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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Prepared by

NORMANDEAU ASSOCIATES, INC.
25 Nashua Road
Bedford, N.H. 03102

R-175

April 1985

APPENDIX B
ABUNDANCE DATA

INDEX OF TABLE NUMBERS

PART 2. DENSITY AND CATCH PER UNIT EFFORT DATA

	ICHTHYOPLANKTON						FALL SHOALS			BEACH SEINE		
SPECIES	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
	137[a]	138[a]	139[a]	140[a]								
Alewife					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.

STRIPED BASS EGGS

WEEK BEGINNING MONDAY		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
	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	3	N	3	6	3	4	3	10	6	3	6	15
09MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	19.44	0.00	6.40	9.75
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	11.68	0.00	6.40	5.02
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	15
16MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	2.60	1.11	20.90	2.77	59.66	33.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	2.60	1.11	14.42	1.39	22.48	10.72
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	15
23MAY83	DENSITY	0.00	N	0.00	0.00	19.78	5.29	18.52	16.44	73.63	58.34	28.12	51.38
	S.E.	0.00	N	0.00	0.00	17.92	5.29	5.12	7.20	49.19	11.53	27.13	21.34
	NO. TOWS	3	N	3	6	3	4	4	11	5	4	4	13
30MAY83	DENSITY	0.00	N	0.00	0.00	0.00	11.80	0.00	2.28	68.64	37.35	3.43	34.69
	S.E.	0.00	N	0.00	0.00	0.00	11.80	0.00	2.28	26.70	18.73	2.06	10.61
	NO. TOWS	3	N	3	6	3	3	4	10	5	5	3	13
06JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	6.99	0.72	0.00	2.71
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	4.68	0.72	0.00	1.71
	NO. TOWS	3	N	3	6	3	4	4	11	4	4	4	12
13JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	1.73	0.57	0.54	0.98
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	1.73	0.57	0.54	0.68
	NO. TOWS	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-98 (CONTINUED).

STRIPED BASS EGGS

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

N -- STRATUM NOT SAMPLED

TABLE B-98 (CONTINUED).

STRIPED BASS EGGS

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	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	1.83	0.33	0.68	N	2.80	0.79	1.21	N	2.40	0.00	0.81
	S.E.	N	1.04	0.33	0.35	N	2.00	0.79	0.75	N	1.55	0.00	0.52
	NO. TOWS	N	10	10	20	N	10	10	20	N	6	7	13
16MAY83	DENSITY	N	3.86	2.03	2.46	N	5.43	0.47	1.50	N	5.00	0.92	2.30
	S.E.	N	2.02	1.75	1.42	N	3.62	0.31	0.79	N	5.00	0.92	1.80
	NO. TOWS	N	10	10	20	N	8	11	19	N	6	7	13
23MAY83	DENSITY	N	5.23	9.02	8.14	N	1.73	9.17	7.63	N	0.00	0.81	0.53
	S.E.	N	2.51	4.43	3.45	N	1.73	6.61	5.25	N	0.00	0.81	0.53
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6	10
30MAY83	DENSITY	N	8.81	3.34	4.61	N	7.03	2857.13	2266.44	N	30.83	1.94	11.70
	S.E.	N	3.28	2.37	1.98	N	4.39	2831.25	2244.47	N	25.03	1.94	8.55
	NO. TOWS	N	16	22	38	N	7	12	19	N	5	5	10
06JUN83	DENSITY	N	154.78	18.32	49.99	N	11.96	12.00	11.99	N	0.00	8.08	5.35
	S.E.	N	137.80	7.52	32.49	N	4.77	5.89	4.77	N	0.00	8.08	5.35
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6	10
13JUN83	DENSITY	N	12.31	0.19	3.00	N	0.62	0.00	0.13	N	5.26	1.14	2.53
	S.E.	N	10.21	0.19	2.37	N	0.62	0.00	0.13	N	4.34	1.14	1.65
	NO. TOWS	N	7	15	22	N	5	9	14	N	5	5	10
20JUN83	DENSITY	N	2.93	0.00	0.68	N	1.69	0.00	0.35	N	0.00	1.29	0.85
	S.E.	N	2.13	0.00	0.49	N	1.69	0.00	0.35	N	0.00	1.29	0.85
	NO. TOWS	N	8	14	22	N	5	9	14	N	5	6	11
27JUN83	DENSITY	N	0.00	0.35	0.27	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.35	0.27	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-98 (CONTINUED).

STRIPED BASS EGGS

WEEK BEGINNING MONDAY		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	3	3	6	N	3	3	6
09MAY83	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	3	3	6	N	3	3	6
16MAY83	DENSITY	N	3.85	0.00	1.38	N	1.07	0.00	0.51
	S.E.	N	3.85	0.00	1.38	N	1.07	0.00	0.51
	NO. TOWS	N	4	3	7	N	3	3	6
23MAY83	DENSITY	N	0.00	0.00	0.00	N	2.14	1.78	1.95
	S.E.	N	0.00	0.00	0.00	N	1.07	1.78	1.06
	NO. TOWS	N	5	3	8	N	3	3	6
30MAY83	DENSITY	N	1.82	0.00	0.65	N	1.08	0.88	0.98
	S.E.	N	1.23	0.00	0.44	N	1.08	0.88	0.69
	NO. TOWS	N	5	3	8	N	3	3	6
06JUN83	DENSITY	N	0.00	1.75	1.12	N	0.89	0.00	0.43
	S.E.	N	0.00	1.75	1.12	N	0.89	0.00	0.43
	NO. TOWS	N	5	3	8	N	3	3	6
13JUN83	DENSITY	N	12.89	0.00	4.62	N	0.00	1.03	0.54
	S.E.	N	9.70	0.00	3.47	N	0.00	1.03	0.54
	NO. TOWS	N	4	2	6	N	3	3	6
20JUN83	DENSITY	N	0.00	0.00	0.00	N	0.00	2.06	1.08
	S.E.	N	0.00	0.00	0.00	N	0.00	2.06	1.08
	NO. TOWS	N	3	2	5	N	3	3	6
27JUN83	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	4	2	6	N	3	3	6
04JUL83	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	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	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	5	N	5	21	66	107	194
09MAY83	DENSITY	N	0.56	N	0.56	5.15	0.79	1.46	1.66
	S.E.	N	0.56	N	0.56	2.84	0.24	0.51	0.44
	NO. TOWS	N	5	N	5	21	69	104	194
16MAY83	DENSITY	N	0.00	N	0.00	8.61	5.05	43.70	30.78
	S.E.	N	0.00	N	0.00	3.62	1.83	8.95	5.91
	NO. TOWS	N	5	N	5	21	67	106	194
23MAY83	DENSITY	N	0.00	N	0.00	41.14	20.12	28.28	27.54
	S.E.	N	0.00	N	0.00	17.54	5.96	6.40	4.77
	NO. TOWS	N	3	N	3	19	68	99	186
30MAY83	DENSITY	N	0.00	N	0.00	16.76	9.16	253.89	170.60
	S.E.	N	0.00	N	0.00	6.46	2.84	249.49	163.82
	NO. TOWS	N	3	N	3	19	68	99	186
06JUN83	DENSITY	N	29.84	N	29.84	4.96	29.68	10.64	14.75
	S.E.	N	18.63	N	18.63	2.36	17.39	1.84	4.44
	NO. TOWS	N	3	N	3	19	68	99	186
13JUN83	DENSITY	N	0.00	N	0.00	0.63	3.76	1.68	2.09
	S.E.	N	0.00	N	0.00	0.44	1.73	0.40	0.50
	NO. TOWS	N	3	N	3	16	63	108	187
20JUN83	DENSITY	N	0.00	N	0.00	0.07	4.71	0.97	1.80
	S.E.	N	0.00	N	0.00	0.07	1.73	0.33	0.48
	NO. TOWS	N	3	N	3	16	63	108	187
27JUN83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.07	0.05
	S.E.	N	0.00	N	0.00	0.00	0.00	0.06	0.04
	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-99
DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

STRIPED BASS — YOLK-SAC LARVAE

WEEK BEGINNING MONDAY		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
	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	3	N	3	6	3	4	3	10	6	3	6	15
09MAY83	DENSITY	0.00	N	0.00	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	0.00	1.75	0.00	0.58	0.68
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	15
16MAY83	DENSITY	5.02	N	5.11	5.10	31.51	2.02	34.64	27.16	35.29	0.00	52.61	34.72
	S.E.	5.02	N	5.11	4.56	16.14	1.17	18.98	10.18	18.87	0.00	13.12	8.78
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	15
23MAY83	DENSITY	0.00	N	0.00	0.00	264.26	159.62	33.44	145.08	73.08	60.82	188.45	118.27
	S.E.	0.00	N	0.00	0.00	133.59	86.75	8.89	53.36	30.19	25.94	97.64	42.38
	NO. TOWS	3	N	3	6	3	4	4	11	5	4	4	13
30MAY83	DENSITY	4.11	N	9.00	8.43	9.17	33.25	67.48	38.82	60.13	32.45	6.89	31.94
	S.E.	4.11	N	6.50	5.76	9.17	33.25	29.85	14.73	25.15	17.06	3.52	10.02
	NO. TOWS	3	N	3	6	3	3	4	10	5	5	3	13
06JUN83	DENSITY	0.00	N	0.00	0.00	1.96	18.12	6.26	6.92	20.89	112.62	13.21	37.89
	S.E.	0.00	N	0.00	0.00	1.96	9.76	3.92	2.63	7.87	23.93	7.78	6.81
	NO. TOWS	3	N	3	6	3	4	4	11	4	4	4	12
13JUN83	DENSITY	0.00	N	1.12	0.99	39.14	23.16	134.00	76.74	200.64	315.64	73.72	173.27
	S.E.	0.00	N	0.54	0.48	30.58	8.48	104.64	46.37	106.89	97.04	35.52	46.85
	NO. TOWS	1	N	8	9	3	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	0.71	0.00	0.16
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71	0.00	0.16
	NO. TOWS	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-99 (CONTINUED).

STRIPED BASS 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	0.00	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	0.00	0.00
	NO. TOWS	4	7	25	36	N	4	30	34	5	12	6	23
09MAY83	DENSITY	0.92	0.00	0.00	0.06	N	0.00	1.99	1.71	0.00	0.79	2.86	2.15
	S.E.	0.92	0.00	0.00	0.06	N	0.00	0.62	0.54	0.00	0.56	0.75	0.53
	NO. TOWS	4	8	24	36	N	4	30	34	5	13	5	23
16MAY83	DENSITY	14.44	4.93	12.55	11.44	N	0.75	10.94	9.54	1.78	2.64	5.33	4.42
	S.E.	2.95	2.83	2.60	2.08	N	0.75	1.70	1.47	0.73	0.68	1.87	1.29
	NO. TOWS	4	7	25	36	N	7	30	37	5	10	5	20
23MAY83	DENSITY	95.34	15.94	39.87	39.39	N	2.71	12.79	11.40	17.09	23.15	24.66	23.82
	S.E.	77.09	7.71	16.33	13.61	N	1.06	2.40	2.07	9.02	6.34	17.83	12.23
	NO. TOWS	3	6	13	22	N	7	23	30	5	9	6	20
30MAY83	DENSITY	27.99	85.31	68.39	68.66	N	77.80	78.46	78.37	10.08	226.07	49.78	93.89
	S.E.	12.09	51.34	18.25	16.45	N	64.91	25.21	23.51	5.55	96.45	28.84	32.06
	NO. TOWS	3	6	15	24	N	6	23	29	5	9	6	20
06JUN83	DENSITY	29.93	369.83	92.05	132.83	N	85.60	81.08	81.70	65.69	114.20	56.05	71.92
	S.E.	6.50	169.67	31.53	36.66	N	37.28	15.88	14.63	35.01	38.78	27.60	21.43
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	5	19
13JUN83	DENSITY	208.22	886.28	396.16	463.38	N	241.26	215.28	218.87	86.70	551.95	89.70	211.20
	S.E.	49.94	542.85	87.08	110.41	N	94.45	36.99	34.44	65.50	161.09	45.01	52.40
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28
20JUN83	DENSITY	1.84	15.65	9.85	10.29	N	126.20	48.43	59.15	12.78	15.14	2.21	6.23
	S.E.	1.26	14.76	4.08	3.97	N	39.91	8.54	9.19	9.90	3.55	0.96	1.28
	NO. TOWS	5	5	17	27	N	8	25	33	3	12	13	28
27JUN83	DENSITY	0.00	0.00	0.37	0.29	N	9.70	9.03	9.13	0.00	2.82	1.72	1.91
	S.E.	0.00	0.00	0.37	0.29	N	3.70	2.10	1.88	0.00	1.29	0.88	0.69
	NO. TOWS	5	6	16	27	N	8	25	33	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	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	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28

N -- STRATUM NOT SAMPLED

TABLE B-99 (CONTINUED).

