
17OCT83	0.00 0.00 13	N	0.00 0.00 6	0.00 0.00 19	0.00 0.00 19	N	0.00 0.00 14	0.00 0.00 6	0.00 0.00 20	N	0.00 0.00 14	0.00 0.00 6	0.00 0.00 20

N -- STRATUM NOT SAMPLED

TABLE B-173 (CONTINUED).

WEEK BEGINNING MONDAY	WHITE CATFISH											
	ALBANY					OLDER						
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	0.00	N	0.00	0.06	0.02	0.00	0.01	0.02	0.00	0.01
	S.E.	N	0.00	N	0.00	0.04	0.02	0.00	0.01	0.02	0.00	0.01
	NO. TOWS	N	8	N	8	66	85	49	200	85	49	200
22AUG83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	8	N	8	64	87	49	200	87	49	200
05SEP83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	8	N	8	63	87	49	199	87	49	199
19SEP83	DENSITY	N	0.00	N	0.00	0.00	0.07	0.00	0.02	0.07	0.00	0.02
	S.E.	N	0.00	N	0.00	0.00	0.05	0.00	0.01	0.05	0.00	0.01
	NO. TOWS	N	8	N	8	64	86	49	199	86	49	199
03OCT83	DENSITY	N	0.00	N	0.00	0.02	0.07	0.00	0.02	0.07	0.00	0.02
	S.E.	N	0.00	N	0.00	0.02	0.04	0.00	0.01	0.04	0.00	0.01
	NO. TOWS	N	8	N	8	65	85	50	200	85	50	200
17OCT83	DENSITY	N	0.00	N	0.00	0.06	0.00	0.00	0.01	0.00	0.00	0.01
	S.E.	N	0.00	N	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	8	N	8	64	86	50	200	86	50	200

N -- STRATUM NOT SAMPLED

TABLE B-174
 CATCH PER UNIT EFFORT (NUMBER PER HAUL) BY WEEK AND REGION,
 BEACH SEINE SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	YK	TZ	CH	IP	WP	REGIONS					AL	COMBINED	
						CW	PK	HP	KG	SG			CS
01AUG83	CPU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	5	24	14	5	5	6	5	5	5	10	7	100
15AUG83	CPU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	5	24	14	5	5	6	5	5	9	10	7	100
29AUG83	CPU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	5	24	14	5	5	6	5	5	9	10	7	100
12SEP83	CPU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	5	24	14	5	5	6	5	5	9	10	7	100
26SEP83	CPU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	5	24	14	5	5	7	5	5	9	10	7	101
10OCT83	CPU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. HAULS	5	24	14	7	5	6	5	4	9	10	7	102

WHITE CATFISH OLDER

TABLE B-175
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	SPOTTAIL SHINER												YOUNG-OF-THE-YEAR											
	YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW				YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	N	5	12	32	7	7	7	7	7	7	46	16	8	3	27	27	3	3	27	27	3	27
22AUG83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	N	5	12	29	9	8	8	8	8	46	16	8	3	27	27	3	3	27	27	3	27	27
05SEP83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	N	5	12	29	8	8	8	8	45	16	8	2	26	26	2	26	2	26	26	2	26	26
19SEP83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	N	5	11	31	8	8	8	8	47	15	8	3	26	26	3	26	3	26	26	3	26	26
03OCT83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.F.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	N	5	11	31	7	8	8	8	46	17	8	3	28	28	3	28	3	28	28	3	28	28
17OCT83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.F.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	N	5	12	30	8	8	8	8	46	16	7	3	26	26	3	26	3	26	26	3	26	26

N -- STRATUM NOT SAMPLED

TABLE B-175 (CONTINUED).

WEEK BEGINNING MONDAY	SPOTTAIL SHINER												YOUNG-OF-THE-YEAR				
	INDIAN POINT				WEST POINT				CORNWALL				REGION	CHANNEL	REGION		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION					
08AUG83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	4	3	7	5	6	3	14	5	6	3	14	3
22AUG83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	2	14	5	3	8	5	5	3	13	5	5	3	13	3
05SEP83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	6	3	15	5	3	8	5	5	3	13	5	5	3	13	3
19SEP83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.03	0.03
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.03	0.03
	NO. TOWS	6	5	3	14	5	3	8	5	5	3	13	6	5	2	13	3
03OCT83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	4	2	6	5	6	2	15	5	6	4	15	4
17OCT83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	6	3	15	5	3	8	5	5	3	13	5	5	3	13	3

N -- STRATUM NOT SAMPLED

TABLE B-175 (CONTINUED).

WEEK BEGINNING MONDAY	SPOTTAIL SHINER												YOUNG-OF-THE-YEAR		
	POUGHKEEPSIE				HYDE PARK				KINGSTON				REGION	CHANNEL	REGION
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION			
08AUG83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	1.08	0.00	0.37	0.37	15
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	1.08	0.00	0.37	0.37	15
	NO. TOWS	N	5	3	8	6	4	10	N	9	9	6	6	6	15
22AUG83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	15
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	15
	NO. TOWS	N	5	3	8	6	4	10	N	9	9	6	6	6	15
05SEP83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	15
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	15
	NO. TOWS	N	5	3	8	6	4	10	N	9	9	6	6	6	15
19SEP83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	15
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	15
	NO. TOWS	N	5	3	8	6	4	10	N	9	9	6	6	6	15
03OCT83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.31	0.00	0.11	0.11	15
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.31	0.00	0.11	0.11	15
	NO. TOWS	N	5	3	8	6	4	10	N	9	9	6	6	6	15
17OCT83	DENSITY	N	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.58	0.00	0.20	0.20	15
	S.E.	N	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.58	0.00	0.20	0.20	15
	NO. TOWS	N	5	3	8	6	4	10	N	9	9	6	6	6	15

N -- STRATUM NOT SAMPLED

TABLE B-175 (CONTINUED).

WEEK BEGINNING MONDAY	SPOTTAIL SHINER						YOUNG-OF-THE-YEAR					
	SAUGERTIES			CATSKILL			SAUGERTIES			CATSKILL		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	0.19	0.00	0.07	N	0.49	0.00	0.24	N	0.26	0.13
	S.E.	N	0.19	0.00	0.07	N	0.26	0.00	0.13	N	0.26	0.13
	NO. TOWS	N	12	6	13	N	15	6	21	N	6	21
22AUG83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00
	NO. TOWS	N	12	6	13	N	15	6	21	N	6	21
05SEP83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00
	NO. TOWS	N	12	6	18	N	15	6	21	N	6	21
19SEP83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00
	NO. TOWS	N	12	6	18	N	15	6	21	N	6	21
03OCT83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00
	NO. TOWS	N	12	6	18	N	15	6	21	N	6	21
17OCT83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00
	NO. TOWS	N	13	6	19	N	14	6	20	N	6	20

N -- STRATUM NOT SAMPLED.

TABLE B-175 (CONTINUED).

WEEK BEGINNING MONDAY	SPOTTAIL SHINER			ALBANY			YOUNG-OF-THE-YEAR			COMBINED			
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83		N	1.38	N	1.38	0.00	0.00	0.00	0.00	0.00	0.36	0.00	0.09
		N	0.81	N	0.81	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.04
		N	8	N	8	8	8	66	8	66	85	49	200
22AUG83		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		N	8	N	8	8	8	64	8	64	87	49	200
05SEP83		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		N	8	N	8	8	8	63	8	63	87	49	199
19SEP83		N	0.00	N	0.00	0.00	0.00	0.02	0.00	0.02	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.02	0.00	0.02	0.00	0.00	0.00
		N	8	N	8	8	8	64	8	64	86	49	199
03OCT83		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.01
		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.01
		N	8	N	8	8	8	65	8	65	85	50	200
17OCT83		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.01
		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.01
		N	8	N	8	8	8	64	8	64	86	50	200

N -- STRATUM NOT SAMPLED

TABLE B-176
 CATCH PER UNIT EFFORT (NUMBER PER HAUL) BY WEEK AND REGION,
 BEACH SEINE SURVEY, HUDSON RIVER ESTUARY, 1983.

SPOTTAIL SHINER YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY	CPUE S.E. NO. HAULS	YK	TZ	CH	IP	WP	REGIONS					SG	CS	AL	COMBINED
							CW	PK	HP	KG					
01AUG83	0.00 0.00 5	0.00 0.00 5	0.00 0.00 24	2.29 1.79 14	8.40 6.23 5	12.00 8.81 5	6.50 2.93 6	3.60 2.42 5	36.00 11.95 5	22.40 9.47 5	19.11 4.51 9	27.20 10.84 10	36.43 18.15 7	10.98 2.09 100	
15AUG83	0.00 0.00 5	0.00 0.00 5	0.08 0.06 24	0.93 0.93 14	1.40 1.40 5	17.80 13.92 5	9.17 3.50 6	7.40 3.96 5	22.00 13.96 5	9.60 4.70 5	1.44 1.09 9	3.80 1.74 10	27.00 7.65 7	4.79 0.80 100	
29AUG83	0.00 0.00 5	0.00 0.00 5	0.75 0.75 24	1.50 1.50 14	0.00 0.00 5	3.40 2.01 5	8.67 2.23 6	18.20 6.64 5	10.00 2.49 5	5.00 3.27 5	11.22 6.06 9	3.30 1.79 10	21.57 12.80 7	5.38 1.30 100	
12SEP83	0.00 0.00 5	0.00 0.00 5	0.04 0.04 24	0.00 0.00 14	0.40 0.40 5	2.40 1.12 5	10.67 3.96 6	7.20 2.48 5	5.60 2.91 5	5.80 2.78 5	7.00 4.06 9	3.20 1.58 10	22.57 15.42 7	4.27 1.35 100	
26SEP83	0.00 0.00 5	0.00 0.00 5	0.00 0.00 24	0.64 0.64 14	0.40 0.40 5	17.80 11.67 5	2.71 1.38 7	23.80 8.74 5	148.40 141.70 5	15.80 7.20 5	6.67 3.96 9	7.00 3.97 10	40.43 18.73 7	8.17 2.00 101	
10OCT83	0.00 0.00 5	0.00 0.00 5	0.00 0.00 24	0.71 0.64 14	0.57 0.37 7	4.40 2.62 5	0.50 0.34 6	5.60 4.86 5	6.75 4.50 4	18.67 12.79 6	10.11 4.62 9	10.10 4.24 10	6.14 5.65 7	4.17 1.07 102	

TABLE B-177
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	SPOTTAIL SHINER												YEARLING											
	YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW				YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	3	6	3	3	6	3	4	3	10	3	3	3	6	3	3	3	6	3	3	6	15
09MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	3	6	3	3	6	3	4	3	10	3	3	3	6	3	3	3	6	3	3	6	15
16MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	3	6	3	3	6	3	4	3	10	3	3	3	6	3	3	3	6	3	3	6	15
23MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	3	6	3	3	6	3	4	4	11	3	4	4	5	3	4	4	4	4	4	4	13
30MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	3	6	3	3	6	3	3	4	10	3	3	4	5	3	4	4	4	5	3	3	13
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	3	6	3	3	6	3	4	4	11	3	4	4	4	4	4	4	4	4	4	4	12
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	8	9	3	5	6	14	5	6	14	3	5	6	6	4	6	6	6	6	6	6	16
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	8	9	3	5	6	14	5	6	14	3	5	6	4	6	6	6	6	6	6	6	15
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	8	9	3	4	6	13	4	6	13	3	4	6	6	6	6	6	6	6	6	6	16
04JUL83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	8	9	3	5	6	14	5	6	14	3	5	6	6	6	6	6	6	6	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-177 (CONTINUED).

WEEK BEGINNING MONDAY	SPOTTAIL SHINER												YEARLING				
	INDIAN POINT				WEST POINT				CORNWALL				REGION	CHANNEL	REGION		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION					
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	7	25	36	4	30	34	5	12	6	23	5	6	23	5	23
09MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	8	24	36	4	30	34	5	13	5	23	5	5	23	5	23
16MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	7	25	36	7	30	37	5	10	5	20	5	5	20	5	20
23MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	6	13	22	7	23	30	5	9	6	20	5	6	20	5	20
30MAY83	DENSITY	0.00	0.00	0.00	0.00	1.33	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	1.33	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	6	15	24	6	23	29	5	9	6	20	5	6	20	5	20
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	6	14	24	7	23	30	5	9	5	19	5	5	19	5	19
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	16	26	8	25	33	3	12	13	28	3	13	28	3	28
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.07	0.00	0.00	0.07	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.07	0.00	0.00	0.07	0.00	0.00
	NO. TOWS	5	5	17	27	8	25	33	3	12	13	28	3	13	28	3	28
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	6	16	27	8	25	33	3	12	13	28	3	13	28	3	28
04JUL83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	16	26	8	25	33	3	12	13	28	3	13	28	3	28

N -- STRATUM NOT SAMPLED

TABLE B-177 (CONTINUED).