STRIPED BASS YOLK-SAC LARVAE

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	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	0.93	0.00	0.21	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.47	0.00	0.11	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	0.89	1.60	1.44	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.63	0.91	0.72	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	3.00	4.85	4.42	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	1.48	1.69	1.34	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	107.19	21.65	41.50	N	39.97	28.42	30.81	N	51.52	1.48	18.38
	S.E.	N	52.42	8.43	13.78	N	18.94	12.90	10.96	N	23.32	0.98	7.91
	NO. TOWS	N	16	22	38	N	7	12	19	N	5	5	10
06JUN83	DENSITY	N	168.08	108.96	122.68	N	4.34	5.65	5.38	N	12.80	0.95	4.95
	S.E.	N	63.45	37.48	32.33	N	2.01	2.14	1.75	N	12.80	0.95	4.37
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6	10
13JUN83	DENSITY	N	1516.83	257.72	549.90	N	68.82	30.06	38.10	N	103.16	25.07	51.45
	S.E.	N	411.05	162.04	156.79	N	20.44	17.91	14.81	N	45.97	16.64	19.04
	NO. TOWS	N	7	15	22	N	5	9	14	N	5	5	10
20JUN83	DENSITY	N	28.26	22.33	23.71	N	21.08	13.79	15.30	N	1.22	1.78	1.59
	S.E.	N	16.04	6.78	6.40	N	10.22	5.56	4.89	N	0.75	1.19	0.83
	NO. TOWS	N	8	14	22	N	5	9	14	N	5	6	11
27JUN83	DENSITY	N	1.77	4.59	3.94	N	1.80	0.31	0.62	N	0.00	1.81	1.20
	S.E.	N	0.91	1.35	1.06	N	0.74	0.31	0.29	N	0.00	0.81	0.54
	NO. TOWS	N	7	15	22	N	5	9	14	N	4	6	10
04JUL83	DENSITY	N	0.00	0.18	0.14	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.18	0.14	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-99 (CONTINUED).

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

N -- STRATUM NOT SAMPLED

TABLE B-99 (CONTINUED).

STRIPED BASS YOLK-SAC LARVAE

WEEK BEGINNING MONDAY		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	5	N	5	21	66	107	194
09MAY83	DENSITY	N	0.00	N	0.00	0.71	0.17	0.44	0.40
	S.E.	N	0.00	N	0.00	0.43	0.07	0.09	0.08
	NO. TOWS	N	5	N	5	21	69	104	194
16MAY83	DENSITY	N	0.00	N	0.00	27.22	0.85	9.34	9.02
	S.E.	N	0.00	N	0.00	9.94	0.24	2.01	1.64
	NO. TOWS	N	5	N	5	21	67	106	194
23MAY83	DENSITY	N	1.09	N	1.09	167.96	24.54	19.06	35.04
	S.E.	N	1.09	N	1.09	73.43	9.83	4.63	8.20
	NO. TOWS	N	3	N	3	19	68	99	186
30MAY83	DENSITY	N	0.00	N	0.00	21.98	50.37	33.74	36.66
	S.E.	N	0.00	N	0.00	7.92	11.15	5.29	4.49
	NO. TOWS	N	3	N	3	19	68	99	186
06JUN83	DENSITY	N	0.00	N	0.00	10.20	65.11	41.78	44.39
	S.E.	N	0.00	N	0.00	2.55	13.46	7.22	5.78
	NO. TOWS	N	3	N	3	19	68	99	186
13JUN83	DENSITY	N	0.00	N	0.00	84.81	336.24	135.65	179.81
	S.E.	N	0.00	N	0.00	30.99	62.31	28.97	24.58
	NO. TOWS	N	3	N	3	16	63	108	187
20JUN83	DENSITY	N	0.86	N	0.86	0.57	15.82	13.67	12.91
	S.E.	N	0.86	N	0.86	0.37	3.37	2.09	1.60
	NO. TOWS	N	3	N	3	16	63	108	187
27JUN83	DENSITY	N	0.00	N	0.00	0.00	1.02	2.08	1.62
	S.E.	N	0.00	N	0.00	0.00	0.24	0.34	0.23
	NO. TOWS	N	3	N	3	16	62	109	187
04JUL83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.03	0.02
	S.E.	N	0.00	N	0.00	0.00	0.00	0.03	0.02
	NO. TOWS	N	3	N	3	16	62	109	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		STRIPED BASS								POST YOLK-SAC LARVAE			
		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
	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	3	N	3	6	3	4	3	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
	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	3	N	3	6	3	4	3	10	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
	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	3	N	3	6	3	4	3	10	6	3	6	15
23MAY83	DENSITY	0.00	N	0.00	0.00	16.87	20.91	10.10	14.75	4.86	3.92	1.67	3.33
	S.E.	0.00	N	0.00	0.00	4.88	8.95	5.14	3.36	3.25	3.92	1.67	1.62
	NO. TOWS	3	N	3	6	3	4	4	11	5	4	4	13
30MAY83	DENSITY	44.25	N	2.40	7.26	13.74	7.17	18.05	14.32	1.44	20.94	5.41	7.38
	S.E.	23.25	N	2.40	3.43	5.35	1.68	9.56	4.58	1.44	16.16	3.77	3.92
	NO. TOWS	3	N	3	6	3	3	4	10	5	5	3	13
06JUN83	DENSITY	0.00	N	3.85	3.40	2.94	68.15	0.73	14.58	10.19	220.40	26.37	63.16
	S.E.	0.00	N	2.44	2.16	2.94	27.07	0.73	5.35	5.40	101.68	24.43	24.64
	NO. TOWS	3	N	3	6	3	4	4	11	4	4	4	12
13JUN83	DENSITY	0.00	N	1.09	0.97	315.50	153.32	304.55	279.51	124.91	299.29	492.01	315.64
	S.E.	0.00	N	0.77	0.68	179.36	64.01	183.83	104.73	39.68	130.41	207.17	91.79
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	6	16
20JUN83	DENSITY	6.03	N	1.61	2.12	84.38	68.56	119.53	96.40	1096.96	547.50	410.46	691.14
	S.E.	0.00	N	0.61	0.54	36.32	22.02	79.22	36.89	704.79	195.95	75.75	262.68
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	5	15
27JUN83	DENSITY	0.00	N	0.00	0.00	23.33	7.73	36.99	26.17	78.22	74.13	66.12	72.30
	S.E.	0.00	N	0.00	0.00	13.62	3.15	11.96	7.29	20.18	24.37	9.54	9.93
	NO. TOWS	1	N	8	9	3	4	6	13	4	6	6	16
04JUL83	DENSITY	0.00	N	0.00	0.00	5.46	1.45	1.86	3.14	9.73	1.85	37.69	19.60
	S.E.	0.00	N	0.00	0.00	4.12	0.90	0.91	1.61	1.43	1.27	26.11	10.85
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-100 (CONTINUED).

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

N -- STRATUM NOT SAMPLED

TABLE B-100 (CONTINUED).

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

N -- STRATUM NOT SAMPLED

TABLE B-100 (CONTINUED).

STRIPED BASS POST YOLK-SAC LARVAE

WEEK BEGINNING MONDAY		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	3	3	6	N	3	3	6
09MAY83	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	3	3	6	N	3	3	6
16MAY83	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	4	3	7	N	3	3	6
23MAY83	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	5	3	8	N	3	3	6
30MAY83	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	5	3	8	N	3	3	6
06JUN83	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	5	3	8	N	3	3	6
13JUN83	DENSITY	N	1.64	0.00	0.59	N	0.00	0.00	0.00
	S.E.	N	0.95	0.00	0.34	N	0.00	0.00	0.00
	NO. TOWS	N	4	2	6	N	3	3	6
20JUN83	DENSITY	N	39.55	32.11	34.77	N	0.00	6.67	3.48
	S.E.	N	10.25	28.63	18.74	N	0.00	3.77	1.97
	NO. TOWS	N	3	2	5	N	3	3	6
27JUN83	DENSITY	N	5.30	0.00	1.90	N	1.08	0.00	0.51
	S.E.	N	2.64	0.00	0.95	N	1.08	0.00	0.51
	NO. TOWS	N	4	2	6	N	3	3	6
04JUL83	DENSITY	N	0.00	1.53	0.98	N	5.16	0.00	2.47
	S.E.	N	0.00	1.53	0.98	N	5.16	0.00	2.47
	NO. TOWS	N	4	2	6	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-100 (CONTINUED).

STRIPED BASS POST YOLK-SAC LARVAE

WEEK BEGINNING MONDAY		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	5	N	5	21	66	107	194
09MAY83	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	5	N	5	21	69	104	194
16MAY83	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	5	N	5	21	67	106	194
23MAY83	DENSITY	N	0.00	N	0.00	10.45	2.63	1.10	2.40
	S.E.	N	0.00	N	0.00	2.78	1.03	0.48	0.49
	NO. TOWS	N	3	N	3	19	68	99	186
30MAY83	DENSITY	N	0.00	N	0.00	13.53	2.24	2.88	3.77
	S.E.	N	0.00	N	0.00	4.05	0.97	0.97	0.79
	NO. TOWS	N	3	N	3	19	68	99	186
06JUN83	DENSITY	N	0.00	N	0.00	5.11	33.65	10.80	15.84
	S.E.	N	0.00	N	0.00	2.19	7.99	2.64	2.62
	NO. TOWS	N	3	N	3	19	68	99	186
13JUN83	DENSITY	N	0.00	N	0.00	226.86	223.30	181.02	195.89
	S.E.	N	0.00	N	0.00	99.06	44.61	25.14	22.07
	NO. TOWS	N	3	N	3	16	63	108	187
20JUN83	DENSITY	N	0.00	N	0.00	369.94	173.66	252.12	244.47
	S.E.	N	0.00	N	0.00	171.68	22.92	21.08	22.54
	NO. TOWS	N	3	N	3	16	63	108	187
27JUN83	DENSITY	N	0.00	N	0.00	57.87	51.52	81.46	71.80
	S.E.	N	0.00	N	0.00	17.65	9.95	11.87	8.35
	NO. TOWS	N	3	N	3	16	62	109	187
04JUL83	DENSITY	N	0.00	N	0.00	8.78	21.46	21.49	20.23
	S.E.	N	0.00	N	0.00	2.48	4.79	2.40	1.98
	NO. TOWS	N	3	N	3	16	62	109	187

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		STRIPED BASS						YOUNG-OF-THE-YEAR					
		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
	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	3	N	3	6	3	4	3	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
	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	3	N	3	6	3	4	3	10	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
	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	3	N	3	6	3	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	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	3	N	3	6	3	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	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	3	N	3	6	3	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
	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	3	N	3	6	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	5	6	14	4	6	5	15
27JUN83	DENSITY	0.00	N	0.00	0.00	4.21	0.00	0.00	1.59	0.96	0.00	0.00	0.35
	S.E.	0.00	N	0.00	0.00	4.21	0.00	0.00	1.59	0.96	0.00	0.00	0.35
	NO. TOWS	1	N	8	9	3	4	6	13	4	6	6	16
04JUL83	DENSITY	0.00	N	0.00	0.00	2.07	0.00	0.49	1.00	15.88	0.63	0.00	5.93
	S.E.	0.00	N	0.00	0.00	1.05	0.00	0.49	0.45	8.77	0.63	0.00	3.20
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	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	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	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	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	0.00	0.00
	NO. TOWS	4	8	24	36	N	4	30	34	5	13	5	23
16MAY83	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	0.00	0.00
	NO. TOWS	4	7	25	36	N	7	30	37	5	10	5	20
23MAY83	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	0.00	0.00
	NO. TOWS	3	6	13	22	N	7	23	30	5	9	6	20
30MAY83	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	0.00	0.00
	NO. TOWS	3	6	15	24	N	6	23	29	5	9	6	20
06JUN83	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	0.00	0.00
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	5	19
13JUN83	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	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	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	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	0.00
	NO. TOWS	5	5	17	27	N	8	25	33	3	12	13	28
27JUN83	DENSITY	0.00	0.00	0.20	0.16	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.20	0.16	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	28
04JUL83	DENSITY	48.01	5.24	2.04	5.33	N	0.00	0.35	0.30	0.00	0.00	0.00	0.00
	S.E.	22.08	2.46	1.21	1.68	N	0.00	0.20	0.17	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28

N -- STRATUM NOT SAMPLED

TABLE B-102 (CONTINUED).

STRIPED BASS YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY		POUGHKEEPSIE				HYDE PARK				KINGSTON			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	2.86	0.00	0.66	N	0.76	0.00	0.16	N	0.79	0.00	0.27
	S.E.	N	1.66	0.00	0.38	N	0.76	0.00	0.16	N	0.56	0.00	0.19
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
22AUG83	DENSITY	N	0.97	0.00	0.23	N	0.00	0.00	0.00	N	2.45	0.00	0.83
	S.E.	N	0.97	0.00	0.23	N	0.00	0.00	0.00	N	1.43	0.00	0.48
	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	1.28	0.00	0.43
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.68	0.00	0.23
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
19SEP83	DENSITY	N	0.49	0.00	0.11	N	0.38	0.00	0.08	N	2.03	0.00	0.69
	S.E.	N	0.49	0.00	0.11	N	0.38	0.00	0.08	N	0.60	0.00	0.20
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
03OCT83	DENSITY	N	0.00	0.00	0.00	N	0.40	0.00	0.08	N	0.34	0.00	0.12
	S.E.	N	0.00	0.00	0.00	N	0.40	0.00	0.08	N	0.34	0.00	0.12
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
17OCT83	DENSITY	N	2.26	0.00	0.52	N	0.86	0.00	0.18	N	0.00	0.00	0.00
	S.E.	N	1.22	0.00	0.28	N	0.86	0.00	0.18	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-102 (CONTINUED).

WEEK BEGINNING MONDAY		STRIPED BASS				YOUNG-OF-THE-YEAR			
		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	6.33	0.00	2.27	N	5.04	0.00	2.41
	S.E.	N	2.16	0.00	0.77	N	3.10	0.00	1.48
	NO. TOWS	N	12	6	18	N	15	6	21
22AUG83	DENSITY	N	1.86	0.00	0.67	N	0.41	0.00	0.19
	S.E.	N	1.33	0.00	0.48	N	0.28	0.00	0.13
	NO. TOWS	N	12	6	18	N	15	6	21
05SEP83	DENSITY	N	0.42	0.00	0.15	N	0.52	0.00	0.25
	S.E.	N	0.29	0.00	0.10	N	0.52	0.00	0.25
	NO. TOWS	N	12	6	18	N	15	6	21
19SEP83	DENSITY	N	0.80	0.00	0.28	N	0.00	0.00	0.00
	S.E.	N	0.45	0.00	0.16	N	0.00	0.00	0.00
	NO. TOWS	N	12	6	18	N	15	6	21
03OCT83	DENSITY	N	1.79	0.00	0.64	N	0.00	0.00	0.00
	S.E.	N	0.60	0.00	0.21	N	0.00	0.00	0.00
	NO. TOWS	N	12	6	18	N	15	6	21
17OCT83	DENSITY	N	0.33	0.00	0.12	N	0.00	0.00	0.00
	S.E.	N	0.22	0.00	0.08	N	0.00	0.00	0.00
	NO. TOWS	N	13	6	19	N	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		REGIONS YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL	COMBINED
01AUG83	CPUE	14.00	6.42	5.79	11.20	16.40	15.17	8.80	14.00	8.00	7.11	13.30	5.71	8.66
	S.E.	8.83	1.07	1.42	4.02	7.26	6.27	4.61	7.54	5.41	2.38	6.87	2.18	1.16
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
15AUG83	CPUE	15.40	6.42	10.57	3.20	2.80	5.50	0.20	5.60	5.80	2.67	6.30	1.86	6.12
	S.E.	4.01	1.61	3.35	1.36	0.97	2.32	0.20	4.08	4.86	1.34	3.68	0.67	0.89
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
29AUG83	CPUE	4.60	31.42	6.86	3.80	9.00	18.50	2.40	5.00	1.20	2.00	4.20	1.14	12.16
	S.E.	1.89	6.94	2.31	1.74	4.63	5.32	1.50	3.79	0.80	0.93	1.95	0.99	1.94
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
12SEP83	CPUE	3.60	66.92	18.64	15.00	10.40	12.17	0.20	0.00	2.80	3.56	5.00	0.71	23.87
	S.E.	1.94	22.69	5.39	7.45	7.10	4.83	0.20	0.00	1.53	2.35	3.61	0.47	6.16
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
26SEP83	CPUE	0.40	8.29	9.43	12.40	0.40	6.57	1.20	0.00	0.20	0.89	2.60	0.29	5.29
	S.E.	0.24	3.67	3.34	5.98	0.40	1.76	0.97	0.00	0.20	0.45	1.92	0.18	1.19
	NO. HAULS	5	24	14	5	5	7	5	5	5	9	10	7	101
10OCT83	CPUE	0.00	0.83	5.93	1.29	5.80	4.83	0.40	0.00	0.17	0.33	1.30	0.00	1.83
	S.E.	0.00	0.43	1.98	0.99	5.31	1.66	0.40	0.00	0.17	0.24	0.98	0.00	0.38
	NO. HAULS	5	24	14	7	5	6	5	4	6	9	10	7	102

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

STRIPED BASS YEARLING

WEEK BEGINNING MONDAY		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
	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	3	N	3	6	3	4	3	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
	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	3	N	3	6	3	4	3	10	6	3	6	15
16MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.55	1.31	0.00	0.49
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.55	1.31	0.00	0.35
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	15
23MAY83	DENSITY	1.49	N	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	1.49	N	0.00	0.17	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	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
	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	3	N	3	6	3	3	4	10	5	5	3	13
06JUN83	DENSITY	0.00	N	0.00	0.00	0.98	0.00	0.00	0.37	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.98	0.00	0.00	0.37	0.00	0.00	0.00	0.00
	NO. TOWS	3	N	3	6	3	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	1.11	0.00	0.24
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.11	0.00	0.24
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	6	16
20JUN83	DENSITY	0.00	N	0.00	0.00	1.31	0.00	0.00	0.49	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	1.31	0.00	0.00	0.49	0.00	0.00	0.00	0.00
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	5	15
27JUN83	DENSITY	0.00	N	0.00	0.00	1.11	0.00	0.52	0.65	0.80	0.97	0.00	0.50
	S.E.	0.00	N	0.00	0.00	1.11	0.00	0.52	0.48	0.80	0.97	0.00	0.36
	NO. TOWS	1	N	8	9	3	4	6	13	4	6	6	16
04JUL83	DENSITY	0.00	N	0.36	0.32	3.02	0.74	0.00	1.29	0.00	1.26	0.00	0.28
	S.E.	0.00	N	0.36	0.32	1.65	0.74	0.00	0.64	0.00	1.26	0.00	0.28
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-104 (CONTINUED).

STRIPED BASS YEARLING

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	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	0.19	0.15	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.19	0.15	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	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-104 (CONTINUED).

WEEK BEGINNING MONDAY		STRIPED BASS YEARLING							
		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	3	3	6	N	3	3	6
09MAY83	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	3	3	6	N	3	3	6
16MAY83	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	4	3	7	N	3	3	6
23MAY83	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	5	3	8	N	3	3	6
30MAY83	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	5	3	8	N	3	3	6
06JUN83	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	5	3	8	N	3	3	6
13JUN83	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	4	2	6	N	3	3	6
20JUN83	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	3	2	5	N	3	3	6
27JUN83	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	4	2	6	N	3	3	6
04JUL83	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	4	2	6	N	3	3	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	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	5	N	5	21	66	107	194
09MAY83	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	5	N	5	21	69	104	194
16MAY83	DENSITY	N	0.00	N	0.00	0.13	0.08	0.00	0.03
	S.E.	N	0.00	N	0.00	0.13	0.08	0.00	0.02
	NO. TOWS	N	5	N	5	21	67	106	194
23MAY83	DENSITY	N	0.00	N	0.00	0.18	0.00	0.00	0.02
	S.E.	N	0.00	N	0.00	0.18	0.00	0.00	0.02
	NO. TOWS	N	3	N	3	19	68	99	186
30MAY83	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	19	68	99	186
06JUN83	DENSITY	N	0.00	N	0.00	0.53	0.00	0.00	0.05
	S.E.	N	0.00	N	0.00	0.53	0.00	0.00	0.05
	NO. TOWS	N	3	N	3	19	68	99	186
13JUN83	DENSITY	N	0.00	N	0.00	0.00	0.07	0.00	0.02
	S.E.	N	0.00	N	0.00	0.00	0.07	0.00	0.02
	NO. TOWS	N	3	N	3	16	63	108	187
20JUN83	DENSITY	N	0.00	N	0.00	0.71	0.00	0.03	0.09
	S.E.	N	0.00	N	0.00	0.71	0.00	0.03	0.07
	NO. TOWS	N	3	N	3	16	63	108	187
27JUN83	DENSITY	N	0.00	N	0.00	0.84	0.06	0.08	0.15
	S.E.	N	0.00	N	0.00	0.64	0.06	0.05	0.07
	NO. TOWS	N	3	N	3	16	62	109	187
04JUL83	DENSITY	N	0.00	N	0.00	1.69	0.16	0.08	0.26
	S.E.	N	0.00	N	0.00	0.90	0.11	0.05	0.10
	NO. TOWS	N	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.

STRIPED BASS YEARLING

WEEK BEGINNING MONDAY		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	0.29	0.00	0.06
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.06
	NO. TOWS	7	N	5	12	32	7	7	46	16	8	3	27
22AUG83	DENSITY	1.79	N	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	1.79	N	0.00	0.21	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	0.16	0.00	0.00	0.06	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.16	0.00	0.00	0.06	0.00	0.00	0.00	0.00
	NO. TOWS	6	N	5	11	31	7	8	46	17	8	3	28
17OCT83	DENSITY	0.00	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	30	8	8	46	16	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-105 (CONTINUED).

STRIPED BASS YEARLING

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	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	3	7	5	6	3	14
22AUG83	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	0.00	0.00
	NO. TOWS	7	5	2	14	N	5	3	8	5	5	3	13
05SEP83	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	0.00	0.00
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13
19SEP83	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	5	3	8	6	5	2	13
03OCT83	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	2	6	5	6	4	15
17OCT83	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	0.00	0.00
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-105 (CONTINUED).