WEEK BEGINNING MONDAY	SPOTTAIL SHINER											
	POUGHKEEPSIE				HYDE PARK				YEARLING			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00
	S.E. NO. TOWS	0.00	0.00	0.00	19	0.00	0.00	0.00	21	0.00	0.00	0.00
09MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00
	S.E. NO. TOWS	0.00	0.00	0.00	20	0.00	0.00	0.00	20	0.00	0.00	0.00
16MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.57	0.19
	S.E. NO. TOWS	0.00	0.00	0.00	20	0.00	0.00	0.00	19	0.57	0.00	0.19
23MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00
	S.E. NO. TOWS	0.00	0.00	0.00	38	0.00	0.00	0.00	19	0.00	0.00	0.00
30MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00
	S.E. NO. TOWS	0.00	0.00	0.00	22	0.00	0.00	0.00	19	0.00	0.00	0.00
06JUN83	DENSITY	0.17	0.00	0.04	N	0.00	0.00	0.00	0.00	N	0.00	0.00
	S.E. NO. TOWS	0.17	0.00	0.04	38	0.00	0.00	0.00	19	0.00	0.00	0.00
13JUN83	DENSITY	0.49	0.00	0.11	N	0.00	0.00	0.00	0.00	N	0.00	0.00
	S.E. NO. TOWS	0.49	0.00	0.11	22	0.00	0.00	0.00	14	0.00	0.00	0.00
20JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00
	S.E. NO. TOWS	0.00	0.00	0.00	22	0.00	0.00	0.00	14	0.00	0.00	0.00
27JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.74	0.25
	S.E. NO. TOWS	0.00	0.00	0.00	22	0.00	0.00	0.00	14	0.74	0.00	0.25
04JUL83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	N	0.00	0.00
	S.E. NO. TOWS	0.00	0.00	0.00	22	0.00	0.00	0.00	14	0.00	0.00	0.00

N -- STRATUM NOT SAMPLED

TABLE B-177 (CONTINUED).

WEEK BEGINNING MONDAY	SPOTTAIL SHINER			YEARLING			
	SAUGERTIES			CATSKILL			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	3	3	N	3	3	6
09MAY83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	3	3	N	3	3	6
16MAY83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	4	3	N	3	3	6
23MAY83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	N	3	3	6
30MAY83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	N	3	3	6
06JUN83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	N	3	3	6
13JUN83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	4	2	N	3	3	6
20JUN83	DENSITY	2.87	0.00	N	0.00	0.00	0.00
	S.E.	2.87	0.00	N	0.00	0.00	0.00
	NO. TOWS	3	2	N	3	3	6
27JUN83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	4	2	N	3	3	6
04JUL83	DENSITY	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	4	2	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-177 (CONTINUED).

WEEK BEGINNING MONDAY	SPOTTAIL SHINER			ALBANY			YEARLING		
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
		N	0.00	0.00	N	0.00	0.00	0.00	0.00
02MAY83	N	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
	N	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
	N	5	5	N	5	21	66	107	194
09MAY83	N	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
	N	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
	N	5	5	N	5	21	69	104	194
16MAY83	N	0.00	0.00	N	0.00	0.00	0.05	0.00	0.01
	N	0.00	0.00	N	0.00	0.00	0.05	0.00	0.01
	N	5	5	N	5	21	67	106	194
23MAY83	N	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
	N	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
	N	3	3	N	3	19	68	99	186
30MAY83	N	0.00	0.00	N	0.00	0.00	0.07	0.00	0.02
	N	0.00	0.00	N	0.00	0.00	0.07	0.00	0.02
	N	3	3	N	3	19	68	99	186
06JUN83	N	0.00	0.00	N	0.00	0.00	0.02	0.00	0.01
	N	0.00	0.00	N	0.00	0.00	0.02	0.00	0.01
	N	3	3	N	3	19	68	99	186
13JUN83	N	0.00	0.00	N	0.00	0.00	0.06	0.00	0.02
	N	0.00	0.00	N	0.00	0.00	0.06	0.00	0.02
	N	3	3	N	3	16	63	108	187
20JUN83	N	0.00	0.00	N	0.00	0.00	0.34	0.00	0.08
	N	0.00	0.00	N	0.00	0.00	0.33	0.00	0.08
	N	3	3	N	3	16	63	108	187
27JUN83	N	0.00	0.00	N	0.00	0.00	0.06	0.00	0.02
	N	0.00	0.00	N	0.00	0.00	0.06	0.00	0.02
	N	3	3	N	3	16	62	109	187
04JUL83	N	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
	N	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
	N	3	3	N	3	16	62	109	187

N -- STRATUM NOT SAMPLED

TABLE B-178
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	SPOTTAIL SHINER											
	YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	32	7	7	46	16	8	3	27
22AUG83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	29	9	8	46	16	8	3	27
05SEP83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	29	8	8	45	16	8	2	26
19SEP83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	11	31	8	8	47	15	8	3	26
03OCT83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	11	31	7	8	46	17	8	3	28
17OCT83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	30	8	8	46	16	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-178 (CONTINUED).

WEEK BEGINNING MONDAY	SPOTTAIL SHINER											
	INDIAN POINT				WEST POINT				YEARLING			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	N	0.67	0.00	0.09	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.67	0.00	0.09	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	4	3	7	5	6	3	14
22AUG83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	2	14	5	3	8	5	5	3	13
05SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	6	3	15	5	3	8	5	5	3	13
19SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.44	0.00	0.00	0.03
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.44	0.00	0.00	0.03
	NO. TOWS	6	5	3	14	5	3	8	6	5	2	13
03OCT83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	4	2	6	5	6	4	15
17OCT83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	6	3	15	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-178 (CONTINUED).

WEEK BEGINNING MONDAY	SPOTTAIL SHINER											
	POUGHKEEPSIE				HYDE PARK				KINGSTON			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.27	0.00	0.09
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.27	0.00	0.09
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
22AUG83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.98	0.00	0.33
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.98	0.00	0.33
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
05SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	2.01	0.00	0.68
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	2.01	0.00	0.68
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
19SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
03OCT83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
17OCT83	DENSITY	0.00	0.00	0.00	N	0.43	0.00	0.09	N	0.87	0.00	0.30
	S.E.	0.00	0.00	0.00	N	0.43	0.00	0.09	N	0.87	0.00	0.30
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15

N -- STRATUM NOT SAMPLED

TABLE B-178 (CONTINUED).

WEEK BEGINNING MONDAY	SPOTTAIL SHINER			YEARLING				
	SAUGERTIES			CATSKILL				
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	1.07	0.00	0.38	N	0.52	0.00	0.25
	S.E.	0.39	0.00	0.14	N	0.28	0.00	0.13
	NO. TOWS	12	6	18	N	15	6	21
22AUG83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	12	6	18	N	15	6	21
05SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	12	6	18	N	15	6	21
19SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	12	6	18	N	15	6	21
03OCT83	DENSITY	0.00	0.00	0.00	N	0.20	0.00	0.10
	S.E.	0.00	0.00	0.00	N	0.20	0.00	0.10
	NO. TOWS	12	6	18	N	15	6	21
17OCT83	DENSITY	0.00	0.00	0.00	N	0.17	0.00	0.08
	S.E.	0.00	0.00	0.00	N	0.17	0.00	0.08
	NO. TOWS	13	6	19	N	14	6	20

N -- STRATUM NOT SAMPLED

TABLE B-178 (CONTINUED).

WEEK BEGINNING MONDAY	SPOTTAIL SHINER			YEARLING			
	ALBANY			COMBINED			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.83	N	0.83	0.36	0.00	0.09
	S.E.	0.41	N	0.41	0.09	0.00	0.02
	NO. TOWS	8	N	8	85	49	200
22AUG83	DENSITY	0.00	N	0.00	0.08	0.00	0.02
	S.E.	0.00	N	0.00	0.08	0.00	0.02
	NO. TOWS	8	N	8	87	49	200
05SEP83	DENSITY	0.00	N	0.00	0.17	0.00	0.04
	S.E.	0.00	N	0.00	0.17	0.00	0.04
	NO. TOWS	8	N	8	87	49	199
19SEP83	DENSITY	0.00	N	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00
	NO. TOWS	8	N	8	86	49	199
03OCT83	DENSITY	0.00	N	0.00	0.03	0.00	0.01
	S.F.	0.00	N	0.00	0.03	0.00	0.01
	NO. TOWS	8	N	8	85	50	200
17OCT83	DENSITY	0.59	N	0.59	0.20	0.00	0.05
	S.F.	0.59	N	0.59	0.11	0.00	0.03
	NO. TOWS	8	N	8	86	50	200

N -- STRATUM NOT SAMPLED

TABLE B-179
 CATCH PER UNIT EFFORT (NUMBER PER HAUL) BY WEEK AND REGION,
 BEACH SEINE SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	SPOTTAIL SHINER	YEARLING											AL	COMBINED		
		YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS				
01AUG83	CPU	0.00	0.00	1.14	0.00	4.00	3.67	0.00	0.20	2.00	2.00	0.00	0.00	0.00	0.00	0.78
	S.E. NO. HAULS	0.00 5	0.00 24	0.99 14	0.00 5	2.17 5	2.91 6	0.00 5	0.20 5	2.00 5	2.00 9	0.00 10	0.00 10	0.00 7	0.00 7	3.61 100
15AUG83	CPU	0.00	0.00	0.21	0.60	3.40	1.00	0.00	1.00	0.00	0.00	0.20	0.00	0.00	0.21	
	S.E. NO. HAULS	0.00 5	0.00 24	0.21 14	0.60 5	1.57 5	1.00 6	0.00 5	1.00 5	0.00 5	0.00 9	0.20 10	0.00 10	0.00 7	0.00 7	2.53 100
29AUG83	CPU	0.00	0.04	0.00	0.00	0.40	1.50	1.20	2.20	0.00	3.00	0.00	0.00	19.86	2.07	
	S.E. NO. HAULS	0.00 5	0.04 24	0.00 14	0.00 5	0.40 5	0.92 6	0.80 5	1.43 5	0.00 5	1.90 9	0.00 10	0.00 10	19.86 7	5.31 100	
12SEP83	CPU	0.00	0.08	0.00	0.00	0.80	1.17	0.00	1.00	2.80	2.89	3.20	5.14	1.34		
	S.E. NO. HAULS	0.00 5	0.08 24	0.00 14	0.00 5	0.37 5	1.17 6	0.00 5	0.77 5	1.96 5	1.33 9	1.44 10	3.44 7	4.13 100		
26SEP83	CPU	0.00	0.00	0.07	0.00	0.80	0.14	5.40	0.00	2.00	1.11	3.10	2.86	1.06		
	S.E. NO. HAULS	0.00 5	0.00 24	0.07 14	0.00 5	0.49 5	0.14 7	2.82 5	0.00 5	1.30 5	0.81 9	1.73 10	2.04 7	3.93 101		
10OCT83	CPU	0.00	0.00	0.14	0.00	0.00	0.33	0.40	0.75	5.67	7.44	2.90	0.43	1.49		
	S.E. NO. HAULS	0.00 5	0.00 24	0.14 14	0.00 7	0.00 5	0.21 6	0.40 5	0.48 4	5.08 6	4.99 9	1.80 10	0.43 7	4.25 102		

TABLE B-180
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	SPOTTAIL SHINER												REGION
	YONKERS				TAPPAN ZEE				OLDFR				
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	3	6	3	4	3	10	6	3	6	15
09MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	3	10	6	3	6	15	
16MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	3	10	6	3	6	15	
23MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	4	11	5	4	4	13	
30MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	3	4	10	5	5	3	13	
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	4	11	4	4	4	12	
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	5	6	14	4	6	6	16	
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	5	6	14	4	6	5	15	
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	4	6	13	4	6	6	16	
04JUL83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	5	6	14	4	6	6	16	

N -- STRATUM NOT SAMPLED

TABLE B-180 (CONTINUED).

WEEK BEGINNING MONDAY	SPOTTAIL SHINER											
	INDIAN POINT				WEST POINT				OLDER			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 4	0.00 7	0.00 25	0.00 36	0.00 4	0.00 30	0.00 34	0.00 5	0.00 12	0.00 6	0.00 23
09MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 4	0.00 8	0.00 24	0.00 36	0.00 4	0.00 30	0.00 34	0.00 5	0.00 13	0.00 5	0.00 23
16MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.40	0.00	0.11
	S.E. NO. TOWS	0.00 4	0.00 7	0.00 25	0.00 36	0.00 7	0.00 30	0.00 37	0.00 5	0.40 10	0.00 5	0.11 20
23MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 3	0.00 6	0.00 13	0.00 22	0.00 7	0.00 23	0.00 30	0.00 5	0.00 9	0.00 6	0.00 20
30MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 3	0.00 6	0.00 15	0.00 24	0.00 6	0.00 23	0.00 29	0.00 5	0.00 9	0.00 6	0.00 20
06JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 4	0.00 6	0.00 14	0.00 24	0.00 7	0.00 23	0.00 30	0.00 5	0.00 9	0.00 5	0.00 19
13JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 5	0.00 5	0.00 16	0.00 26	0.00 8	0.00 25	0.00 33	0.00 3	0.00 12	0.00 13	0.00 28
20JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 5	0.00 5	0.00 17	0.00 27	0.00 8	0.00 25	0.00 33	0.00 3	0.00 12	0.00 13	0.00 28
27JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 5	0.00 6	0.00 16	0.00 27	0.00 8	0.00 25	0.00 33	0.00 3	0.00 12	0.00 13	0.00 28
04JUL83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	0.00 5	0.00 5	0.00 16	0.00 26	0.00 8	0.00 25	0.00 33	0.00 3	0.00 12	0.00 13	0.00 28

N -- STRATUM NOT SAMPLED

TABLE B-180 (CONTINUED).