STRIPED BASS YEARLING

WEEK BEGINNING MONDAY		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	0.65	0.00	0.22
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.65	0.00	0.22
	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-105 (CONTINUED).

WEEK BEGINNING MONDAY		STRIPED BASS YEARLING							
		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	0.00	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	0.20	0.00	0.07	N	0.16	0.00	0.08
	S.E.	N	0.20	0.00	0.07	N	0.16	0.00	0.08
	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-105 (CONTINUED).

WEEK BEGINNING MONDAY		STRIPED BASS				YEARLING			
		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	0.00	N	0.00	0.00	0.02	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.02	0.00	0.00
	NO. TOWS	N	8	N	8	66	85	49	200
22AUG83	DENSITY	N	1.45	N	1.45	0.21	0.24	0.00	0.08
	S.E.	N	1.45	N	1.45	0.21	0.19	0.00	0.05
	NO. TOWS	N	8	N	8	64	87	49	200
05SEP83	DENSITY	N	0.00	N	0.00	0.00	0.04	0.00	0.01
	S.E.	N	0.00	N	0.00	0.00	0.03	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	0.09	0.00	0.00	0.01
	S.E.	N	0.00	N	0.00	0.09	0.00	0.00	0.01
	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-106
CATCH PER UNIT EFFORT (NUMBER PER HAUL) BY WEEK AND REGION,
BEACH SEINE SURVEY, HUDSON RIVER ESTUARY, 1983.

STRIPED BASS YEARLING

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

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

STRIPED BASS OLDER

WEEK BEGINNING MONDAY		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
	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	3	N	3	6	3	4	3	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
	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	3	N	3	6	3	4	3	10	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
	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	3	N	3	6	3	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	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	3	N	3	6	3	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	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	3	N	3	6	3	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
	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	3	N	3	6	3	4	4	11	4	4	4	12
13JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.59	0.00	0.11	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.59	0.00	0.11	0.00	0.00	0.00	0.00
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	6	16
20JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.96	0.41	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.61	0.26	0.00	0.00	0.00	0.00
	NO. TOWS	1	N	8	9	3	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	0.51	0.21
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51	0.21
	NO. TOWS	1	N	8	9	3	4	6	13	4	6	6	16
04JUL83	DENSITY	0.00	N	0.00	0.00	1.08	0.00	0.00	0.41	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	1.08	0.00	0.00	0.41	0.00	0.00	0.00	0.00
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-107 (CONTINUED).

STRIPED BASS 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	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	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	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	0.00	0.00
	NO. TOWS	4	8	24	36	N	4	30	34	5	13	5	23
16MAY83	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	0.00	0.00
	NO. TOWS	4	7	25	36	N	7	30	37	5	10	5	20
23MAY83	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	0.00	0.00
	NO. TOWS	3	6	13	22	N	7	23	30	5	9	6	20
30MAY83	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	0.00	0.00
	NO. TOWS	3	6	15	24	N	6	23	29	5	9	6	20
06JUN83	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	0.00	0.00
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	5	19
13JUN83	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	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	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	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	0.00
	NO. TOWS	5	5	17	27	N	8	25	33	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	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	0.00
	NO. TOWS	5	6	16	27	N	8	25	33	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	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	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28

N -- STRATUM NOT SAMPLED

TABLE B-107 (CONTINUED).

STRIPED BASS OLDER

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	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	0.38	0.00	0.08	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.38	0.00	0.08	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	0.00	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	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-107 (CONTINUED).

WEEK BEGINNING MONDAY		STRIPED BASS				OLDER			
		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	3	3	6	N	3	3	6
09MAY83	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	3	3	6	N	3	3	6
16MAY83	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	4	3	7	N	3	3	6
23MAY83	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	5	3	8	N	3	3	6
30MAY83	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	5	3	8	N	3	3	6
06JUN83	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	5	3	8	N	3	3	6
13JUN83	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	4	2	6	N	3	3	6
20JUN83	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	3	2	5	N	3	3	6
27JUN83	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	4	2	6	N	3	3	6
04JUL83	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	4	2	6	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-107 (CONTINUED).

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

STRIPED BASS OLDER

WEEK BEGINNING MONDAY		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	0.36	N	0.00	0.04	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
	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	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	30	8	8	46	16	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-108 (CONTINUED).

STRIPED BASS OLDER

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	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	3	7	5	6	3	14
22AUG83	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	0.00	0.00
	NO. TOWS	7	5	2	14	N	5	3	8	5	5	3	13
05SEP83	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	0.00	0.00
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13
19SEP83	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	5	3	8	6	5	2	13
03OCT83	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	2	6	5	6	4	15
17OCT83	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	0.00	0.00
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-108 (CONTINUED).

STRIPED BASS OLDER

WEEK BEGINNING MONDAY		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-108 (CONTINUED).

WEEK BEGINNING MONDAY		STRIPED BASS				OLDER			
		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	0.00	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	0.17	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
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-108 (CONTINUED).

WEEK BEGINNING MONDAY		STRIPED BASS				OLDER			
		ALBANY				COMBINED			
		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	66	85	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.

STRIPED BASS OLDER

WEEK BEGINNING MONDAY		REGIONS YK	TZ	CH	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
	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
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	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.	0.00	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	6	5	5	5	9	10	7	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
	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
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	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.	0.00	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	6	5	5	5	9	10	7	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.	0.00	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	7	5	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	0.00
	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
	NO. HAULS	5	24	14	7	5	6	5	4	6	9	10	7	102

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

WHITE PERCH EGGS

WEEK BEGINNING MONDAY		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	10.92	0.00	0.00	3.99
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	10.92	0.00	0.00	3.99
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	15
09MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	21.09	0.00	0.00	7.70
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	21.09	0.00	0.00	7.70
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	15
16MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.58	2.77	0.00	0.82
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.58	1.39	0.00	0.37
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	15
23MAY83	DENSITY	0.00	N	0.00	0.00	0.00	3.03	0.00	0.58	8.95	0.00	0.00	3.27
	S.E.	0.00	N	0.00	0.00	0.00	3.03	0.00	0.58	8.95	0.00	0.00	3.27
	NO. TOWS	3	N	3	6	3	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	1.32	0.00	0.29
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.00	0.18
	NO. TOWS	3	N	3	6	3	3	4	10	5	5	3	13
06JUN83	DENSITY	0.00	N	0.00	0.00	491.43	0.00	0.00	185.85	13.12	0.00	0.00	4.79
	S.E.	0.00	N	0.00	0.00	491.43	0.00	0.00	185.85	5.88	0.00	0.00	2.15
	NO. TOWS	3	N	3	6	3	4	4	11	4	4	4	12
13JUN83	DENSITY	0.00	N	0.00	0.00	100.29	1.22	0.00	38.16	10.35	4.11	0.00	4.68
	S.E.	0.00	N	0.00	0.00	100.29	1.22	0.00	37.93	9.23	4.11	0.00	3.49
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	6	16
20JUN83	DENSITY	0.00	N	0.00	0.00	5.22	0.00	0.00	1.98	1.75	5.39	0.00	1.82
	S.E.	0.00	N	0.00	0.00	5.22	0.00	0.00	1.98	1.75	3.42	0.00	0.99
	NO. TOWS	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-110 (CONTINUED).

WHITE PERCH EGGS

WEEK BEGINNING MONDAY	-	INDIAN POINT				WEST POINT				CORNWALL			
		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	0.88	2.06	1.28	1.02
	NO. TOWS	4	7	25	36	N	4	30	34	5	12	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	1.65	26.31	0.00	6.93
	NO. TOWS	4	8	24	36	N	4	30	34	5	13	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	14.82	217.40	3.50	57.28
	NO. TOWS	4	7	25	36	N	7	30	37	5	10	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	27.88	176.59	0.44	46.51
	NO. TOWS	3	6	13	22	N	7	23	30	5	9	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	8.56	32.59	152.77	104.06
	NO. TOWS	3	6	15	24	N	6	23	29	5	9	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.	316.54	55.96	8.59	22.18	N	358.79	2.44	49.52	95.01	421.87	1.66	111.19
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	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	2.80	704.53	9.95	185.58
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	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	0.00	0.00	0.52	0.36
	NO. TOWS	5	5	17	27	N	8	25	33	3	12	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	0.00	0.00
	NO. TOWS	5	6	16	27	N	8	25	33	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	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	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28

N -- STRATUM NOT SAMPLED

TABLE B-110 (CONTINUED).

WHITE PERCH EGGS

WEEK BEGINNING MONDAY		POUGHKEEPSIE SHOAL	POUGHKEEPSIE BOTTOM	POUGHKEEPSIE CHANNEL	POUGHKEEPSIE REGION	HYDE PARK SHOAL	HYDE PARK BOTTOM	HYDE PARK CHANNEL	HYDE PARK REGION	KINGSTON SHOAL	KINGSTON BOTTOM	KINGSTON CHANNEL	KINGSTON REGION
02MAY83	DENSITY	N	2.11	0.00	0.49	N	383.17	8.32	86.01	N	37.26	17.38	24.09
	S.E.	N	1.08	0.00	0.25	N	175.85	7.30	36.90	N	19.05	10.54	9.49
	NO. TOWS	N	9	10	19	N	10	11	21	N	6	7	13
09MAY83	DENSITY	N	1336.69	5.82	314.66	N	473.19	1.84	99.53	N	1455.76	0.00	491.77
	S.E.	N	558.90	1.96	129.71	N	229.10	0.85	47.49	N	1126.33	0.00	380.48
	NO. TOWS	N	10	10	20	N	10	10	20	N	6	7	13
16MAY83	DENSITY	N	982.99	6.65	233.22	N	540.40	9.01	119.14	N	2035.56	24.23	703.67
	S.E.	N	422.22	6.06	98.09	N	130.08	4.37	27.18	N	1005.11	20.45	339.81
	NO. TOWS	N	10	10	20	N	8	11	19	N	6	7	13
23MAY83	DENSITY	N	590.12	24.33	155.63	N	237.66	8.32	55.85	N	1110.08	58.49	413.73
	S.E.	N	221.15	14.75	52.55	N	78.44	3.86	16.54	N	1056.60	56.44	358.88
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6	10
30MAY83	DENSITY	N	1191.52	7.30	282.11	N	247.88	114.42	142.08	N	292.61	11.60	106.53
	S.E.	N	1160.47	3.18	269.31	N	175.16	97.59	85.46	N	231.02	8.45	78.24
	NO. TOWS	N	16	22	38	N	7	12	19	N	5	5	10
06JUN83	DENSITY	N	118.19	10.35	35.37	N	448.65	48.03	131.06	N	14.54	0.50	5.25
	S.E.	N	73.96	6.07	17.79	N	298.71	34.32	67.62	N	13.52	0.50	4.58
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6	10
13JUN83	DENSITY	N	102.79	3.82	26.79	N	0.00	0.00	0.00	N	1030.03	36.42	372.07
	S.E.	N	33.15	2.40	7.91	N	0.00	0.00	0.00	N	680.88	16.19	230.26
	NO. TOWS	N	7	15	22	N	5	9	14	N	5	5	10
20JUN83	DENSITY	N	21.32	0.00	4.95	N	2.28	0.00	0.47	N	0.00	0.00	0.00
	S.E.	N	20.50	0.00	4.76	N	1.40	0.00	0.29	N	0.00	0.00	0.00
	NO. TOWS	N	8	14	22	N	5	9	14	N	5	6	11
27JUN83	DENSITY	N	0.00	0.00	0.00	N	0.61	0.00	0.13	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.61	0.00	0.13	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-110 (CONTINUED).

WEEK BEGINNING MONDAY		WHITE PERCH EGGS							
		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	210.39	2.25	76.79	N	0.00	0.00	0.00
	S.E.	N	166.43	2.25	59.62	N	0.00	0.00	0.00
	NO. TOWS	N	3	3	6	N	3	3	6
09MAY83	DENSITY	N	1501.65	6.24	541.77	N	5224.00	66.23	2531.17
	S.E.	N	1501.65	6.24	537.78	N	267.67	30.54	128.91
	NO. TOWS	N	3	3	6	N	3	3	6
16MAY83	DENSITY	N	2929.35	78.00	1099.11	N	386.34	2.56	185.97
	S.E.	N	2778.14	76.26	996.10	N	192.20	1.34	91.86
	NO. TOWS	N	4	3	7	N	3	3	6
23MAY83	DENSITY	N	523.70	0.00	187.54	N	718.88	39.84	364.36
	S.E.	N	123.22	0.00	44.13	N	629.15	33.77	301.19
	NO. TOWS	N	5	3	8	N	3	3	6
30MAY83	DENSITY	N	318.25	3.22	116.04	N	1676.43	454.77	1038.61
	S.E.	N	176.19	1.86	63.11	N	272.37	56.27	133.44
	NO. TOWS	N	5	3	8	N	3	3	6
06JUN83	DENSITY	N	462.12	22.30	179.81	N	2108.17	76.36	1047.38
	S.E.	N	137.66	12.55	49.95	N	968.24	57.78	463.72
	NO. TOWS	N	5	3	8	N	3	3	6
13JUN83	DENSITY	N	64.47	0.00	23.09	N	3304.98	123.88	1644.16
	S.E.	N	21.88	0.00	7.84	N	1309.63	62.12	626.72
	NO. TOWS	N	4	2	6	N	3	3	6
20JUN83	DENSITY	N	2.98	0.00	1.07	N	231.31	13.41	117.55
	S.E.	N	2.98	0.00	1.07	N	31.86	13.41	16.76
	NO. TOWS	N	3	2	5	N	3	3	6
27JUN83	DENSITY	N	0.00	0.00	0.00	N	5.31	0.00	2.54
	S.E.	N	0.00	0.00	0.00	N	3.90	0.00	1.86
	NO. TOWS	N	4	2	6	N	3	3	6
04JUL83	DENSITY	N	2.12	0.00	0.76	N	6.32	2.12	4.13
	S.E.	N	1.34	0.00	0.48	N	3.16	1.07	1.61
	NO. TOWS	N	4	2	6	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-110 (CONTINUED).

WEEK BEGINNING MONDAY		WHITE PERCH				EGGS			
		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	344.72	N	344.72	2.77	96.37	2.58	25.58
	S.E.	N	63.98	N	63.98	2.64	23.35	0.96	5.76
	NO. TOWS	N	5	N	5	21	66	107	194
09MAY83	DENSITY	N	16.99	N	16.99	5.25	1227.19	5.89	305.14
	S.E.	N	10.40	N	10.40	5.10	211.87	1.82	51.94
	NO. TOWS	N	5	N	5	21	69	104	194
16MAY83	DENSITY	N	4245.63	N	4245.63	1.42	1289.65	10.38	323.01
	S.E.	N	416.83	N	416.83	0.56	337.01	6.03	82.69
	NO. TOWS	N	5	N	5	21	67	106	194
23MAY83	DENSITY	N	386.44	N	386.44	9.70	411.72	12.87	110.31
	S.E.	N	181.39	N	181.39	6.87	132.20	4.72	32.55
	NO. TOWS	N	3	N	3	19	68	99	186
30MAY83	DENSITY	N	1560.46	N	1560.46	0.76	721.85	65.28	219.84
	S.E.	N	200.07	N	200.07	0.31	161.18	15.83	40.85
	NO. TOWS	N	3	N	3	19	68	99	186
06JUN83	DENSITY	N	178.17	N	178.17	296.80	473.62	15.03	155.11
	S.E.	N	35.42	N	35.42	268.94	140.46	4.74	43.52
	NO. TOWS	N	3	N	3	19	68	99	186
13JUN83	DENSITY	N	1747.93	N	1747.93	58.01	885.39	13.65	231.65
	S.E.	N	1395.80	N	1395.80	54.80	265.26	3.80	65.28
	NO. TOWS	N	3	N	3	16	63	108	187
20JUN83	DENSITY	N	332.97	N	332.97	3.27	78.53	1.52	20.57
	S.E.	N	313.06	N	313.06	2.88	40.38	0.83	9.91
	NO. TOWS	N	3	N	3	16	63	108	187
27JUN83	DENSITY	N	0.00	N	0.00	0.00	0.82	0.00	0.20
	S.E.	N	0.00	N	0.00	0.00	0.54	0.00	0.13
	NO. TOWS	N	3	N	3	16	62	109	187
04JUL83	DENSITY	N	0.00	N	0.00	0.00	1.11	0.12	0.35
	S.E.	N	0.00	N	0.00	0.00	0.46	0.06	0.12
	NO. TOWS	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				YOLK-SAC LARVAE							
		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	3.27	1.40	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	3.27	1.40	0.00	0.00	0.00	0.00
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	15
09MAY83	DENSITY	27.29	N	3.04	5.85	28.60	0.00	3.24	12.21	223.60	1.10	19.06	89.75
	S.E.	13.77	N	3.04	3.13	14.33	0.00	3.24	5.59	36.85	1.10	12.32	14.39
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	15
16MAY83	DENSITY	13.71	N	11.51	11.76	23.00	2.97	34.56	24.09	85.40	18.78	113.64	82.46
	S.E.	12.01	N	11.51	10.27	10.87	2.97	24.03	11.11	24.07	12.76	21.07	12.71
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	15
23MAY83	DENSITY	0.00	N	0.00	0.00	115.70	40.34	15.31	58.11	26.21	71.68	31.58	38.45
	S.E.	0.00	N	0.00	0.00	71.14	20.04	5.57	27.29	8.55	24.83	9.61	7.45
	NO. TOWS	3	N	3	6	3	4	4	11	5	4	4	13
30MAY83	DENSITY	0.00	N	0.00	0.00	31.44	3.22	5.14	14.72	61.53	26.13	32.76	41.80
	S.E.	0.00	N	0.00	0.00	19.43	3.22	5.14	7.70	12.52	10.09	16.18	8.42
	NO. TOWS	3	N	3	6	3	3	4	10	5	5	3	13
06JUN83	DENSITY	0.00	N	4.24	3.75	18.11	22.90	7.34	14.41	104.44	98.11	3.82	61.29
	S.E.	0.00	N	4.24	3.75	7.66	4.11	6.36	4.06	56.91	48.44	2.31	23.36
	NO. TOWS	3	N	3	6	3	4	4	11	4	4	4	12
13JUN83	DENSITY	0.00	N	0.00	0.00	229.43	70.89	42.09	118.50	32.19	15.51	14.45	21.16
	S.E.	0.00	N	0.00	0.00	122.05	40.94	27.04	48.24	13.04	4.97	7.55	5.80
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	6	16
20JUN83	DENSITY	0.00	N	0.40	0.36	0.00	2.22	1.56	1.10	0.87	7.11	2.54	2.94
	S.E.	0.00	N	0.40	0.36	0.00	2.22	1.05	0.62	0.87	5.09	1.22	1.27
	NO. TOWS	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-111 (CONTINUED).

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

N -- STRATUM NOT SAMPLED

TABLE B-111 (CONTINUED).