WEEK BEGINNING MONDAY	SPOTTAIL SHINER			SAUCERTIES			OLDER		
	DENSITY S.E. NO. TOWS	SHOAL		DENSITY S.E. NO. TOWS	SHOAL		DENSITY S.E. NO. TOWS	SHOAL	
		BOTTOM	CHANNEL		REGION	CHANNEL		REGION	CHANNEL
02MAY83	0.00 0.00 3	0.00 0.00 3	0.00 0.00 3	0.00 0.00 6	0.00 0.00 6	0.00 0.00 3	0.00 0.00 3	0.00 0.00 6	0.00 0.00 6
09MAY83	0.00 0.00 3	0.00 0.00 3	0.00 0.00 3	0.00 0.00 6	0.00 0.00 6	0.00 0.00 3	0.00 0.00 3	0.00 0.00 6	0.00 0.00 6
16MAY83	0.00 0.00 4	0.00 0.00 3	0.00 0.00 3	0.00 0.00 7	0.00 0.00 7	0.00 0.00 3	0.00 0.00 3	0.00 0.00 6	0.00 0.00 6
23MAY83	0.00 0.00 5	0.00 0.00 3	0.00 0.00 3	0.00 0.00 8	0.00 0.00 8	0.00 0.00 3	0.00 0.00 3	0.00 0.00 6	0.00 0.00 6
30MAY83	0.00 0.00 5	0.00 0.00 3	0.00 0.00 3	0.00 0.00 8	0.00 0.00 8	0.00 0.00 3	0.00 0.00 3	0.00 0.00 6	0.00 0.00 6
06JUN83	0.00 0.00 5	0.00 0.00 3	0.00 0.00 3	0.00 0.00 8	0.00 0.00 8	0.00 0.00 3	0.00 0.00 3	0.00 0.00 6	0.00 0.00 6
13JUN83	0.00 0.00 4	0.00 0.00 2	0.00 0.00 2	0.00 0.00 6	0.00 0.00 6	0.00 0.00 3	0.00 0.00 3	0.00 0.00 6	0.00 0.00 6
20JUN83	0.00 0.00 3	0.00 0.00 2	0.00 0.00 2	0.00 0.00 5	0.00 0.00 5	0.00 0.00 3	0.00 0.00 3	0.00 0.00 6	0.00 0.00 6
27JUN83	0.00 0.00 4	0.00 0.00 2	0.00 0.00 2	0.00 0.00 6	0.00 0.00 6	0.00 0.00 3	0.00 0.00 3	0.00 0.00 6	0.00 0.00 6
04JUL83	0.00 0.00 4	0.00 0.00 2	0.00 0.00 2	0.00 0.00 6	0.00 0.00 6	0.00 0.00 3	0.00 0.00 3	0.00 0.00 6	0.00 0.00 6

N -- STRATUM NOT SAMPLED

TABLE B-180 (CONTINUED).

WEEK BEGINNING MONDAY	SPOTTAIL SHINER			ALBANY			OLDER					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	5	N	5	5	21	66	107	194	194	194
09MAY83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.11	0.03	0.05	0.03	0.05
	S.E.	N	0.00	N	0.00	0.00	0.00	0.05	0.03	0.02	0.03	0.02
	NO. TOWS	N	5	N	5	5	21	69	104	194	194	194
16MAY83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.03	0.00	0.01	0.00	0.01
	S.E.	N	0.00	N	0.00	0.00	0.00	0.03	0.00	0.01	0.00	0.01
	NO. TOWS	N	5	N	5	5	21	67	106	194	194	194
23MAY83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	3	N	3	3	19	68	99	186	186	186
30MAY83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	3	N	3	3	19	68	99	186	186	186
06JUN83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	3	N	3	3	19	68	99	186	186	186
13JUN83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	3	N	3	3	16	63	108	187	187	187
20JUN83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	3	N	3	3	16	63	108	187	187	187
27JUN83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	3	N	3	3	16	62	109	187	187	187
04JUL83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	3	N	3	3	16	62	109	187	187	187

N -- STRATUM NOT SAMPLED

TABLE B-181
 CATCH PER UNIT EFFORT (NUMBER PER HAUL) BY WEEK AND REGION,
 BEACH SEINE SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	SPOTTAIL SHINER										OLDER															
	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL	COMBINED	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL	COMBINED
01AUG83	CPUE S.E. NO. HAULS	0.00 0.00 5	0.00 0.00 24	0.00 0.00 14	0.00 0.00 5	0.00 0.00 6	0.00 0.00 5	0.00 0.00 5	0.00 0.00 5	0.00 0.00 9	0.00 0.00 10	0.00 0.00 7	0.00 0.00 100	0.00 0.00 5	0.00 0.00 24	0.00 0.00 14	0.00 0.00 5	0.00 0.00 5	0.00 0.00 6	0.00 0.00 5	0.00 0.00 5	0.00 0.00 9	0.00 0.00 10	0.00 0.00 7	0.00 0.00 100	
15AUG83	CPUE S.E. NO. HAULS	0.00 0.00 5	0.00 0.00 24	0.00 0.00 14	0.00 0.00 5	0.00 0.00 6	0.00 0.00 5	0.00 0.00 5	0.00 0.00 5	0.00 0.00 9	0.00 0.00 10	0.00 0.00 7	0.00 0.00 100	0.00 0.00 5	0.00 0.00 24	0.00 0.00 14	0.00 0.00 5	0.00 0.00 5	0.00 0.00 6	0.00 0.00 5	0.00 0.00 5	0.00 0.00 9	0.00 0.00 10	0.00 0.00 7	0.00 0.00 100	
29AUG83	CPUE S.E. NO. HAULS	0.00 0.00 5	0.00 0.00 24	0.00 0.00 14	0.00 0.00 5	0.00 0.00 6	0.00 0.00 5	0.00 0.00 5	0.00 0.00 5	0.00 0.00 9	0.00 0.00 10	0.00 0.00 7	0.00 0.00 100	0.00 0.00 5	0.00 0.00 24	0.00 0.00 14	0.00 0.00 5	0.00 0.00 5	0.00 0.00 6	0.00 0.00 5	0.00 0.00 5	0.00 0.00 9	0.00 0.00 10	0.00 0.00 7	0.00 0.00 100	
12SEP83	CPUE S.E. NO. HAULS	0.00 0.00 5	0.00 0.00 24	0.00 0.00 14	0.00 0.00 5	0.00 0.00 6	0.00 0.00 5	0.00 0.00 5	0.00 0.00 5	0.00 0.00 9	0.00 0.00 10	0.00 0.00 7	0.00 0.00 100	0.00 0.00 5	0.00 0.00 24	0.00 0.00 14	0.00 0.00 5	0.00 0.00 5	0.00 0.00 6	0.00 0.00 5	0.00 0.00 5	0.00 0.00 9	0.00 0.00 10	0.00 0.00 7	0.00 0.00 100	
26SEP83	CPUE S.E. NO. HAULS	0.00 0.00 5	0.00 0.00 24	0.00 0.00 14	0.00 0.00 5	0.00 0.00 7	0.00 0.00 5	0.00 0.00 5	0.00 0.00 5	0.00 0.00 9	0.00 0.00 10	0.00 0.00 7	0.00 0.00 101	0.00 0.00 5	0.00 0.00 24	0.00 0.00 14	0.00 0.00 5	0.00 0.00 5	0.00 0.00 6	0.00 0.00 5	0.00 0.00 5	0.00 0.00 9	0.00 0.00 10	0.00 0.00 7	0.00 0.00 101	
10OCT83	CPUE S.E. NO. HAULS	0.00 0.00 5	0.00 0.00 24	0.00 0.00 14	0.00 0.00 7	0.00 0.00 6	0.00 0.00 5	0.00 0.00 4	0.00 0.00 5	0.00 0.00 9	0.00 0.00 10	0.00 0.00 7	0.00 0.00 102	0.00 0.00 5	0.00 0.00 24	0.00 0.00 14	0.00 0.00 5	0.00 0.00 5	0.00 0.00 6	0.00 0.00 5	0.00 0.00 4	0.00 0.00 6	0.00 0.00 9	0.00 0.00 10	0.00 0.00 7	0.00 0.00 102

TABLE B-182
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	ATLANTIC STURGEON												YEARLING			
	YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW							
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	3	10	6	3	6	15	6	3	6	15
09MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	3	10	6	3	6	15	6	3	6	15
16MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	3	10	6	3	6	15	6	3	6	15
23MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	4	11	5	4	4	13	5	4	4	13
30MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	3	4	10	5	3	3	13	5	5	3	13
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	4	11	4	4	4	12	4	4	4	12
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	5	6	14	4	6	6	16	4	6	6	16
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	5	6	14	4	6	6	15	4	6	5	15
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	4	6	13	4	6	6	16	4	6	6	16
04JUL83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	5	6	14	4	6	6	16	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-182 (CONTINUED).

ATLANTIC STURGEON YEARLING

WEEK BEGINNING MONDAY	INDIAN POINT			WEST POINT			CORNWALL					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 4	0.00 0.00 7	0.00 0.00 25	0.00 0.00 36	N N N	0.00 0.00 4	0.00 0.00 30	0.00 0.00 34	0.00 0.00 5	0.00 0.00 12	0.00 0.00 23
09MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 4	0.00 0.00 8	0.00 0.00 24	0.00 0.00 36	N N N	0.00 0.00 4	0.00 0.00 30	0.00 0.00 34	0.00 0.00 5	0.00 0.00 13	0.00 0.00 23
16MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 4	0.00 0.00 7	0.00 0.00 25	0.00 0.00 36	N N N	0.00 0.00 7	0.00 0.00 30	0.00 0.00 37	0.00 0.00 5	0.00 0.00 10	0.00 0.00 20
23MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 3	0.00 0.00 6	0.00 0.00 13	0.00 0.00 22	N N N	0.00 0.00 7	0.00 0.00 23	0.00 0.00 30	0.00 0.00 5	0.00 0.00 9	0.00 0.00 20
30MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 3	0.00 0.00 6	0.00 0.00 15	0.00 0.00 24	N N N	0.00 0.00 6	0.00 0.00 23	0.00 0.00 29	0.00 0.00 5	0.00 0.00 9	0.00 0.00 20
06JUN83	DENSITY S.E. NO. TOWS	0.00 0.00 4	0.00 0.00 6	0.00 0.00 14	0.00 0.00 24	N N N	0.00 0.00 7	0.00 0.00 23	0.00 0.00 30	0.00 0.00 5	0.00 0.00 9	0.00 0.00 19
13JUN83	DENSITY S.E. NO. TOWS	0.00 0.00 5	0.00 0.00 5	0.00 0.00 16	0.00 0.00 26	N N N	0.99 0.99 8	0.00 0.00 25	0.14 0.14 33	0.00 0.00 3	0.00 0.00 12	0.00 0.00 28
20JUN83	DENSITY S.E. NO. TOWS	0.00 0.00 5	0.00 0.00 5	0.00 0.00 17	0.00 0.00 27	N N N	0.00 0.00 8	0.00 0.00 25	0.00 0.00 33	0.00 0.00 3	0.00 0.00 12	0.00 0.00 28
27JUN83	DENSITY S.E. NO. TOWS	0.00 0.00 5	0.00 0.00 6	0.00 0.00 16	0.00 0.00 27	N N N	0.00 0.00 8	0.00 0.00 25	0.00 0.00 33	0.00 0.00 3	0.00 0.00 12	0.00 0.00 28
04JUL83	DENSITY S.E. NO. TOWS	0.00 0.00 5	0.00 0.00 5	0.00 0.00 16	0.00 0.00 26	N N N	0.00 0.00 8	0.00 0.00 25	0.00 0.00 33	0.00 0.00 3	0.00 0.00 12	0.00 0.00 28

N -- STRATUM NOT SAMPLED

TABLE B-182 (CONTINUED).

WEEK BEGINNING MONDAY	ATLANTIC STURGEON										YEARLING									
	POUGHKEEPSIE					HYDE PARK					KINGSTON					KINGSTON				
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	9	10	10	19	10	11	11	11	10	11	11	11	10	6	7	13	11	6	7
09MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	10	10	10	20	10	10	10	20	10	10	20	20	6	7	13	20	6	7	13
16MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	10	10	10	20	10	11	11	19	8	11	19	19	6	7	13	19	6	7	13
23MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.F.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	16	22	22	38	7	12	12	19	7	12	19	19	4	6	10	19	4	6	10
30MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	16	22	22	38	7	12	12	19	7	12	19	19	5	5	10	19	5	5	10
06JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	16	22	22	38	7	12	12	19	7	12	19	19	4	6	10	19	4	6	10
13JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	15	15	22	5	9	9	14	5	9	14	14	5	5	10	14	5	5	10
20JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	8	14	14	22	5	9	9	14	5	9	14	14	5	6	11	14	5	6	11
27JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	15	15	22	5	9	9	14	5	9	14	14	4	6	10	14	4	6	10
04JUL83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	15	15	22	5	9	9	14	5	9	14	14	4	6	10	14	4	6	10

N -- STRATUM NOT SAMPLED

TABLE B-182 (CONTINUED).

WEEK BEGINNING MONDAY	ATLANTIC STURGEON			YEARLING			
	SAUGERTIES			CAISKILL			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	3	3	3	3	6
09MAY83	DENSITY	N	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	3	3	3	3	6
16MAY83	DENSITY	N	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	4	3	7	3	6
23MAY83	DENSITY	N	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	3	6
30MAY83	DENSITY	N	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	3	6
06JUN83	DENSITY	N	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	3	6
13JUN83	DENSITY	N	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	4	2	6	3	6
20JUN83	DENSITY	N	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	3	2	5	3	6
27JUN83	DENSITY	N	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	4	2	6	3	6
04JUL83	DENSITY	N	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	4	2	6	3	6

N -- STRATUM NOT SAMPLED

TABLE B-182 (CONTINUED).

WEEK BEGINNING MONDAY	ATLANTIC STURGEON			ALBANY			YEARLING		
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00
	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00
	N	5	N	5	21	66	107	194	194
09MAY83	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00
	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00
	N	5	N	5	21	69	104	194	194
16MAY83	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00
	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00
	N	5	N	5	21	67	106	194	194
23MAY83	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00
	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00
	N	3	N	3	19	68	99	186	186
30MAY83	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00
	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00
	N	3	N	3	19	68	99	186	186
06JUN83	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00
	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00
	N	3	N	3	19	68	99	186	186
13JUN83	N	0.00	N	0.00	0.00	0.05	0.00	0.01	0.01
	N	0.00	N	0.00	0.00	0.05	0.00	0.01	0.01
	N	3	N	3	16	63	108	187	187
20JUN83	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00
	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00
	N	3	N	3	16	63	108	187	187
27JUN83	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00
	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00
	N	3	N	3	16	62	109	187	187
04JUL83	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00
	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00
	N	3	N	3	16	62	109	187	187

N -- STRATUM NOT SAMPLED

TABLE B-183
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	ATLANTIC STURGEON										YEARLING		
	YONKERS			TAPPAN ZEE			CROTON-HAVERSTRAW			SHOAL	BOTTOM	CHANNEL	REGION
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	
08AUG83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	7	N	5	12	32	7	7	46	16	8	27	
22AUG83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	7	N	5	12	29	9	8	46	16	8	27	
05SEP83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	7	N	5	12	29	8	8	45	16	8	26	
19SEP83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	6	N	5	11	31	8	8	47	15	8	26	
03OCT83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	6	N	5	11	31	7	8	46	17	8	28	
17OCT83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	7	N	5	12	30	8	8	46	16	7	26	

N -- STRATUM NOT SAMPLED

TABLE B-183 (CONTINUED).

WEEK BEGINNING MONDAY	ATLANTIC STURGEON										YEARLING		
	INDIAN POINT			WEST POINT			CORNWALL						
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	
08AUG83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	6	5	3	14	4	3	7	5	6	3	14	
22AUG83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	7	5	2	14	5	3	8	5	5	3	13	
05SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	6	6	3	15	5	3	8	5	5	3	13	
19SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	6	5	3	14	5	3	8	6	5	2	13	
03OCT83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	6	5	3	14	4	2	6	5	6	4	15	
17OCT83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	6	6	3	15	5	3	8	5	5	3	13	

N -- STRATUM NOT SAMPLED

TABLE B-183 (CONTINUED).

WEEK BEGINNING MONDAY	ATLANTIC STURGEON											
	POUGHKEEPSIE				HYDE PARK				KINGSTON			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	N	0.38	0.00	0.08	N	0.00	0.00	0.00
	S.F.	0.00	0.00	0.00	N	0.38	0.00	0.08	N	0.00	0.00	0.00
	NO. TOWS	5	3	4	8	6	4	10	N	9	6	15
22AUG83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.F.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	4	8	6	4	10	N	9	6	15
05SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.F.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	4	8	6	4	10	N	9	6	15
19SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.F.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	4	8	6	4	10	N	9	6	15
03OCT83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.F.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	4	8	6	4	10	N	9	6	15
17OCT83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.F.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	4	8	6	4	10	N	9	6	15

N -- STRATUM NOT SAMPLED

TABLE B-183 (CONTINUED).

WEEK BEGINNING MONDAY	ATLANTIC STURGEON						YEARLING					
	SAUGERTIES			CATSKILL			SAUGERTIES			CATSKILL		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.F.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	12	6	18	N	15	6	N	15	6	21
22AUG83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.F.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	12	6	18	N	15	6	N	15	6	21
05SEP83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.F.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	12	6	18	N	15	6	N	15	6	21
19SEP83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.F.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	12	6	18	N	15	6	N	15	6	21
03OCT83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.F.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	12	6	18	N	15	6	N	15	6	21
17OCT83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.F.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	13	6	19	N	14	6	N	14	6	20

N -- STRATUM NOT SAMPLED

TABLE B-183 (CONTINUED).

WEEK BEGINNING MONDAY	ATLANTIC STURGEON			YEARLING				
	ALBANY			COMBINED				
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	N	0.00	0.00	0.02	0.00	0.01
	S.E.	0.00	N	0.00	0.00	0.02	0.00	0.01
	NO. TOWS	8	N	8	66	85	49	200
22AUG83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	8	N	8	64	87	49	200
05SEP83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	8	N	8	63	87	49	199
19SEP83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	8	N	8	64	86	49	199
03OCT83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	8	N	8	65	85	50	200
17OCT83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	8	N	8	64	86	50	200

N -- STRATUM NOT SAMPLED

TABLE B-184
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	ATLANTIC STURGEON											
	YONKERS				TAPPAN ZEE				OLDER			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	3	6	3	4	3	10	6	3	15
09MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	3	10	6	3	6	15
16MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	3	10	6	3	6	15
23MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	4	11	5	4	4	13
30MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	3	4	10	5	5	3	13
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	4	11	4	4	4	12
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	5	6	14	4	6	6	16
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	5	6	14	4	6	5	15
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	4	6	13	4	6	6	16
04JUL83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-184 (CONTINUED).

ATLANTIC STURGEON OLDER

WEEK BEGINNING MONDAY	INDIAN POINT			WEST POINT			CORNWALL					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	7	25	36	N	4	30	34	5	12	6
09MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	8	24	36	N	4	30	34	5	13	5
16MAY83	DENSITY	0.00	0.00	0.00	N	1.85	0.00	0.25	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	1.39	0.00	0.19	0.00	0.00	0.00	0.00
	NO. TOWS	4	7	25	36	N	7	30	37	5	10	5
23MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	6	13	22	N	7	23	30	5	9	6
30MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	6	15	24	N	6	23	29	5	9	6
06JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	5
13JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13
20JUN83	DENSITY	0.00	0.00	0.00	N	0.94	0.00	0.13	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.94	0.00	0.13	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	17	27	N	8	25	33	3	12	13
27JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	6	16	27	N	8	25	33	3	12	13
04JUL83	DENSITY	0.00	0.00	0.00	N	0.35	0.00	0.05	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.35	0.00	0.05	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13

N -- STRATUM NOT SAMPLED

TABLE B-184 (CONTINUED).

WEEK BEGINNING MONDAY	ATLANTIC STURGEON														
	POUGHKEEPSIE					HYDE PARK					KINGSTON				
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION			
02MAY83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00			
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00			
	NO. TOWS	N	9	10	19	N	10	11	21	N	6	7			
09MAY83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00			
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00			
	NO. TOWS	N	10	10	20	N	10	10	20	N	6	7			
16MAY83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00			
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00			
	NO. TOWS	N	10	10	20	N	8	11	19	N	6	7			
23MAY83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00			
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00			
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6			
30MAY83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00			
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00			
	NO. TOWS	N	16	22	38	N	7	12	19	N	5	5			
06JUN83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00			
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00			
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6			
13JUN83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00			
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00			
	NO. TOWS	N	7	15	22	N	5	9	14	N	5	5			
20JUN83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00			
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00			
	NO. TOWS	N	8	14	22	N	5	9	14	N	5	6			
27JUN83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00			
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00			
	NO. TOWS	N	7	15	22	N	5	9	14	N	4	6			
04JUL83	DENSITY	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00			
	S.E.	N	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00			
	NO. TOWS	N	7	15	22	N	5	9	14	N	4	6			

N -- STRATUM NOT SAMPLED

TABLE B-184 (CONTINUED).

WEEK BEGINNING MONDAY	ATLANTIC STURGEON						OLDER					
	SAUGERTIES			CATSKILL			SAUGERTIES			CATSKILL		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	3	3	6	N	3	3	N	3	3	6
09MAY83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	3	3	6	N	3	3	N	3	3	6
16MAY83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	4	3	7	N	3	3	N	3	3	6
23MAY83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	3	3	N	3	3	6
30MAY83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	3	3	N	3	3	6
06JUN83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	3	3	N	3	3	6
13JUN83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	4	2	6	N	3	3	N	3	3	6
20JUN83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	3	2	5	N	3	3	N	3	3	6
27JUN83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	4	2	6	N	3	3	N	3	3	6
04JUL83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	4	2	6	N	3	3	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-184 (CONTINUED).

WEEK BEGINNING MONDAY	ATLANTIC STURGEON						OLDER		
	ALBANY			COMBINED					
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	
02MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	5	N	5	21	66	107	194	
09MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	5	N	5	21	69	104	194	
16MAY83	DENSITY	0.00	N	0.00	0.00	0.10	0.00	0.02	
	S.E.	0.00	N	0.00	0.00	0.07	0.00	0.02	
	NO. TOWS	5	N	5	21	67	106	194	
23MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	3	N	3	19	68	99	186	
30MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	3	N	3	19	68	99	186	
06JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	3	N	3	19	68	99	186	
13JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	3	N	3	16	63	108	187	
20JUN83	DENSITY	0.00	N	0.00	0.00	0.05	0.00	0.01	
	S.E.	0.00	N	0.00	0.00	0.05	0.00	0.01	
	NO. TOWS	3	N	3	16	63	108	187	
27JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	
	NO. TOWS	3	N	3	16	62	109	187	
04JUL83	DENSITY	0.00	N	0.00	0.00	0.02	0.00	0.00	
	S.E.	0.00	N	0.00	0.00	0.02	0.00	0.00	
	NO. TOWS	3	N	3	16	62	109	187	

N -- STRATUM NOT SAMPLED

TABLE B-185
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	ATLANTIC STURGEON												REGION
	YONKERS				TAPPAN ZEI				CROTON-HAVERSTRAW				
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	
08AUG83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	N	5	12	32	7	7	46	16	3	27	27
22AUG83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	N	5	12	29	9	8	46	16	3	27	27
05SEP83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	N	5	12	29	8	8	45	16	2	26	26
19SEP83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.F.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	N	5	11	31	8	8	47	15	3	26	26
03OCT83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	N	5	11	31	7	8	46	17	3	28	28
17OCT83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.F.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	N	5	12	30	8	8	46	16	3	26	26

N -- STRATUM NOT SAMPLED

TABLE B-185 (CONTINUED).

WEEK BEGINNING MOORDAY	ATLANTIC STURGEON											
	INDIAN POINT				WEST POINT				CORNWALL			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.F.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	4	3	7	5	6	3	14
22AUG83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.F.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	2	14	5	3	8	5	5	3	13
05SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.F.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	6	3	15	5	3	8	5	5	3	13
19SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.F.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	5	3	8	6	5	2	13
03OCT83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.F.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	4	2	6	5	6	4	15
17OCT83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.F.	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	6	3	15	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-185 (CONTINUED).

WEEK BEGINNING MONDAY	ATLANTIC STURGEON											
	POUGHKEEPSIE			HYDE PARK			OLDER			KINGSTON		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
22AUG83	DENSITY	3.13	0.00	0.73	N	0.88	0.00	0.18	N	0.00	0.00	0.00
	S.E.	1.36	0.00	0.32	N	0.56	0.00	0.12	N	0.00	0.00	0.00
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
05SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
19SEP83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
03OCT83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15
17OCT83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	5	3	8	N	6	4	10	N	9	6	15

N -- STRATUM NOT SAMPLED

TABLE B-185 (CONTINUED).

WEEK BEGINNING MONDAY	ATLANTIC STURGEON						OLDER						
	SAUGERTIES			CATSKILL			SHOAL			REGION			
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	0.00 0.00 12	N	0.00 0.00 6	0.00 0.00 18	0.00 0.00 18	N	0.00 0.00 15	0.00 0.00 6	0.00 0.00 21	N	0.00 0.00 15	0.00 0.00 6	0.00 0.00 21
22AUG83	0.25 0.25 12	N	0.00 0.00 6	0.09 0.09 18	0.09 0.09 18	N	0.87 0.70 15	0.00 0.00 6	0.41 0.33 21	N	0.00 0.00 15	0.00 0.00 6	0.00 0.00 21
05SEP83	0.00 0.00 12	N	0.00 0.00 6	0.00 0.00 18	0.00 0.00 18	N	0.00 0.00 15	0.00 0.00 6	0.00 0.00 21	N	0.00 0.00 15	0.00 0.00 6	0.00 0.00 21
19SEP83	0.22 0.22 12	N	0.00 0.00 6	0.08 0.08 18	0.08 0.08 18	N	0.16 0.16 15	0.00 0.00 6	0.08 0.08 21	N	0.00 0.00 15	0.00 0.00 6	0.00 0.00 21
03OCT83	0.00 0.00 12	N	0.00 0.00 6	0.00 0.00 18	0.00 0.00 18	N	0.00 0.00 15	0.00 0.00 6	0.00 0.00 21	N	0.00 0.00 15	0.00 0.00 6	0.00 0.00 21
17OCT83	0.00 0.00 13	N	0.00 0.00 6	0.00 0.00 19	0.00 0.00 19	N	0.00 0.00 14	0.00 0.00 6	0.00 0.00 20	N	0.00 0.00 14	0.00 0.00 6	0.00 0.00 20

N -- STRATUM NOT SAMPLED

TABLE B-185 (CONTINUED).