WHITE PERCH YOLK-SAC LARVAE

WEEK BEGINNING MONDAY		POUGHKEEPSIE				HYDE PARK				KINGSTON			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	15.85	1.58	4.89	N	42.09	18.15	23.11	N	6.87	3.65	4.74
	S.E.	N	4.75	1.58	1.64	N	10.39	6.82	5.82	N	3.11	1.49	1.44
	NO. TOWS	N	9	10	19	N	10	11	21	N	6	7	13
09MAY83	DENSITY	N	877.84	232.05	381.91	N	404.27	67.21	137.06	N	329.36	63.23	153.13
	S.E.	N	283.73	90.62	95.80	N	160.70	14.48	35.23	N	64.84	21.38	26.08
	NO. TOWS	N	10	10	20	N	10	10	20	N	6	7	13
16MAY83	DENSITY	N	797.92	253.52	379.85	N	513.55	112.23	195.40	N	117.89	109.55	112.37
	S.E.	N	258.36	122.06	111.27	N	148.77	37.42	42.78	N	45.26	44.32	33.10
	NO. TOWS	N	10	10	20	N	8	11	19	N	6	7	13
23MAY83	DENSITY	N	490.38	126.17	210.69	N	678.70	157.97	265.89	N	1614.41	202.70	679.59
	S.E.	N	131.57	28.52	37.58	N	313.42	49.97	76.08	N	1003.89	110.09	346.87
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6	10
30MAY83	DENSITY	N	121.23	10.80	36.43	N	116.86	30.17	48.14	N	308.83	28.82	123.41
	S.E.	N	28.50	2.89	6.98	N	54.70	8.81	13.32	N	109.75	13.72	38.17
	NO. TOWS	N	16	22	38	N	7	12	19	N	5	5	10
06JUN83	DENSITY	N	40.20	13.09	19.38	N	98.05	19.26	35.58	N	176.67	12.39	67.89
	S.E.	N	7.62	3.24	3.05	N	41.36	7.52	10.44	N	110.22	3.62	37.31
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6	10
13JUN83	DENSITY	N	29.39	4.08	9.96	N	6.60	18.86	16.32	N	65.87	58.67	61.10
	S.E.	N	13.63	2.05	3.53	N	3.08	9.91	7.88	N	23.34	26.30	19.12
	NO. TOWS	N	7	15	22	N	5	9	14	N	5	5	10
20JUN83	DENSITY	N	3.29	0.48	1.13	N	10.36	2.41	4.05	N	3.64	4.75	4.38
	S.E.	N	1.59	0.48	0.52	N	5.61	0.88	1.36	N	1.76	2.20	1.57
	NO. TOWS	N	8	14	22	N	5	9	14	N	5	6	11
27JUN83	DENSITY	N	0.83	0.00	0.19	N	0.00	0.00	0.00	N	1.53	0.00	0.52
	S.E.	N	0.53	0.00	0.12	N	0.00	0.00	0.00	N	1.53	0.00	0.52
	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	0.91	0.43	0.59
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.91	0.43	0.42
	NO. TOWS	N	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			
		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	11.59	2.26	5.60	N	10.19	2.04	5.93
	S.E.	N	3.28	1.13	1.38	N	10.19	2.04	4.98
	NO. TOWS	N	3	3	6	N	3	3	6
09MAY83	DENSITY	N	85.42	77.12	80.09	N	22.65	22.87	22.76
	S.E.	N	36.14	47.24	32.97	N	9.85	4.19	5.19
	NO. TOWS	N	3	3	6	N	3	3	6
16MAY83	DENSITY	N	841.35	158.80	403.23	N	159.55	24.37	88.97
	S.E.	N	433.01	53.27	158.79	N	54.10	4.33	25.95
	NO. TOWS	N	4	3	7	N	3	3	6
23MAY83	DENSITY	N	643.72	110.02	301.15	N	562.59	112.81	327.76
	S.E.	N	139.64	76.01	69.86	N	213.63	15.74	102.42
	NO. TOWS	N	5	3	8	N	3	3	6
30MAY83	DENSITY	N	82.89	7.54	34.52	N	108.87	37.66	71.69
	S.E.	N	42.53	4.70	15.53	N	36.28	7.72	17.80
	NO. TOWS	N	5	3	8	N	3	3	6
06JUN83	DENSITY	N	140.15	59.67	88.49	N	473.69	16.96	235.23
	S.E.	N	101.83	44.62	46.37	N	389.21	12.13	186.11
	NO. TOWS	N	5	3	8	N	3	3	6
13JUN83	DENSITY	N	52.23	51.86	52.00	N	367.52	189.32	274.48
	S.E.	N	19.21	6.49	8.04	N	136.24	94.20	81.60
	NO. TOWS	N	4	2	6	N	3	3	6
20JUN83	DENSITY	N	7.03	13.60	11.25	N	64.13	18.79	40.46
	S.E.	N	5.60	6.64	4.71	N	31.72	4.59	15.35
	NO. TOWS	N	3	2	5	N	3	3	6
27JUN83	DENSITY	N	0.00	0.00	0.00	N	0.00	4.93	2.58
	S.E.	N	0.00	0.00	0.00	N	0.00	4.93	2.58
	NO. TOWS	N	4	2	6	N	3	3	6
04JUL83	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	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	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	0.00	N	0.00	0.84	9.88	4.59	5.52
	S.E.	N	0.00	N	0.00	0.58	1.84	0.93	0.76
	NO. TOWS	N	5	N	5	21	66	107	194
09MAY83	DENSITY	N	11.24	N	11.24	81.47	224.16	85.44	119.05
	S.E.	N	5.37	N	5.37	12.39	39.06	14.93	13.76
	NO. TOWS	N	5	N	5	21	69	104	194
16MAY83	DENSITY	N	23.04	N	23.04	73.85	368.66	196.22	226.45
	S.E.	N	9.48	N	9.48	12.42	74.06	28.88	26.28
	NO. TOWS	N	5	N	5	21	67	106	194
23MAY83	DENSITY	N	311.63	N	311.63	94.58	486.61	88.97	186.97
	S.E.	N	22.89	N	22.89	42.44	97.35	12.42	25.56
	NO. TOWS	N	3	N	3	19	68	99	186
30MAY83	DENSITY	N	5.50	N	5.50	36.50	89.40	31.70	46.31
	S.E.	N	5.50	N	5.50	11.15	13.50	2.88	3.97
	NO. TOWS	N	3	N	3	19	68	99	186
06JUN83	DENSITY	N	407.85	N	407.85	39.82	173.35	20.27	59.71
	S.E.	N	142.34	N	142.34	14.44	58.88	3.90	14.72
	NO. TOWS	N	3	N	3	19	68	99	186
13JUN83	DENSITY	N	290.01	N	290.01	135.93	113.45	29.32	60.42
	S.E.	N	161.76	N	161.76	66.72	28.56	6.23	10.43
	NO. TOWS	N	3	N	3	16	63	108	187
20JUN83	DENSITY	N	145.91	N	145.91	0.55	31.13	3.60	10.05
	S.E.	N	103.06	N	103.06	0.33	13.92	0.62	3.44
	NO. TOWS	N	3	N	3	16	63	108	187
27JUN83	DENSITY	N	6.03	N	6.03	0.18	1.09	0.35	0.52
	S.E.	N	4.60	N	4.60	0.18	0.61	0.28	0.24
	NO. TOWS	N	3	N	3	16	62	109	187
04JUL83	DENSITY	N	0.95	N	0.95	0.00	0.20	0.03	0.07
	S.E.	N	0.95	N	0.95	0.00	0.14	0.03	0.04
	NO. TOWS	N	3	N	3	16	62	109	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			
		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
	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	3	N	3	6	3	4	3	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
	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	3	N	3	6	3	4	3	10	6	3	6	15
16MAY83	DENSITY	41.58	N	29.41	30.82	63.81	7.16	271.00	141.73	134.47	47.85	168.03	129.34
	S.E.	25.06	N	29.41	26.16	37.95	3.01	128.82	57.08	38.20	37.39	31.63	20.84
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	15
23MAY83	DENSITY	0.00	N	2.62	2.31	211.62	149.60	215.65	201.38	287.80	623.84	558.45	474.07
	S.E.	0.00	N	1.34	1.19	82.81	98.05	85.85	51.90	45.60	141.27	382.18	162.49
	NO. TOWS	3	N	3	6	3	4	4	11	5	4	4	13
30MAY83	DENSITY	57.68	N	21.86	26.01	103.26	21.18	81.79	78.22	288.56	216.03	358.66	301.69
	S.E.	30.33	N	16.09	14.65	75.75	10.71	51.96	36.35	67.58	115.97	101.60	55.11
	NO. TOWS	3	N	3	6	3	3	4	10	5	5	3	13
06JUN83	DENSITY	2.82	N	24.59	22.06	82.11	454.20	153.87	184.69	237.36	251.94	425.77	318.76
	S.E.	1.57	N	11.29	9.98	37.06	176.21	57.87	44.37	74.65	76.07	310.59	132.81
	NO. TOWS	3	N	3	6	3	4	4	11	4	4	4	12
13JUN83	DENSITY	0.00	N	1.09	0.97	288.73	1100.77	556.81	560.40	477.28	747.10	930.02	724.55
	S.E.	0.00	N	0.77	0.68	112.87	709.13	341.75	205.01	301.02	161.52	353.73	186.77
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	6	16
20JUN83	DENSITY	6.03	N	0.38	1.04	426.33	437.69	181.26	323.43	666.31	848.33	566.84	665.08
	S.E.	0.00	N	0.38	0.34	160.01	183.06	106.89	83.73	173.85	273.54	143.32	105.76
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	5	15
27JUN83	DENSITY	0.00	N	0.00	0.00	27.39	7.50	27.65	23.67	123.38	173.08	69.58	111.99
	S.E.	0.00	N	0.00	0.00	27.39	5.65	12.85	11.78	11.11	84.46	16.80	20.26
	NO. TOWS	1	N	8	9	3	4	6	13	4	6	6	16
04JUL83	DENSITY	0.00	N	0.34	0.30	1.13	0.00	0.00	0.43	0.00	1.86	13.13	5.86
	S.E.	0.00	N	0.34	0.30	1.13	0.00	0.00	0.43	0.00	1.86	6.98	2.93
	NO. TOWS	1	N	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
02MAY83	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	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	N	0.00	0.33	0.28	0.00	0.26	0.00	0.07
	S.E.	0.00	0.00	0.00	0.00	N	0.00	0.18	0.16	0.00	0.26	0.00	0.07
	NO. TOWS	4	8	24	36	N	4	30	34	5	13	5	23
16MAY83	DENSITY	125.45	325.56	250.35	254.85	N	154.30	329.68	305.50	1046.84	143.74	56.28	136.69
	S.E.	30.04	264.95	28.15	47.84	N	45.98	49.95	43.53	315.87	63.56	35.39	34.52
	NO. TOWS	4	7	25	36	N	7	30	37	5	10	5	20
23MAY83	DENSITY	457.84	269.84	414.58	393.99	N	166.34	343.11	318.74	874.63	203.87	232.92	262.45
	S.E.	134.59	69.54	55.85	45.65	N	50.73	74.56	64.65	450.35	55.09	61.37	51.25
	NO. TOWS	3	6	13	22	N	7	23	30	5	9	6	20
30MAY83	DENSITY	116.46	199.60	472.06	406.86	N	707.75	613.06	626.12	1520.73	520.18	555.09	601.85
	S.E.	39.71	58.76	81.55	64.28	N	191.97	123.24	109.50	499.51	207.56	243.31	176.36
	NO. TOWS	3	6	15	24	N	6	23	29	5	9	6	20
06JUN83	DENSITY	237.33	1102.25	486.62	570.25	N	171.29	420.93	386.51	484.99	442.25	44.66	174.84
	S.E.	109.84	281.62	91.76	84.83	N	60.90	117.64	101.76	269.61	304.07	22.45	82.96
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	5	19
13JUN83	DENSITY	1251.90	2190.69	1166.67	1336.02	N	222.76	398.58	374.34	575.66	537.13	758.35	689.54
	S.E.	219.86	1580.64	234.90	312.91	N	130.92	60.96	55.57	456.37	125.11	269.76	187.93
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28
20JUN83	DENSITY	444.61	478.78	474.86	473.66	N	370.95	296.49	306.76	436.65	369.17	356.01	364.15
	S.E.	62.76	100.66	45.64	39.24	N	73.35	19.52	19.64	115.61	63.26	49.20	37.91
	NO. TOWS	5	5	17	27	N	8	25	33	3	12	13	28
27JUN83	DENSITY	202.28	327.93	354.79	341.26	N	244.08	185.39	193.48	144.06	833.52	583.68	623.97
	S.E.	47.85	78.57	57.85	46.89	N	32.73	21.00	18.66	78.83	212.62	99.41	87.79
	NO. TOWS	5	6	16	27	N	8	25	33	3	12	13	28
04JUL83	DENSITY	43.25	12.86	63.23	53.94	N	824.98	291.59	365.14	125.39	277.88	164.04	191.76
	S.E.	11.75	10.49	21.38	16.76	N	240.26	30.66	42.38	41.51	96.14	34.32	34.48
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28

N -- STRATUM NOT SAMPLED

TABLE B-112 (CONTINUED).

WHITE PERCH 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	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	116.24	100.79	104.38	N	12.97	3.89	5.77	N	3.26	2.90	3.02
	S.E.	N	78.40	48.26	41.28	N	4.11	1.12	1.23	N	1.69	0.49	0.66
	NO. TOWS	N	10	10	20	N	8	11	19	N	6	7	13
23MAY83	DENSITY	N	264.18	137.24	166.70	N	36.32	64.75	58.85	N	58.14	22.42	34.48
	S.E.	N	84.09	24.74	27.23	N	19.30	23.56	19.10	N	35.15	7.99	13.00
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6	10
30MAY83	DENSITY	N	709.63	317.09	408.19	N	123.35	121.00	121.49	N	572.12	217.25	337.12
	S.E.	N	267.33	122.08	112.42	N	45.46	28.51	24.49	N	134.60	76.65	68.14
	NO. TOWS	N	16	22	38	N	7	12	19	N	5	5	10
06JUN83	DENSITY	N	340.70	259.46	278.31	N	357.38	85.29	141.68	N	41.22	44.67	43.50
	S.E.	N	84.56	94.31	75.03	N	154.89	29.80	39.86	N	15.09	26.94	18.56
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6	10
13JUN83	DENSITY	N	573.49	420.84	456.26	N	433.52	777.97	706.58	N	1108.77	953.12	1005.70
	S.E.	N	278.77	180.58	153.02	N	144.75	292.20	233.58	N	231.35	332.42	233.59
	NO. TOWS	N	7	15	22	N	5	9	14	N	5	5	10
20JUN83	DENSITY	N	680.48	524.00	560.31	N	985.77	1172.79	1134.03	N	2392.24	1862.24	2041.28
	S.E.	N	238.37	149.18	127.22	N	368.58	115.34	119.14	N	692.42	722.42	532.50
	NO. TOWS	N	8	14	22	N	5	9	14	N	5	6	11
27JUN83	DENSITY	N	599.13	437.73	475.18	N	1577.28	522.31	740.96	N	1065.69	860.97	930.13
	S.E.	N	120.74	65.94	57.88	N	368.00	202.91	178.02	N	402.91	236.77	207.62
	NO. TOWS	N	7	15	22	N	5	9	14	N	4	6	10
04JUL83	DENSITY	N	192.54	309.62	282.45	N	418.67	460.06	451.48	N	1315.17	324.57	659.20
	S.E.	N	62.36	63.46	50.84	N	36.82	97.48	77.65	N	128.92	187.04	131.29
	NO. TOWS	N	7	15	22	N	5	9	14	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	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	3	3	6	N	3	3	6
09MAY83	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	3	3	6	N	3	3	6
16MAY83	DENSITY	N	3.70	4.42	4.16	N	3.04	1.12	2.04
	S.E.	N	2.27	0.85	0.98	N	1.72	1.12	1.01
	NO. TOWS	N	4	3	7	N	3	3	6
23MAY83	DENSITY	N	5.81	26.83	19.30	N	5.25	8.06	6.72
	S.E.	N	2.01	18.22	11.72	N	1.18	4.21	2.27
	NO. TOWS	N	5	3	8	N	3	3	6
30MAY83	DENSITY	N	13.57	40.84	31.08	N	5.43	9.17	7.39
	S.E.	N	8.54	31.57	20.49	N	1.01	6.70	3.53
	NO. TOWS	N	5	3	8	N	3	3	6
06JUN83	DENSITY	N	0.00	4.27	2.74	N	0.00	3.37	1.76
	S.E.	N	0.00	2.30	1.47	N	0.00	3.37	1.76
	NO. TOWS	N	5	3	8	N	3	3	6
13JUN83	DENSITY	N	1109.66	294.68	586.54	N	542.29	239.38	384.14
	S.E.	N	466.67	50.65	170.25	N	330.00	150.80	176.27
	NO. TOWS	N	4	2	6	N	3	3	6
20JUN83	DENSITY	N	2133.69	2102.38	2113.60	N	1845.68	3703.79	2815.78
	S.E.	N	315.98	563.84	379.20	N	192.49	1190.95	628.55
	NO. TOWS	N	3	2	5	N	3	3	6
27JUN83	DENSITY	N	1773.57	153.10	733.42	N	4225.50	702.21	2386.02
	S.E.	N	593.07	150.11	233.22	N	868.32	150.32	422.33
	NO. TOWS	N	4	2	6	N	3	3	6
04JUL83	DENSITY	N	512.30	305.40	379.49	N	1596.23	624.84	1089.08
	S.E.	N	320.94	134.99	143.94	N	853.84	426.85	464.95
	NO. TOWS	N	4	2	6	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-112 (CONTINUED).