WEEK BEGINNING MONDAY	ATLANTIC STURGEON			ALBANY			OLDER		
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
		N	0.00	0.00	N	0.00	0.00	0.00	0.00
08AUG83	N	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
	N	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
	N	8	8	N	8	66	85	49	200
22AUG83	N	4.08	4.08	N	4.08	0.00	1.11	0.00	0.27
	N	1.75	1.75	N	1.75	0.00	0.30	0.00	0.07
	N	8	8	N	8	64	87	49	200
05SEP83	N	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
	N	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
	N	8	8	N	8	63	87	49	199
19SEP83	N	0.00	0.00	N	0.00	0.00	0.05	0.00	0.01
	N	0.00	0.00	N	0.00	0.00	0.03	0.00	0.01
	N	8	8	N	8	64	86	49	199
03OCT83	N	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
	N	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
	N	8	8	N	8	65	85	50	200
17OCT83	N	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
	N	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00
	N	8	8	N	8	64	86	50	200

N -- STRATUM NOT SAMPLED

TABLE B-186
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	SHORTNOSE STURGEON						YOUNG-OF-THE-YEAR					
	YONKERS			TAPPAN ZEE			CROTON-HAVERSTRAW			REGION		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	3	10	6	3	6	15
09MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	3	10	6	3	6	15
16MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	3	10	6	3	6	15
23MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	4	11	5	4	4	13
30MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	3	4	10	5	5	3	13
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	4	11	4	4	4	12
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	5	6	14	4	6	6	16
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	5	6	14	4	6	5	15
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	4	6	13	4	6	6	16
04JUL83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-186 (CONTINUED).

WEEK BEGINNING MONDAY	SHORTNOSE STURGEON												YOUNG-OF-THE-YEAR											
	INDIAN POINT				WEST POINT				CORNWALL				INDIAN POINT				WEST POINT				CORNWALL			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	7	25	36	4	30	34	N	4	4	30	34	5	12	6	23	5	12	6	23	5	12	6
09MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	8	24	36	4	30	34	N	4	4	30	34	5	13	5	23	5	13	5	23	5	13	5
16MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	7	25	36	7	30	37	N	7	7	30	37	5	10	5	20	5	10	5	20	5	10	5
23MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	6	13	22	7	23	30	N	7	7	23	30	5	9	6	20	5	9	6	20	5	9	6
30MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	6	15	24	6	23	29	N	6	6	23	29	5	9	6	20	5	9	6	20	5	9	6
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	4	6	14	24	7	23	30	N	7	7	23	30	5	9	5	19	5	9	5	19	5	9	5
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	16	26	8	25	33	N	8	8	25	33	3	12	13	28	3	12	13	28	3	12	13
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	17	27	8	25	33	N	8	8	25	33	3	12	13	28	3	12	13	28	3	12	13
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	6	16	27	8	25	33	N	8	8	25	33	3	12	13	28	3	12	13	28	3	12	13
04JUL83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	16	26	8	25	33	N	8	8	25	33	3	12	13	28	3	12	13	28	3	12	13

N -- STRATUM NOT SAMPLED

TABLE B-186 (CONTINUED).

WEEK BEGINNING MONDAY	SHORTNOSE STURGEON										YOUNG-OF-THE-YEAR									
	POUGHKEEPSIE					HYDE PARK					KINGSTON									
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION				
02MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00				
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00				
	NO. TOWS	9	10	19	N	10	11	21	N	6	7	13	N	6	7	13				
09MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00				
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00				
	NO. TOWS	10	10	20	N	10	10	20	N	6	7	13	N	6	7	13				
16MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00				
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00				
	NO. TOWS	10	10	20	N	8	11	19	N	6	7	13	N	6	7	13				
23MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00				
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00				
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10	N	4	6	10				
30MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00				
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00				
	NO. TOWS	16	22	38	N	7	12	19	N	5	5	10	N	5	5	10				
06JUN83	DENSITY	0.00	0.00	0.00	N	0.42	0.00	0.09	N	0.42	0.00	0.09	N	0.00	0.00	0.00				
	S.E.	0.00	0.00	0.00	N	0.42	0.00	0.09	N	0.42	0.00	0.09	N	0.00	0.00	0.00				
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10	N	4	6	10				
13JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00				
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00				
	NO. TOWS	7	15	22	N	5	9	14	N	5	5	10	N	5	5	10				
20JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00				
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00				
	NO. TOWS	8	14	22	N	5	9	14	N	5	6	11	N	5	6	11				
27JUN83	DENSITY	0.00	0.00	0.00	N	0.58	0.00	0.12	N	0.58	0.00	0.12	N	0.00	0.00	0.00				
	S.E.	0.00	0.00	0.00	N	0.58	0.00	0.12	N	0.58	0.00	0.12	N	0.00	0.00	0.00				
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10	N	4	6	10				
04JUL83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00				
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00				
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10	N	4	6	10				

N -- STRATUM NOT SAMPLED

TABLE B-186 (CONTINUED).

WEEK BEGINNING MONDAY	SHORTNOSE STURGEON			YOUNG-OF-THE-YEAR			
	SAUGERTIES			CATSKILL			
	SHOAL	BOTTOM	CHANNEL	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	3	3	6	3	6
09MAY83	DENSITY	N	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	3	3	6	3	6
16MAY83	DENSITY	N	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	4	3	7	3	6
23MAY83	DENSITY	N	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	3	6
30MAY83	DENSITY	N	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	3	6
06JUN83	DENSITY	N	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	3	6
13JUN83	DENSITY	N	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	4	2	6	3	6
20JUN83	DENSITY	N	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	3	2	5	3	6
27JUN83	DENSITY	N	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	4	2	6	3	6
04JUL83	DENSITY	N	0.00	0.00	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	N	4	2	6	3	6

N -- STRATUM NOT SAMPLED

TABLE B-186 (CONTINUED).

WEEK BEGINNING MONDAY	SHORTNOSE STURGEON			ALBANY			YOUNG-OF-THE-YEAR			COMBINED		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS	DENSITY S.E. NO. TOWS
02MAY83	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	5	N	5	5	5	21	66	107	194	194	194
09MAY83	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	5	N	5	5	21	69	104	194	194	194	194
16MAY83	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	5	N	5	5	21	67	106	194	194	194	194
23MAY83	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	3	N	3	3	19	68	99	186	186	186	186
30MAY83	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	3	N	3	3	19	68	99	186	186	186	186
06JUN83	N	0.00	N	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.01
	N	0.00	N	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.01
	N	3	N	3	3	19	68	99	186	186	186	186
13JUN83	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	3	N	3	3	16	63	108	187	187	187	187
20JUN83	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	3	N	3	3	16	63	108	187	187	187	187
27JUN83	N	0.00	N	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.01
	N	0.00	N	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.01
	N	3	N	3	3	16	62	109	187	187	187	187
04JUL83	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	N	3	N	3	3	16	62	109	187	187	187	187

N -- STRATUM NOT SAMPLED

TABLE B-187
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	SHORTNOSE STURGEON											
	YONKERS				TAPPAN ZEE				YEARLING			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	32	7	7	46	16	8	3	27
22AUG83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.F.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	29	9	8	46	16	8	3	27
05SEP83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	29	8	8	45	16	8	2	26
19SEP83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	11	31	8	8	47	15	8	3	26
03OCT83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.F.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	11	31	7	8	46	17	8	3	28
17OCT83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	30	8	8	46	16	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-187 (CONTINUED).

WEEK BEGINNING MONDAY	SHORTNOSE STURGEON												YEARLING		
	INDIAN POINT				WEST POINT				CORNWALL				REGION	CHANNEL	REGION
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION			
08AUG83	DENSITY S.E. NO. TOWS	0.00 0.00 6	0.00 0.00 5	0.00 0.00 3	0.00 0.00 14	N	0.00 0.00 4	0.00 0.00 3	0.00 0.00 7	0.00 0.00 5	0.00 0.00 6	0.00 0.00 3	0.00 0.00 14	0.00 0.00 14	
22AUG83	DENSITY S.E. NO. TOWS	0.00 0.00 7	0.00 0.00 5	0.00 0.00 2	0.00 0.00 14	N	0.00 0.00 5	0.00 0.00 3	0.00 0.00 8	0.00 0.00 5	0.00 0.00 5	0.00 0.00 3	0.00 0.00 13	0.00 0.00 13	
05SEP83	DENSITY S.E. NO. TOWS	0.00 0.00 6	0.00 0.00 6	0.00 0.00 3	0.00 0.00 15	N	0.00 0.00 5	0.00 0.00 3	0.00 0.00 8	0.00 0.00 5	0.00 0.00 5	0.00 0.00 3	0.00 0.00 13	0.00 0.00 13	
19SEP83	DENSITY S.E. NO. TOWS	0.00 0.00 6	0.00 0.00 5	0.00 0.00 3	0.00 0.00 14	N	0.00 0.00 5	0.00 0.00 3	0.00 0.00 8	0.00 0.00 6	0.00 0.00 5	0.00 0.00 2	0.00 0.00 13	0.00 0.00 13	
03OCT83	DENSITY S.E. NO. TOWS	0.00 0.00 6	0.00 0.00 5	0.00 0.00 3	0.00 0.00 14	N	0.00 0.00 4	0.00 0.00 2	0.00 0.00 6	0.00 0.00 5	0.00 0.00 6	0.00 0.00 4	0.00 0.00 15	0.00 0.00 15	
17OCT83	DENSITY S.E. NO. TOWS	0.00 0.00 6	0.00 0.00 6	0.00 0.00 3	0.00 0.00 15	N	0.00 0.00 5	0.00 0.00 3	0.00 0.00 8	0.00 0.00 5	0.00 0.00 5	0.00 0.00 3	0.00 0.00 13	0.00 0.00 13	

N -- STRATUM NOT SAMPLED

TABLE B-187 (CONTINUED).

WEEK BEGINNING MONDAY	SHORTNOSE STURGEON												YEARLING
	POUGHKEEPSIE				HYDE PARK				KINGSTON				
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	
08AUG83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
22AUG83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
05SEP83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
19SEP83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
03OCT83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
17OCT83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15

N -- STRATUM NOT SAMPLED

TABLE B-187 (CONTINUED).

WEEK BEGINNING MONDAY	SHORTNOSE STURGEON			YEARLING			CATSKILL		
	SAUGERTIES			SHOAL			BOTTOM		
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	CHANNEL	REGION	CHANNEL	REGION
08AUG83	0.00 0.00 12	N	0.00 0.00 6	0.00 0.00 18	N	0.00 0.00 6	0.00 0.00 21	0.00 0.00 6	0.00 0.00 21
22AUG83	0.00 0.00 12	N	0.00 0.00 6	0.00 0.00 18	N	0.00 0.00 6	0.00 0.00 21	0.00 0.00 6	0.00 0.00 21
05SEP83	0.00 0.00 12	N	0.00 0.00 6	0.00 0.00 18	N	0.00 0.00 6	0.00 0.00 21	0.00 0.00 6	0.00 0.00 21
19SEP83	0.00 0.00 12	N	0.00 0.00 6	0.00 0.00 18	N	0.00 0.00 6	0.00 0.00 21	0.00 0.00 6	0.00 0.00 21
03OCT83	0.23 0.23 12	N	0.00 0.00 6	0.08 0.08 18	N	0.00 0.00 6	0.00 0.00 21	0.00 0.00 6	0.00 0.00 21
17OCT83	0.00 0.00 13	N	0.00 0.00 6	0.00 0.00 19	N	0.00 0.00 6	0.00 0.00 20	0.00 0.00 6	0.00 0.00 20

N -- STRATUM NOT SAMPLED

TABLE B-187 (CONTINUED).

WEEK BEGINNING MONDAY	SHORTNOSE STURGEON			ALBANY			YEARLING		
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
		N	0.00	N	0.00	0.00	0.00	0.00	0.00
08AUG83		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	8	N	8	66	85	49	200
22AUG83		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	8	N	8	64	87	49	200
05SEP83		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	8	N	8	63	87	49	199
19SEP83		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00
		N	8	N	8	64	86	49	199
03OCT83		N	0.00	N	0.00	0.00	0.03	0.00	0.01
		N	0.00	N	0.00	0.00	0.03	0.00	0.01
		N	8	N	8	65	85	50	200
17OCT83		N	0.31	N	0.31	0.00	0.04	0.00	0.01
		N	0.31	N	0.31	0.00	0.04	0.00	0.01
		N	8	N	8	64	86	50	200

N -- STRATUM NOT SAMPLED

TABLE B-188
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	SHORTNOSE STURGEON											
	YONKERS				TAPPAN ZEE				OLDER			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	3	10	6	3	6	15
09MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	3	10	6	3	6	15
16MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	3	10	6	3	6	15
23MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	4	11	5	4	4	13
30MAY83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	3	4	10	5	5	3	13
06JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	3	3	6	3	4	4	11	4	4	4	12
13JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	5	6	14	4	6	6	16
20JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	5	6	14	4	6	5	15
27JUN83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	4	6	13	4	6	6	16
04JUL83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	8	9	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-188 (CONTINUED).

WEEK BEGINNING MONDAY	SHORTNOSE STURGEON											
	INDIAN POINT				WEST POINT				OLDER			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	4	7	25	36	4	4	30	34	5	12	6
09MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	4	8	24	36	4	4	30	34	5	13	5
16MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	4	7	25	36	7	7	30	37	5	10	5
23MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	3	6	13	22	7	7	23	30	5	9	6
30MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	3	6	15	24	6	6	23	29	5	9	6
06JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	4	6	14	24	7	7	23	30	5	9	5
13JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	5	5	16	26	8	8	25	33	3	12	13
20JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	5	5	17	27	8	8	25	33	3	12	13
27JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	5	6	16	27	8	8	25	33	3	12	13
04JUL83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E. NO. TOWS	5	5	16	26	8	8	25	33	3	12	13

N -- STRATUM NOT SAMPLED

TABLE B-188 (CONTINUED).

SHORTNOSE STURGEON

WEEK
BEGINNING
MONDAY

	POUGHKEEPSIE			HYDE PARK			OLDER			KINGSTON		
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	9	10	19	N	10	11	21	N	6	7	13
09MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	10	10	20	N	10	10	20	N	6	7	13
16MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	10	10	20	N	8	11	19	N	6	7	13
23MAY83	DENSITY	0.00	0.00	0.00	N	0.81	0.00	0.17	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.81	0.00	0.17	N	0.00	0.00	0.00
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10
30MAY83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	16	22	38	N	7	12	19	N	5	5	10
06JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	16	22	38	N	7	12	19	N	4	6	10
13JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	7	15	22	N	5	9	14	N	5	5	10
20JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	8	14	22	N	5	9	14	N	5	6	11
27JUN83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10
04JUL83	DENSITY	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	NO. TOWS	7	15	22	N	5	9	14	N	4	6	10

N -- STRATUM NOT SAMPLED

TABLE B-188 (CONTINUED).

WEEK BEGINNING MONDAY	SHORTNOSE STURGEON						CATSKILL									
	SAUGERTIES			SHOAL			SHOAL			BOTTOM CHANNEL			REGION			
	DENSITY S.E. NO. TOWS	0.00 0.00 3	0.00 0.00 3	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 3	0.00 0.00 6	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 3	0.00 0.00 3	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 3	0.00 0.00 3	N N N
02MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 3	0.00 0.00 3	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 3	0.00 0.00 6	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 3	0.00 0.00 3	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 3	0.00 0.00 3	N N N
09MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 3	0.00 0.00 3	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 3	0.00 0.00 6	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 3	0.00 0.00 3	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 3	0.00 0.00 3	N N N
16MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 4	0.00 0.00 3	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 3	0.00 0.00 7	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 3	0.00 0.00 3	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 3	0.00 0.00 3	N N N
23MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 5	0.00 0.00 3	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 3	0.00 0.00 8	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 5	0.00 0.00 3	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 5	0.00 0.00 3	N N N
30MAY83	DENSITY S.E. NO. TOWS	0.00 0.00 5	0.00 0.00 3	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 3	0.00 0.00 8	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 4	0.00 0.00 2	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 4	0.00 0.00 2	N N N
06JUN83	DENSITY S.E. NO. TOWS	0.00 0.00 5	0.00 0.00 3	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 3	0.00 0.00 8	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 3	0.00 0.00 3	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 3	0.00 0.00 3	N N N
13JUN83	DENSITY S.E. NO. TOWS	0.00 0.00 4	0.00 0.00 2	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 2	0.00 0.00 6	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 3	0.00 0.00 2	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 3	0.00 0.00 2	N N N
20JUN83	DENSITY S.E. NO. TOWS	0.00 0.00 3	0.00 0.00 2	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 2	0.00 0.00 5	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 4	0.00 0.00 2	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 4	0.00 0.00 2	N N N
27JUN83	DENSITY S.E. NO. TOWS	0.00 0.00 4	0.00 0.00 2	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 2	0.00 0.00 6	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 4	0.00 0.00 2	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 4	0.00 0.00 2	N N N
04JUL83	DENSITY S.E. NO. TOWS	0.00 0.00 4	0.00 0.00 2	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 2	0.00 0.00 6	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 4	0.00 0.00 2	N N N	DENSITY S.E. NO. TOWS	0.00 0.00 4	0.00 0.00 2	N N N

N -- STRATUM NOT SAMPLED

TABLE B-188 (CONTINUED).

WEEK BEGINNING MONDAY	SHORTNOSE STURGEON			ALBANY			OLDER		
	DENSITY S.E. NO. TOWS	SHOAL BOTTOM CHANNEL	REGION	SHOAL BOTTOM CHANNEL	REGION	SHOAL BOTTOM CHANNEL	REGION	SHOAL BOTTOM CHANNEL	REGION
02MAY83	N 0.00 5	N 0.00 5	0.00 0.00 5	N 0.00 21	0.00 0.00 21	0.00 0.00 21	0.00 0.00 194	0.00 0.00 107	0.00 0.00 194
09MAY83	N 0.00 5	N 0.00 5	0.00 0.00 5	N 0.00 21	0.00 0.00 21	0.00 0.00 194	0.00 0.00 104	0.00 0.00 69	0.00 0.00 194
16MAY83	N 0.00 5	N 0.00 5	0.00 0.00 5	N 0.00 21	0.00 0.00 21	0.00 0.00 194	0.00 0.00 106	0.00 0.00 67	0.00 0.00 194
23MAY83	N 0.00 3	N 0.00 3	0.00 0.00 3	N 0.00 19	0.00 0.00 19	0.00 0.00 186	0.00 0.00 99	0.05 0.05 68	0.01 0.01 186
30MAY83	N 0.00 3	N 0.00 3	0.00 0.00 3	N 0.00 19	0.00 0.00 19	0.00 0.00 186	0.00 0.00 99	0.00 0.00 68	0.00 0.00 186
06JUN83	N 0.00 3	N 0.00 3	0.00 0.00 3	N 0.00 19	0.00 0.00 19	0.00 0.00 186	0.00 0.00 99	0.00 0.00 68	0.00 0.00 186
13JUN83	N 0.00 3	N 0.00 3	0.00 0.00 3	N 0.00 16	0.00 0.00 16	0.00 0.00 187	0.00 0.00 108	0.00 0.00 63	0.00 0.00 187
20JUN83	N 0.00 3	N 0.00 3	0.00 0.00 3	N 0.00 16	0.00 0.00 16	0.00 0.00 187	0.00 0.00 108	0.00 0.00 63	0.00 0.00 187
27JUN83	N 0.00 3	N 0.00 3	0.00 0.00 3	N 0.00 16	0.00 0.00 16	0.00 0.00 187	0.00 0.00 109	0.00 0.00 62	0.00 0.00 187
04JUL83	N 0.00 3	N 0.00 3	0.00 0.00 3	N 0.00 16	0.00 0.00 16	0.00 0.00 187	0.00 0.00 109	0.00 0.00 62	0.00 0.00 187

N -- STRATUM NOT SAMPLED

TABLE B-189
 DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
 FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	SHORTNOSE STURGEON											
	YONKERS				TAPPAN ZEE				OLDER			
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	32	7	7	46	16	8	3	27
22AUG83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	29	9	8	46	16	8	3	27
05SEP83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	29	8	8	45	16	8	2	26
19SEP83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	11	31	8	8	47	15	8	3	26
03OCT83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	11	31	7	8	46	17	8	3	28
17OCT83	DENSITY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	12	30	8	8	46	16	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-189 (CONTINUED).

WEEK BEGINNING MONDAY	SHORTNOSE STURGEON						OLDER					
	INDIAN POINT		WEST POINT		CORNWALL		INDIAN POINT		WEST POINT		CORNWALL	
	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY S.F. NO. TOWS	0.00 0.00 6	0.00 0.00 5	0.00 0.00 3	0.00 0.00 14	N N N	0.00 0.00 4	0.00 0.00 3	0.00 0.00 7	0.00 0.00 5	0.00 0.00 6	0.00 0.00 14
22AUG83	DENSITY S.F. NO. TOWS	0.00 0.00 7	0.00 0.00 5	0.00 0.00 2	0.00 0.00 14	N N N	0.00 0.00 5	0.00 0.00 3	0.00 0.00 8	0.00 0.00 5	0.00 0.00 3	0.00 0.00 13
05SEP83	DENSITY S.F. NO. TOWS	0.00 0.00 6	0.00 0.00 6	0.00 0.00 3	0.00 0.00 15	N N N	0.00 0.00 5	0.00 0.00 3	0.00 0.00 8	0.00 0.00 5	0.00 0.00 5	0.00 0.00 13
19SEP83	DENSITY S.F. NO. TOWS	0.00 0.00 6	0.00 0.00 5	0.00 0.00 3	0.00 0.00 14	N N N	0.00 0.00 5	0.00 0.00 3	0.00 0.00 8	0.00 0.00 6	0.00 0.00 5	0.00 0.00 13
03OCT83	DENSITY S.F. NO. TOWS	0.00 0.00 6	0.00 0.00 5	0.00 0.00 3	0.00 0.00 14	N N N	0.00 0.00 4	0.00 0.00 2	0.00 0.00 6	0.00 0.00 5	0.00 0.00 6	0.00 0.00 15
17OCT83	DENSITY S.F. NO. TOWS	0.00 0.00 6	0.00 0.00 6	0.00 0.00 3	0.00 0.00 15	N N N	0.00 0.00 5	0.00 0.00 3	0.00 0.00 8	0.00 0.00 5	0.00 0.00 5	0.00 0.00 13

N -- STRATUM NOT SAMPLED

TABLE B-189 (CONTINUED).

WEEK BEGINNING MONDAY	SHORTNOSE STURGEON			SAUGERTIES			OLDER			CATSKILL			
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM CHANNEL	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM CHANNEL	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM CHANNEL	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM CHANNEL	REGION
08AUG83	0.00 0.00 6	N	0.00 0.00 6	0.00 0.00 18	N	0.00 0.00 18	0.00 0.00 6	N	0.00 0.00 6	0.00 0.00 21	N	0.00 0.00 21	0.00 0.00 21
22AUG83	0.00 0.00 6	N	0.00 0.00 6	0.00 0.00 18	N	0.00 0.00 18	0.00 0.00 6	N	0.00 0.00 6	0.00 0.00 21	N	0.00 0.00 21	0.00 0.00 21
05SEP83	0.00 0.00 12	N	0.00 0.00 12	0.00 0.00 18	N	0.00 0.00 18	0.00 0.00 6	N	0.00 0.00 6	0.00 0.00 21	N	0.00 0.00 21	0.00 0.00 21
19SEP83	0.00 0.00 12	N	0.00 0.00 12	0.00 0.00 18	N	0.00 0.00 18	0.00 0.00 6	N	0.00 0.00 6	0.00 0.00 21	N	0.00 0.00 21	0.00 0.00 21
03OCT83	0.00 0.00 12	N	0.00 0.00 12	0.00 0.00 18	N	0.00 0.00 18	0.00 0.00 6	N	0.00 0.00 6	0.00 0.00 21	N	0.00 0.00 21	0.00 0.00 21
17OCT83	0.00 0.00 13	N	0.00 0.00 13	0.00 0.00 19	N	0.00 0.00 19	0.00 0.00 6	N	0.00 0.00 6	0.00 0.00 20	N	0.00 0.00 20	0.00 0.00 20

N -- STRATUM NOT SAMPLED

TABLE B-189 (CONTINUED).

WEEK BEGINNING MONDAY	SHORTNOSE STURGEON			ALBANY			OLDER			COMBINED			
	DENSITY S.E. NO. TOWS	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		N	8	N	8	8	66	85	49	200			
22AUG83		N	0.35	N	0.35	0.00	0.00	0.05	0.00	0.01			
		N	0.35	N	0.35	0.00	0.00	0.05	0.00	0.01			
		N	8	N	8	64	87	49	200				
05SEP83		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		N	8	N	8	63	87	49	199				
19SEP83		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		N	8	N	8	64	86	49	199				
03OCT83		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		N	8	N	8	65	85	50	200				
17OCT83		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		N	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		N	8	N	8	64	86	50	200				

N -- STRATUM NOT SAMPLED

APPENDIX C
WATER QUALITY DATA

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ICHTHYOPLANKTON AND FALL SHOALS WATER TEMPERATURE	C-1
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TABLE C-1
 WEIGHTED MEAN WATER TEMPERATURE (C) BY REGION AND WEEK, HUDSON RIVER ESTUARY, 1983
 (ASSOCIATED WITH THE LONG RIVER ICHTHYOPLANKTON AND FALL SHOALS SURVEYS).

WEEK BEGINNING MONDAY	REGIONS												
	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL	
02MAY83	12.48	12.53	12.88	10.53	12.47	13.37	13.13	12.82	12.41	12.22	11.97	12.20	
09MAY83	12.42	12.58	13.27	13.31	12.84	12.85	12.60	12.52	11.62	11.61	11.52	11.41	
16MAY83	13.43	14.01	13.88	13.58	13.23	12.92	12.61	12.47	12.10	12.14	12.30	12.52	
23MAY83	13.59	13.95	14.03	13.75	13.87	14.80	14.60	14.81	14.73	14.92	14.96	14.77	
30MAY83	13.96	13.97	13.98	13.93	14.22	14.44	13.57	12.77	13.18	13.15	14.09	11.73	
06JUN83	19.04	18.91	18.51	18.04	18.18	17.83	17.45	17.57	17.47	17.52	14.92	15.66	
13JUN83	21.73	22.11	21.06	20.60	20.59	20.52	20.26	20.60	20.52	20.76	20.59	20.38	
20JUN83	25.37	24.26	24.31	22.64	22.04	22.24	22.07	22.60	23.47	23.32	24.20	24.73	
27JUN83	27.41	26.42	25.55	24.16	22.88	23.24	23.54	23.62	23.98	24.53	24.98	25.63	
04JUL83	22.67	23.69	24.69	25.05	24.00	24.51	24.47	24.15	23.42	23.77	23.71	23.57	
08AUG83	26.44	26.41	26.33	26.02	28.84	28.11	27.45	26.57	27.02	27.31	27.72	28.37	
22AUG83	30.04	25.42	25.76	25.79	26.17	26.67	26.15	25.14	24.88	24.90	24.81	24.61	
05SEP83	24.86	26.48	26.71	26.46	26.11	25.98	24.55	23.62	22.93	23.57	25.01	26.11	
19SEP83	28.99	28.23	28.32	27.14	26.92	25.92	25.37	23.80	23.08	22.42	22.85	23.48	
03OCT83	22.50	23.88	22.10	20.84	20.75	20.45	19.34	18.81	19.02	19.65	20.82	20.37	
17OCT83	17.05	17.23	18.17	22.10	21.12	19.65	20.05	19.65	19.10	19.20	19.65	18.87	

TABLE C-2
 MEAN WATER TEMPERATURE (C) BY REGION AND WEEK, HUDSON RIVER ESTUARY, 1983
 (ASSOCIATED WITH THE BEACH SEINE SURVEY).