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

WHITE PERCH — YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY		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
	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	3	N	3	6	3	4	3	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
	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	3	N	3	6	3	4	3	10	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
	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	3	N	3	6	3	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	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	3	N	3	6	3	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	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	3	N	3	6	3	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
	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	3	N	3	6	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	5	6	14	4	6	5	15
27JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.00	0.00	0.29
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.00	0.00	0.29
	NO. TOWS	1	N	8	9	3	4	6	13	4	6	6	16
04JUL83	DENSITY	0.00	N	0.00	0.00	1.13	0.00	0.00	0.43	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	1.13	0.00	0.00	0.43	0.00	0.00	0.00	0.00
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-113 (CONTINUED).

WEEK BEGINNING MONDAY		WHITE PERCH								YOUNG-OF-THE-YEAR			
		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	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	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	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	0.00	0.00
	NO. TOWS	4	8	24	36	N	4	30	34	5	13	5	23
16MAY83	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	0.00	0.00
	NO. TOWS	4	7	25	36	N	7	30	37	5	10	5	20
23MAY83	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	0.00	0.00
	NO. TOWS	3	6	13	22	N	7	23	30	5	9	6	20
30MAY83	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	0.00	0.00
	NO. TOWS	3	6	15	24	N	6	23	29	5	9	6	20
06JUN83	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	0.00	0.00
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	5	19
13JUN83	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	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	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	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	0.00
	NO. TOWS	5	5	17	27	N	8	25	33	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	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	0.00
	NO. TOWS	5	6	16	27	N	8	25	33	3	12	13	28
04JUL83	DENSITY	1.85	0.00	0.66	0.63	N	0.38	0.23	0.25	0.00	0.00	0.00	0.00
	S.E.	1.22	0.00	0.38	0.31	N	0.38	0.16	0.15	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28

N -- STRATUM NOT SAMPLED

TABLE B-113 (CONTINUED).

WHITE PERCH 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	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	0.00	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	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	0.16	0.12	N	0.57	0.00	0.12	N	0.00	0.00	0.00
	S.E.	N	0.00	0.16	0.12	N	0.57	0.00	0.12	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-113 (CONTINUED).

WEEK BEGINNING MONDAY		WHITE PERCH				YOUNG-OF-THE-YEAR			
		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	3	3	6	N	3	3	6
09MAY83	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	3	3	6	N	3	3	6
16MAY83	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	4	3	7	N	3	3	6
23MAY83	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	5	3	8	N	3	3	6
30MAY83	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	5	3	8	N	3	3	6
06JUN83	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	5	3	8	N	3	3	6
13JUN83	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	4	2	6	N	3	3	6
20JUN83	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	3	2	5	N	3	3	6
27JUN83	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	4	2	6	N	3	3	6
04JUL83	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	4	2	6	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-113 (CONTINUED).

WEEK BEGINNING MONDAY		WHITE PERCH				YOUNG-OF-THE-YEAR			
		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	5	N	5	21	66	107	194
09MAY83	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	5	N	5	21	69	104	194
16MAY83	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	5	N	5	21	67	106	194
23MAY83	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	19	68	99	186
30MAY83	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	19	68	99	186
06JUN83	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	19	68	99	186
13JUN83	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	63	108	187
20JUN83	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	63	108	187
27JUN83	DENSITY	N	0.00	N	0.00	0.19	0.00	0.00	0.02
	S.E.	N	0.00	N	0.00	0.19	0.00	0.00	0.02
	NO. TOWS	N	3	N	3	16	62	109	187
04JUL83	DENSITY	N	0.00	N	0.00	0.72	0.05	0.12	0.17
	S.E.	N	0.00	N	0.00	0.62	0.04	0.05	0.07
	NO. TOWS	N	3	N	3	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						YOUNG-OF-THE-YEAR					
		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	0.06	0.00	0.00	0.02	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.06	0.00	0.00	0.02	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	0.35	0.00	0.00	0.13	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.27	0.00	0.00	0.10	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	0.42	N	0.00	0.05	0.31	0.00	0.00	0.12	0.15	0.29	0.00	0.12
	S.E.	0.42	N	0.00	0.05	0.24	0.00	0.00	0.09	0.15	0.29	0.00	0.09
	NO. TOWS	6	N	5	11	31	7	8	46	17	8	3	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	N	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	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	3	7	5	6	3	14
22AUG83	DENSITY	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.53	0.00	0.00	0.03
	S.E.	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.53	0.00	0.00	0.03
	NO. TOWS	7	5	2	14	N	5	3	8	5	5	3	13
05SEP83	DENSITY	0.00	0.39	0.00	0.06	N	0.00	0.00	0.00	0.47	0.44	0.00	0.14
	S.E.	0.00	0.39	0.00	0.06	N	0.00	0.00	0.00	0.47	0.44	0.00	0.12
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13
19SEP83	DENSITY	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	1.25	0.00	0.00	0.07
	S.E.	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.84	0.00	0.00	0.05
	NO. TOWS	6	5	3	14	N	5	3	8	6	5	2	13
03OCT83	DENSITY	0.00	0.00	0.00	0.00	N	0.51	0.00	0.07	1.49	0.00	0.00	0.09
	S.E.	0.00	0.00	0.00	0.00	N	0.51	0.00	0.07	1.05	0.00	0.00	0.06
	NO. TOWS	6	5	3	14	N	4	2	6	5	6	4	15
17OCT83	DENSITY	0.44	0.00	0.00	0.03	N	0.00	0.00	0.00	3.85	1.42	0.00	0.60
	S.E.	0.44	0.00	0.00	0.03	N	0.00	0.00	0.00	3.22	0.58	0.00	0.24
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-114 (CONTINUED).

WHITE PERCH YOUNG-OF-THE-YEAR

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

N -- STRATUM NOT SAMPLED

TABLE B-114 (CONTINUED).

WEEK BEGINNING MONDAY		WHITE PERCH				YOUNG-OF-THE-YEAR			
		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	7.99	0.00	2.86	N	4.08	0.00	1.95
	S.E.	N	2.38	0.00	0.85	N	1.40	0.00	0.67
	NO. TOWS	N	12	6	18	N	15	6	21
22AUG83	DENSITY	N	0.21	0.00	0.07	N	0.95	0.00	0.45
	S.E.	N	0.21	0.00	0.07	N	0.44	0.00	0.21
	NO. TOWS	N	12	6	18	N	15	6	21
05SEP83	DENSITY	N	6.98	0.00	2.50	N	0.70	0.00	0.34
	S.E.	N	6.73	0.00	2.41	N	0.39	0.00	0.19
	NO. TOWS	N	12	6	18	N	15	6	21
19SEP83	DENSITY	N	3.65	0.00	1.31	N	0.47	0.00	0.22
	S.E.	N	0.93	0.00	0.33	N	0.34	0.00	0.16
	NO. TOWS	N	12	6	18	N	15	6	21
03OCT83	DENSITY	N	3.72	0.00	1.33	N	1.50	0.00	0.72
	S.E.	N	0.94	0.00	0.34	N	0.82	0.00	0.39
	NO. TOWS	N	12	6	18	N	15	6	21
17OCT83	DENSITY	N	4.35	0.00	1.56	N	3.18	0.00	1.52
	S.E.	N	0.84	0.00	0.30	N	0.69	0.00	0.33
	NO. TOWS	N	13	6	19	N	14	6	20

N -- STRATUM NOT SAMPLED

TABLE B-114 (CONTINUED).

WEEK BEGINNING MONDAY		WHITE PERCH				YOUNG-OF-THE-YEAR			
		ALBANY				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.