WEEK BEGINNING MONDAY	REGIONS											
	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL
01AUG83	25.86	27.19	27.66	27.34	26.70	30.03	28.60	27.16	26.38	27.41	27.50	27.10
15AUG83	26.46	25.36	26.71	23.42	25.96	28.27	27.36	25.60	26.42	25.44	26.24	24.77
29AUG83	26.18	26.07	26.00	26.04	26.00	26.25	28.80	28.72	28.78	28.89	29.34	27.70
12SEP83	24.00	23.54	28.64	28.20	23.32	23.92	22.88	22.48	22.40	22.22	24.10	24.93
26SEP83	21.42	20.75	21.24	23.94	23.36	21.93	20.14	20.66	21.04	19.67	20.00	19.14
10OCT83	18.30	18.15	19.94	20.06	19.96	19.65	18.62	17.95	18.07	17.30	17.99	18.37

TABLE C-3
 WEIGHTED MEAN DISSOLVED OXYGEN (MG/L) BY REGION AND WEEK, HUDSON RIVER ESTUARY, 1983
 (ASSOCIATED WITH THE LONG RIVER ICHTHYOPLANKTON AND FALL SHOALS SURVEYS).

WEEK BEGINNING MONDAY	REGIONS												
	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL	
02MAY83	8.72	8.86	8.72	10.70	9.99	9.36	9.55	9.72	10.12	10.29	10.87	11.13	
09MAY83	8.73	8.95	8.69	9.52	9.46	10.39	10.00	10.32	10.48	10.24	10.52	11.12	
16MAY83	8.79	8.95	8.71	8.71	9.53	9.98	9.89	10.07	9.90	9.92	10.46	11.21	
23MAY83	9.29	9.23	8.95	9.07	9.12	9.56	9.54	9.61	9.40	9.47	9.53	10.27	
30MAY83	9.96	9.91	9.81	9.46	9.20	9.27	9.09	9.17	9.91	9.07	9.20	10.02	
06JUN83	9.14	10.36	8.52	8.32	8.27	8.20	8.85	9.08	9.31	9.61	9.54	9.83	
13JUN83	6.87	8.81	8.77	8.09	7.93	7.78	8.03	8.48	8.94	9.74	8.73	8.05	
20JUN83	4.52	6.57	8.25	8.38	8.14	7.72	7.77	7.45	8.03	8.12	7.07	7.64	
27JUN83	4.97	6.13	6.94	7.49	7.67	7.20	7.10	6.87	7.10	7.71	7.21	6.37	
04JUL83	6.55	7.68	7.94	7.11	7.83	6.86	7.41	7.42	7.59	7.34	7.21	7.31	
08AUG83	7.37	7.46	7.21	7.05	5.22	5.30	5.93	7.17	7.52	7.89	6.99	5.63	
22AUG83	6.60	8.03	7.69	7.48	7.39	7.65	8.17	7.42	6.37	6.38	6.42	5.67	
05SEP83	6.62	6.59	6.66	6.22	6.66	6.98	7.02	6.88	6.89	6.85	7.09	6.42	
19SEP83	7.87	6.61	7.35	7.39	6.43	6.72	6.93	6.83	7.02	6.98	7.12	8.31	
03OCT83	5.92	6.68	6.76	6.76	8.24	7.69	6.87	8.96	9.31	10.26	10.26	10.11	
17OCT83	5.30	7.06	6.98	6.45	6.31	7.20	7.61	7.92	8.30	7.91	7.04	7.14	

TABLE C-4
 MEAN DISSOLVED OXYGEN (MG/L) BY REGION AND WEEK, HUDSON RIVER ESTUARY, 1983
 (ASSOCIATED WITH THE BEACH SEINE SURVEY).

WEEK BEGINNING MONDAY	REGIONS											
	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL
01AUG83	6.80	8.64	7.43	6.94	6.40	6.95	6.90	8.22	10.10	10.97	9.00	7.11
15AUG83	8.00	7.54	7.98	7.10	6.38	8.05	7.06	6.78	8.56	8.01	9.24	7.50
29AUG83	7.42	7.10	7.78	7.74	7.06	7.12	6.68	6.84	6.92	6.83	7.04	7.24
12SEP83	6.98	7.15	6.54	6.64	7.32	7.95	7.86	8.22	8.12	7.68	6.93	7.29
26SEP83	7.32	7.13	7.05	6.48	7.34	6.64	6.90	6.78	6.82	6.97	6.98	7.07
10OCT83	6.96	7.22	6.62	7.07	7.08	7.63	7.76	8.55	8.53	8.89	8.51	7.23

TABLE C-5
 WEIGHTED MEAN CONDUCTIVITY (MS/CM) BY REGION AND WEEK, HUDSON RIVER ESTUARY, 1983
 (ASSOCIATED WITH THE LONG RIVER ICHTHYOPLANKTON AND FALL SHOALS SURVEYS).

WEEK BEGINNING MONDAY	REGIONS											
	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL
02MAY83	5.82	2.67	0.50	0.14	0.14	0.14	0.13	0.13	0.13	0.12	0.13	0.13
09MAY83	7.81	2.92	0.63	0.15	0.14	0.14	0.13	0.13	0.13	0.13	0.13	0.13
16MAY83	0.32	0.21	0.15	0.14	0.15	0.15	0.14	0.15	0.15	0.14	0.14	0.13
23MAY83	2.99	0.61	0.14	0.15	0.17	0.13	0.13	0.13	0.13	0.13	0.14	0.14
30MAY83	4.54	0.93	0.14	0.14	0.17	0.17	0.15	0.15	0.16	0.15	0.14	0.12
06JUN83	5.13	0.53	0.33	0.18	0.18	0.18	0.18	0.16	0.17	0.17	0.14	0.15
13JUN83	9.46	2.38	0.21	0.19	0.18	0.17	0.16	0.16	0.16	0.16	0.17	0.17
20JUN83	14.94	4.62	1.07	0.20	0.19	0.19	0.17	0.17	0.18	0.19	0.19	0.20
27JUN83	17.93	7.66	3.41	0.74	0.19	0.18	0.18	0.19	0.20	0.19	0.21	0.20
04JUL83	17.68	12.55	5.00	2.65	0.89	0.21	0.20	0.22	0.23	0.23	0.23	0.23
08AUG83	15.56	15.46	10.55	9.04	3.37	1.23	0.37	0.25	0.26	0.24	0.24	0.20
22AUG83	16.28	17.16	12.59	8.47	6.48	2.87	0.61	0.26	0.24	0.23	0.22	0.22
05SEP83	25.62	15.65	13.29	2.78	1.87	2.05	0.50	0.23	0.21	0.24	0.24	0.23
19SEP83	17.30	15.00	10.86	10.66	6.32	4.42	1.31	0.27	0.26	0.25	0.26	0.25
03OCT83	22.60	15.49	11.10	7.97	5.51	3.82	0.99	0.25	0.25	0.25	0.25	0.24
17OCT83	25.24	15.15	11.02	6.65	4.53	2.69	0.81	0.26	0.30	0.28	0.32	0.33

TABLE C-6
 MEAN CONDUCTIVITY (mS/cm) BY REGION AND WEEK, HUDSON RIVER ESTUARY, 1983
 (ASSOCIATED WITH THE BEACH SEINE SURVEY).

WEEK BEGINNING MONDAY	REGIONS											
	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL
01AUG83	16.420	12.025	9.557	10.800	3.316	1.039	0.462	0.220	0.218	0.230	0.235	0.237
15AUG83	15.800	13.046	8.737	9.680	2.906	0.994	0.367	0.251	0.235	0.233	0.222	0.244
29AUG83	18.036	12.967	6.925	6.078	0.245	0.310	0.166	0.161	0.152	0.153	0.182	0.181
12SEP83	18.700	6.508	9.420	9.020	0.254	0.246	0.240	0.232	0.220	0.205	0.216	0.208
26SEP83	10.300	7.267	5.593	4.866	2.840	1.777	1.049	0.254	0.241	0.235	0.210	0.163
10OCT83	20.298	15.408	9.904	8.174	6.612	3.645	0.651	0.263	0.243	0.237	0.238	0.153

APPENDIX D

LENGTH DATA

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ABBREVIATIONS

- S.E. = standard error of the mean
- N = number of fish measured
- YSL = yolk-sac larvae
- PYSL = post yolk-sac larvae
- YOY = young-of-the-year
- FS = Fall Shoals Survey
- BS = Beach Seine Survey

TABLE D-1
 WEEKLY MEAN LENGTHS (MM, TL) BY ESTUARY SEGMENT OF
 STRIPED BASS LARVAE AND EARLY JUVENILES ESTIMATED FROM
 ICHTHYOPLANKTON SAMPLES, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY	LOWER ESTUARY			MIDDLE ESTUARY			UPPER ESTUARY		
	MEAN S.E. N	YSL PYSL YOY	YOY	YSL PYSL YOY	YSL PYSL YOY	YSL PYSL YOY	YSL PYSL YOY		
09MAY83	4.2 0.1 6	4.7 0.1 28							
16MAY83	5.3 0.0 197	5.2 0.1 251							
23MAY83	5.9 0.0 366	6.8 0.0 52	6.8 0.1 9	4.6 1					
30MAY83	5.6 0.0 260	6.8 0.0 91	6.5 0.1 49	5.4 0.0 263					
06JUN83	5.1 0.1 132	6.5 0.1 154	6.4 0.0 450	4.4 0.1 49	5.2 1				
13JUN83	5.5 0.0 267	7.0 0.1 448	6.4 0.0 1442	4.9 0.0 397	6.8 0.4 24				
20JUN83	6.0 1	8.8 0.1 661	6.4 0.0 2542	5.2 0.1 117	6.0 0.0 396				
27JUN83	8.8 0.1 405	22.4 0.7 5	7.4 0.0 2485	4.6 0.3 7	8.6 0.2 78				
04JUL83	12.5 0.3 76	31.0 1.5 23	10.9 0.1 1344	11.6 0.3 66	22.0 1				

TABLE D-2
 WEEKLY MEAN LENGTHS (TL,MM) BY REGION OF YOUNG-OF-THE-YEAR FOR
 SELECTED SPECIES COLLECTED IN THE HUDSON RIVER ESTUARY BY
 FALL SHOALS AND BEACH SEINE SURVEYS, 1983.
 STRIPED BASS

WEEK BEGINNING MONDAY	GEAR	MEAN S.E. N	YK	TZ	CH	IP	WP	CW	PK	HP-AL	TOTAL
01AUG83	BS	57.1 3.0 20	62.3 1.6 20	57.1 3.0 20	59.7 1.9 20	56.8 1.4 20	52.4 2.3 17	58.7 2.3 20	42.1 2.5 19	53.0 1.9 20	55.4 0.9 156
08AUG83	FS	68.9 2.3 20		68.9 2.3 20	58.3 2.1 20	60.1 3.3 17	46.0 4.0 2	41.9 1.4 15	44.2 2.3 6	49.7 1.4 22	55.3 1.3 102
15AUG83	BS	62.3 2.4 20	67.5 1.4 20	62.3 2.4 20	63.2 4.8 5	68.1 2.9 12	60.9 2.5 9	51.2 2.0 20	59.9 3.9 20	59.9 3.9 20	61.3 1.2 106
22AUG83	FS	75.6 2.8 19		75.6 2.8 19	68.0 1			39.0 2.0 2	62.9 1.8 8	62.9 1.8 8	69.5 2.6 30
29AUG83	BS	67.3 2.2 20	83.9 2.7 15	67.3 2.2 20	73.1 2.3 10	65.9 2.3 13	61.3 3.0 10	60.3 1.5 20	59.9 3.7 11	65.9 2.5 8	67.7 1.2 110
05SEP83	FS	80.4 3.9 16		80.4 3.9 16	80.1 2.8 23			68.0 7.0 2	72.5 2.2 11	72.5 2.2 11	78.1 1.9 52
12SEP83	BS	80.6 1.8 20	106.0 7.0 2	80.6 1.8 20	70.0 2.0 16	83.2 2.8 19	67.0 2.3 20	69.5 1.9 20	100.0 1	64.2 3.3 5	75.6 1.2 114
19SEP83	FS	104.0 11.4 3		104.0 11.4 3	82.3 5.0 4			75.0 1	70.0 1	77.3 1.5 13	81.4 2.7 22
26SEP83	BS	87.9 3.0 16		87.9 3.0 16	79.0 1.8 19	78.1 1.8 20	75.0 1	69.0 1.7 20	78.2 10.4 6	71.0 2.0 4	77.7 1.3 86
03OCT83	FS	99.8 3.0 12		99.8 3.0 12	95.1 2.4 22	75.7 2.6 9	81.0 1	83.0 18.0 2		84.6 2.7 8	90.7 1.8 54
10OCT83	BS	89.2 4.5 6		89.2 4.5 6	87.2 2.0 24	78.7 2.8 9		74.8 1.6 20	89.5 4.5 2		82.1 1.3 61
17OCT83	FS	120.0 1		120.0 1	102.0 1	98.0 1		80.8 3.0 8	78.8 4.5 4	91.8 8.1 5	87.0 3.3 20

TABLE D-3
 WEEKLY MEAN LENGTHS (MM, TL) BY ESTUARY SEGMENT OF
 WHITE PERCH LARVAE AND EARLY JUVENILES ESTIMATED FROM
 ICHTHYOPLANKTON SAMPLES, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY		LOWER ESTUARY			MIDDLE ESTUARY			UPPER ESTUARY		
		YSL	PYSL	YOY	YSL	PYSL	YOY	YSL	PYSL	YOY
02MAY83	MEAN	3.6			3.6			3.5		
	S.E.	0.1			0.0			0.0		
	N	3			263			236		
09MAY83	MEAN	4.0			3.9	4.0		3.5		
	S.E.	0.0			0.0	0.2		0.0		
	N	259			2003	4		852		
16MAY83	MEAN	4.0	4.3		4.0	4.3		3.6	4.1	
	S.E.	0.0	0.0		0.0	0.0		0.0	0.0	
	N	241	327		1700	1459		983	73	
23MAY83	MEAN	4.0	4.4		3.8	4.3		3.7	4.2	
	S.E.	0.0	0.0		0.0	0.0		0.0	0.0	
	N	192	436		1181	1837		852	266	
30MAY83	MEAN	3.8	4.3		3.8	4.4		3.8	4.3	
	S.E.	0.0	0.0		0.0	0.0		0.0	0.0	
	N	159	419		960	2095		458	542	
06JUN83	MEAN	3.5	4.9		3.6	5.0		3.6	4.5	
	S.E.	0.0	0.0		0.0	0.0		0.0	0.0	
	N	147	488		782	1890		508	387	
13JUN83	MEAN	3.4	6.3		3.6	6.5		3.5	4.8	
	S.E.	0.0	0.1		0.0	0.0		0.0	0.0	
	N	195	579		395	2435		380	657	
20JUN83	MEAN	3.5	8.1		3.5	6.5		3.3	5.8	
	S.E.	0.1	0.1		0.0	0.0		0.0	0.0	
	N	24	713		88	3167		144	1009	
27JUN83	MEAN		8.0	22.3	3.3	7.2		3.3	6.9	
	S.E.		0.1		0.1	0.0		0.1	0.1	
	N		457	1	16	3222		12	1076	
04JUL83	MEAN		11.6	25.0		9.2	22.2		7.7	20.0
	S.E.		0.4			0.0	0.6		0.1	
	N		33	1		2596	10	3	1084	1

TABLE D-4
 WEEKLY MEAN LENGTHS (TL, MM) BY REGION OF YOUNG-OF-THE-YEAR FOR
 SELECTED SPECIES COLLECTED IN THE HUDSON RIVER ESTUARY BY
 FALL SHOALS AND BEACH SEINE SURVEYS, 1983.
 WHITE PERCH

WEEK BEGINNING MONDAY	GEAR	MEAN S.E. N	YK	TZ	CH	IP	WP	CW	PK	HP-AL	TOTAL
01AUG83	BS	43.1 2.2 7			41.6 1.9 16	39.0 2.8 8	47.4 1.3 14	40.1 4.5 9	46.9 1.1 14	43.5 1.0 68	
08AUG83	FS	49.2 1.1 19							49.2 1.1 19	49.2 1.1 19	
15AUG83	BS	52.4 2.2 5	47.3 4.7 3	52.9 1.5 20	49.7 0.8 12	46.4 1.8 20	53.4 1.2 20	46.0 1.0 19	51.5 1.3 20	50.1 0.6 119	
22AUG83	FS	57.5 1.7 21			63.0 3.6 7				59.2 1.7 13	57.5 1.7 21	
29AUG83	BS	56.7 2.3 10		61.5 1.5 20	56.7 2.3 10	55.0 1.5 18	58.5 1.0 19	61.7 6.3 3	57.6 2.2 10	58.3 0.7 80	
05SEP83	FS	62.4 2.1 5		62.4 2.1 5	66.2 2.2 5		70.0 3.0 2	62.7 2.6 9	66.3 1.5 17	65.1 1.0 38	
12SEP83	BS	60.8 1.6 20	63.5 2.5 2	60.8 1.6 20	58.9 1.5 15	57.7 1.5 19	67.0 1.4 20	64.0 2.0 2	66.3 3.4 12	62.2 0.8 101	
19SEP83	FS	69.6 1.2 36		69.6 1.2 36	69.3 4.6 3		69.3 4.6 3	66.2 2.4 13	71.8 1.3 20	69.6 1.2 36	
26SEP83	BS	67.1 0.8 99		65.7 2.2 12	62.6 1.3 10	66.4 1.6 9	60.5 1.5 20	71.6 1.9 16	72.1 1.7 20	67.1 0.8 99	
03OCT83	FS	73.0 1.1 33		79.7 3.9 3	67.0 2.0 2		77.0 2.5 2	75.0 0.9 5	71.5 1.5 20	73.0 1.1 33	
10OCT83	BS	71.7 1.0 47		70.9 2.2 9	70.4 1.4 11	69.5 2.0 15		77.1 1.5 9	74.0 3.0 3	71.7 1.0 47	
17OCT83	FS	76.9 1.3 43			71.8 1.9 5			71.2 1.4 15	81.8 1.7 23	76.9 1.3 43	

TABLE D-6
 WEEKLY MEAN LENGTHS (TL,MM) BY REGION OF YOUNG-OF-THE-YEAR FOR
 SELECTED SPECIES COLLECTED IN THE HUDSON RIVER ESTUARY BY
 FALL SHOALS AND BEACH SEINE SURVEYS, 1983.
 AMERICAN SHAD

WEEK BEGINNING MONDAY	GEAR	MEAN S.E. N	YK	TZ	CH	IP	WP	CW	PK	HP-AL	TOTAL
01AUG83	BS	54.0 0.7 20	1	56.9 0.7 20	54.3 0.8 12	57.8 0.9 20	62.0 2.2 10	55.6 1.3 20	55.1 0.6 25	57.3 1.1 15	56.7 0.4 123
08AUG83	FS	56.9 1.2 17		56.8 1.2 20	61.4 0.7 20	59.9 1.2 11	63.0 1 1	61.3 0.9 16	40.0 5.0 2	60.7 2.0 22	59.2 0.6 109
15AUG83	BS	MEAN S.E. N		58.6 0.7 7		59.8 1.7 6	59.9 0.7 16	57.6 1.0 20	59.2 0.8 20	62.0 0.3 20	59.6 0.4 89
22AUG83	FS	MEAN S.E. N		65.5 1.0 20	62.7 1.3 6	68.0 2.0 2		62.9 1.9 7	66.3 4.9 3	72.6 1.0 28	68.1 0.8 66
29AUG83	BS	MEAN S.E. N		64.3 1.1 13	66.8 1.3 10	65.6 0.7 14	69.8 1.1 12	67.6 1.0 15	69.3 1.0 21	70.1 0.8 20	67.7 0.4 108
05SEP83	FS	MEAN S.E. N		69.0 2.1 4	69.8 2.0 8	63.0 1 1		75.0 1 1	77.0 5.0 2	75.0 0.8 21	72.9 0.8 38
12SEP83	BS	MEAN S.E. N		71.0 1.1 21	66.9 0.8 9	70.1 0.8 15	71.2 1.5 15	73.8 0.6 20	73.8 0.8 21	76.1 0.9 20	72.4 0.4 124
19SEP83	FS	MEAN S.E. N		74.8 1.8 5	71.7 3.2 3			74.0 3.0 2	83.7 1.5 3	81.6 1.6 21	79.3 1.2 35
26SEP83	BS	MEAN S.E. N		71.7 1.3 11	79.0 1 1	70.2 1.1 9	75.0 1.6 14	72.5 1.4 20	73.6 0.9 18	76.9 0.7 20	73.8 0.5 93
03OCT83	FS	MEAN S.E. N		90.8 2.8 4	81.1 1.2 8	75.1 1.0 10	76.0 1 1	80.8 2.4 13	85.7 9.4 3	84.5 1.6 20	81.8 1.0 60
10OCT83	BS	MEAN S.E. N		81.0 0.8 5	83.7 1.5 3	77.0 1 1	78.0 1 1	80.5 0.7 19	80.0 0.8 11	82.2 0.8 27	81.2 0.4 67
17OCT83	FS	MEAN S.E. N		87.3 1.4 14	93.3 3.5 6	80.8 5.8 4	77.0 1 1	83.9 1.7 21	87.5 2.4 6	83.6 2.1 25	86.8 1.0 92

TABLE D-7
 WEEKLY MEAN LENGTHS (TL,MM) BY REGION OF YOUNG-OF-THE-YEAR FOR
 SELECTED SPECIES COLLECTED IN THE HUDSON RIVER ESTUARY BY
 FALL SHOALS AND BEACH SEINE SURVEYS, 1983.
 ATLANTIC TOMCOD

WEEK BEGINNING MONDAY	GEAR	MEAN S.E. N	YK	TZ	CH	IP	WP	CW	PK	HP-AL	TOTAL
01AUG83	BS	86.0 8.7 3		95.0 1							88.3 6.6 4
08AUG83	FS	77.0 77.8 4.8 4 1	77.0 1	77.8 4.8 4 4	78.5 2.5 2	72.8 3.9 9	69.6 1.5 14	70.4 1.6 7			72.1 1.3 37
15AUG83	BS	72.5 3.5 2		72.5 3.5 2							72.5 3.5 2
22AUG83	FS	76.0 3.2 20		78.8 3.2 20	76.0 9.0 2			61.0 1	68.0 1	27.0 1	75.4 3.4 25
29AUG83	BS	84.2 5.7 4		72.3 5.7 4	84.2 6.1 5						78.9 4.5 9
05SEP83	FS	79.3 2.2 13	79.3 2.2 13	80.2 5.7 6	85.0 1	79.7 5.1 6	88.0 5.3 7	76.0 10.0 2	85.0 1		81.3 1.9 36
12SEP83	BS	107.3 4.6 4		107.3 4.6 4							107.3 4.6 4
19SEP83	FS	86.7 4.8 7	86.7 4.8 7	80.8 2.3 6	112.0 1		79.5 2.5 2	90.7 0.9 3	78.0 4.1 7	99.5 11.5 2	85.0 2.3 28
26SEP83	BS	91.7 10.7 3		91.7 10.7 3							91.7 10.7 3
03OCT83	FS	68.0 68.0 1	68.0 1		85.0 1	86.8 2.5 5	87.3 4.3 3	89.1 2.0 20	90.5 4.5 6	84.5 4.5 2	88.0 1.4 38
17OCT83	FS	124.7 4.8 3	124.7 4.8 3	99.0 1			93.0 8.6 6	96.7 3.9 17	82.4 1.9 8		95.3 3.0 35

TABLE D-8
 WEEKLY MEAN LENGTHS (TL,MM) BY REGION OF YOUNG-OF-THE-YEAR FOR
 SELECTED SPECIES COLLECTED IN THE HUDSON RIVER ESTUARY BY
 FALL SHOALS AND BEACH SEINE SURVEYS, 1983.
 BAY ANCHOVY

WEEK BEGINNING MONDAY	GEAR	MEAN S.E. N	YK	TZ	CH	IP	WP	CW	PK	HP-AL	TOTAL
01AUG83	BS	35.6 1.4 5	40.0 0.6 3								37.5 0.8 13
08AUG83	FS	41.3 1.2 36	31.9 2.2 20	33.2 1.1 25	32.6 1.6 20	32.0 1.2 20	28.3 1.4 20		37.0 3.0 2	25.8 0.7 21	33.1 0.6 164
15AUG83	BS		36.5 2.8 4								36.5 2.8 4
22AUG83	FS		37.3 2.1 20	33.9 1.5 20	30.5 3.2 15		39.1 1.3 15		42.6 1.5 10	38.1 1.8 16	36.5 0.9 96
29AUG83	BS		44.9 1.6 15	41.0 1 1							44.7 1.5 16
05SEP83	FS		39.7 1.3 20	41.1 1.4 20	37.4 2.0 20	38.7 2.4 11	46.4 1.3 9	43.5 1.4 30	44.5 1.6 21	41.8 1.7 20	41.6 0.6 151
12SEP83	BS		40.9 1.6 18								40.9 1.6 18
19SEP83	FS		41.9 1.8 15	42.7 1.0 20	39.9 1.7 21	42.8 2.8 15	44.9 2.5 10	41.3 1.5 20	40.0 1.9 25	44.4 2.2 20	42.0 0.7 146
26SEP83	BS		40.0 1 1								40.0 1 1
03OCT83	FS		45.0 1.3 20	43.3 0.9 20	41.3 1.3 20	42.4 1.6 25	45.1 1.7 10	44.4 2.1 20	51.1 1.7 20	53.2 1.8 25	45.9 0.7 160
10OCT83	BS		49.0 1.0 5					58.0 1.5 3			52.4 1.8 8
17OCT83	FS		49.8 1.8 20	44.6 1.9 20	46.3 1.6 20	46.8 1.9 20	48.5 2.5 20	45.1 2.5 15	47.2 1.8 20	48.9 2.2 21	47.2 0.7 156