WHITE PERCH YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY		REGIONS YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL	COMBINED
01AUG83	CPUE	1.60	6.50	8.14	16.60	22.00	7.67	1.80	35.20	11.20	39.56	10.00	24.71	12.92
	S.E.	1.36	1.93	3.60	7.76	13.76	5.53	0.97	15.76	5.09	9.26	4.06	16.86	1.99
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
15AUG83	CPUE	0.60	6.25	5.57	7.40	28.00	7.33	8.80	4.60	16.00	13.11	13.20	12.00	8.92
	S.E.	0.40	2.07	1.61	5.31	16.00	4.13	4.26	2.29	5.53	6.45	6.00	12.00	1.59
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
29AUG83	CPUE	0.00	3.54	85.36	0.00	16.40	31.50	0.60	23.20	8.60	27.67	11.70	0.14	21.51
	S.E.	0.00	0.93	84.21	0.00	7.76	23.36	0.40	11.27	4.76	14.75	5.06	0.14	13.50
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
12SEP83	CPUE	0.60	7.08	3.21	5.60	4.80	5.83	0.40	1.40	14.60	13.56	30.00	0.00	8.80
	S.E.	0.40	2.98	2.26	4.63	2.75	2.73	0.40	0.68	10.77	4.59	12.89	0.00	1.90
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
26SEP83	CPUE	0.00	2.54	12.79	6.60	22.00	4.29	39.80	1.60	4.00	7.56	3.30	0.43	6.74
	S.E.	0.00	1.05	6.89	5.63	10.06	2.02	30.25	0.68	2.02	5.86	2.68	0.43	1.86
	NO. HAULS	5	24	14	5	5	7	5	5	5	9	10	7	101
10OCT83	CPUE	0.00	1.00	11.93	7.14	8.20	6.33	0.20	0.25	2.83	2.56	9.70	0.00	4.60
	S.E.	0.00	0.92	10.40	5.87	6.73	3.57	0.20	0.25	2.44	1.46	3.44	0.00	1.77
	NO. HAULS	5	24	14	7	5	6	5	4	6	9	10	7	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
02MAY83	DENSITY	14.43	N	1.22	2.75	7.28	1.70	2.35	4.09	2.68	1.38	0.00	1.28
	S.E.	14.43	N	1.22	1.99	7.28	1.70	2.35	2.95	1.70	1.38	0.00	0.69
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	15
09MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	2.33	33.41	0.00	8.20
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	1.75	22.83	0.00	5.06
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	15
16MAY83	DENSITY	6.77	N	0.00	0.79	0.00	0.00	1.21	0.52	5.01	23.52	0.00	7.01
	S.E.	6.77	N	0.00	0.79	0.00	0.00	1.21	0.52	3.18	23.52	0.00	5.30
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	15
23MAY83	DENSITY	2.69	N	0.00	0.31	0.00	3.28	0.00	0.63	0.00	3.05	0.00	0.67
	S.E.	1.37	N	0.00	0.16	0.00	1.90	0.00	0.37	0.00	2.06	0.00	0.45
	NO. TOWS	3	N	3	6	3	4	4	11	5	4	4	13
30MAY83	DENSITY	1.42	N	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	1.42	N	0.00	0.16	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	13
06JUN83	DENSITY	0.00	N	0.00	0.00	15.71	0.00	0.00	5.94	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	14.20	0.00	0.00	5.37	0.00	0.00	0.00	0.00
	NO. TOWS	3	N	3	6	3	4	4	11	4	4	4	12
13JUN83	DENSITY	0.00	N	0.00	0.00	1.11	0.00	0.00	0.42	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	1.11	0.00	0.00	0.42	0.00	0.00	0.00	0.00
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	6	16
20JUN83	DENSITY	0.00	N	0.00	0.00	1.31	0.00	0.00	0.49	0.87	0.53	0.66	0.71
	S.E.	0.00	N	0.00	0.00	1.31	0.00	0.00	0.49	0.87	0.53	0.66	0.44
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	5	15
27JUN83	DENSITY	0.00	N	0.00	0.00	1.05	1.62	6.29	3.41	0.96	1.63	0.51	0.92
	S.E.	0.00	N	0.00	0.00	1.05	0.94	6.29	2.73	0.96	0.74	0.51	0.44
	NO. TOWS	1	N	8	9	3	4	6	13	4	6	6	16
04JUL83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.85	0.00	0.00	0.31
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.85	0.00	0.00	0.31
	NO. TOWS	1	N	8	9	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			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	13.07	0.40	2.41	N	47.38	0.10	6.62	2.87	6.13	0.00	1.78
	S.E.	0.00	6.44	0.29	1.06	N	39.06	0.10	5.39	1.39	1.80	0.00	0.48
	NO. TOWS	4	7	25	36	N	4	30	34	5	12	6	23
09MAY83	DENSITY	0.00	0.46	0.64	0.57	N	1.44	0.29	0.45	0.00	3.94	0.00	1.04
	S.E.	0.00	0.46	0.41	0.32	N	1.44	0.16	0.24	0.00	1.29	0.00	0.34
	NO. TOWS	4	8	24	36	N	4	30	34	5	13	5	23
16MAY83	DENSITY	6.80	4.08	1.00	1.85	N	15.96	0.57	2.69	0.00	8.08	0.00	2.13
	S.E.	3.09	2.20	0.50	0.56	N	4.46	0.29	0.66	0.00	2.24	0.00	0.59
	NO. TOWS	4	7	25	36	N	7	30	37	5	10	5	20
23MAY83	DENSITY	0.00	1.40	0.00	0.22	N	4.99	0.55	1.16	0.00	3.41	0.00	0.90
	S.E.	0.00	0.88	0.00	0.14	N	1.67	0.26	0.32	0.00	1.59	0.00	0.42
	NO. TOWS	3	6	13	22	N	7	23	30	5	9	6	20
30MAY83	DENSITY	0.00	0.00	0.00	0.00	N	2.64	0.00	0.36	0.00	1.09	0.00	0.29
	S.E.	0.00	0.00	0.00	0.00	N	1.97	0.00	0.27	0.00	1.09	0.00	0.29
	NO. TOWS	3	6	15	24	N	6	23	29	5	9	6	20
06JUN83	DENSITY	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.33	0.00	0.09
	S.E.	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.33	0.00	0.09
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	5	19
13JUN83	DENSITY	0.73	0.00	0.00	0.04	N	0.00	0.13	0.11	0.00	0.78	0.00	0.21
	S.E.	0.73	0.00	0.00	0.04	N	0.00	0.13	0.11	0.00	0.41	0.00	0.11
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28
20JUN83	DENSITY	0.75	0.73	0.00	0.16	N	0.48	0.14	0.19	0.00	1.52	0.00	0.40
	S.E.	0.75	0.73	0.00	0.13	N	0.48	0.14	0.14	0.00	0.80	0.00	0.21
	NO. TOWS	5	5	17	27	N	8	25	33	3	12	13	28
27JUN83	DENSITY	0.69	0.00	0.19	0.19	N	0.00	0.15	0.13	0.00	0.54	0.00	0.14
	S.E.	0.69	0.00	0.19	0.15	N	0.00	0.15	0.13	0.00	0.36	0.00	0.10
	NO. TOWS	5	6	16	27	N	8	25	33	3	12	13	28
04JUL83	DENSITY	1.25	0.58	0.33	0.42	N	0.82	0.18	0.27	0.00	0.00	0.00	0.00
	S.E.	0.77	0.58	0.22	0.20	N	0.54	0.18	0.17	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28

N -- STRATUM NOT SAMPLED

TABLE B-116 (CONTINUED).

WHITE PERCH YEARLING

WEEK BEGINNING MONDAY		POUGHKEEPSIE				HYDE PARK				KINGSTON			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	0.25	0.00	0.06	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.25	0.00	0.06	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	0.93	0.00	0.19	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.47	0.00	0.10	N	0.00	0.00	0.00
	NO. TOWS	N	10	10	20	N	10	10	20	N	6	7	13
16MAY83	DENSITY	N	1.79	0.00	0.41	N	0.73	0.00	0.15	N	1.89	0.00	0.64
	S.E.	N	0.66	0.00	0.15	N	0.48	0.00	0.10	N	1.89	0.00	0.64
	NO. TOWS	N	10	10	20	N	8	11	19	N	6	7	13
23MAY83	DENSITY	N	0.17	0.00	0.04	N	1.17	0.00	0.24	N	0.00	0.00	0.00
	S.E.	N	0.17	0.00	0.04	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	10
30MAY83	DENSITY	N	0.56	0.00	0.13	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.40	0.00	0.09	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	2.07	0.00	0.48	N	0.87	0.00	0.18	N	0.00	0.00	0.00
	S.E.	N	0.94	0.00	0.22	N	0.56	0.00	0.12	N	0.00	0.00	0.00
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6	10
13JUN83	DENSITY	N	0.87	0.00	0.20	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.87	0.00	0.20	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	3.00	0.00	1.01
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	2.29	0.00	0.77
	NO. TOWS	N	8	14	22	N	5	9	14	N	5	6	11
27JUN83	DENSITY	N	2.07	0.00	0.48	N	2.48	0.37	0.81	N	0.00	0.00	0.00
	S.E.	N	1.13	0.00	0.26	N	1.84	0.37	0.48	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	0.37	0.28	N	0.48	0.63	0.60	N	0.00	0.00	0.00
	S.E.	N	0.00	0.37	0.28	N	0.48	0.42	0.35	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-116 (CONTINUED).

WEEK BEGINNING MONDAY		WHITE PERCH				YEARLING			
		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	3	3	6	N	3	3	6
09MAY83	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	3	3	6	N	3	3	6
16MAY83	DENSITY	N	0.95	0.00	0.34	N	0.00	0.00	0.00
	S.E.	N	0.95	0.00	0.34	N	0.00	0.00	0.00
	NO. TOWS	N	4	3	7	N	3	3	6
23MAY83	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	5	3	8	N	3	3	6
30MAY83	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	5	3	8	N	3	3	6
06JUN83	DENSITY	N	0.56	0.00	0.20	N	0.00	0.00	0.00
	S.E.	N	0.56	0.00	0.20	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	3	3	6
13JUN83	DENSITY	N	1.64	0.00	0.59	N	0.00	0.00	0.00
	S.E.	N	0.95	0.00	0.34	N	0.00	0.00	0.00
	NO. TOWS	N	4	2	6	N	3	3	6
20JUN83	DENSITY	N	3.96	0.00	1.42	N	0.00	0.00	0.00
	S.E.	N	1.04	0.00	0.37	N	0.00	0.00	0.00
	NO. TOWS	N	3	2	5	N	3	3	6
27JUN83	DENSITY	N	3.82	0.00	1.37	N	0.00	0.00	0.00
	S.E.	N	2.94	0.00	1.05	N	0.00	0.00	0.00
	NO. TOWS	N	4	2	6	N	3	3	6
04JUL83	DENSITY	N	0.00	0.00	0.00	N	1.03	0.00	0.49
	S.E.	N	0.00	0.00	0.00	N	1.03	0.00	0.49
	NO. TOWS	N	4	2	6	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-116 (CONTINUED).

WEEK BEGINNING MONDAY		WHITE PERCH				YEARLING			
		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	0.70	N	0.70	6.45	4.02	0.44	1.91
	S.E.	N	0.70	N	0.70	4.35	2.06	0.28	0.69
	NO. TOWS	N	5	N	5	21	66	107	194
09MAY83	DENSITY	N	0.00	N	0.00	0.56	2.37	0.10	0.71
	S.E.	N	0.00	N	0.00	0.42	1.34	0.05	0.33
	NO. TOWS	N	5	N	5	21	69	104	194
16MAY83	DENSITY	N	0.00	N	0.00	2.41	3.52	0.29	1.29
	S.E.	N	0.00	N	0.00	1.13	1.43	0.13	0.38
	NO. TOWS	N	5	N	5	21	67	106	194
23MAY83	DENSITY	N	0.00	N	0.00	0.32	1.21	0.07	0.37
	S.E.	N	0.00	N	0.00	0.16	0.29	0.03	0.08
	NO. TOWS	N	3	N	3	19	68	99	186
30MAY83	DENSITY	N	0.00	N	0.00	0.17	0.28	0.00	0.08
	S.E.	N	0.00	N	0.00	0.17	0.13	0.00	0.04
	NO. TOWS	N	3	N	3	19	68	99	186
06JUN83	DENSITY	N	0.00	N	0.00	8.57	0.40	0.00	0.94
	S.E.	N	0.00	N	0.00	7.75	0.14	0.00	0.76
	NO. TOWS	N	3	N	3	19	68	99	186
13JUN83	DENSITY	N	0.00	N	0.00	0.65	0.35	0.02	0.16
	S.E.	N	0.00	N	0.00	0.61	0.16	0.02	0.07
	NO. TOWS	N	3	N	3	16	63	108	187
20JUN83	DENSITY	N	0.00	N	0.00	0.97	0.91	0.04	0.35
	S.E.	N	0.00	N	0.00	0.74	0.24	0.03	0.10
	NO. TOWS	N	3	N	3	16	63	108	187
27JUN83	DENSITY	N	0.00	N	0.00	0.85	1.16	0.67	0.81
	S.E.	N	0.00	N	0.00	0.62	0.40	0.58	0.40
	NO. TOWS	N	3	N	3	16	62	109	187
04JUL83	DENSITY	N	0.00	N	0.00	0.28	0.25	0.17	0.20
	S.E.	N	0.00	N	0.00	0.21	0.15	0.08	0.07
	NO. TOWS	N	3	N	3	16	62	109	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				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	2.83	0.00	0.39	1.24	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	2.58	0.00	0.39	0.99	0.00	0.00	0.00	0.00
	NO. TOWS	7	N	5	12	32	7	7	46	16	8	3	27
22AUG83	DENSITY	1.27	N	0.00	0.15	0.30	0.00	0.00	0.11	0.16	0.00	0.00	0.06
	S.E.	1.27	N	0.00	0.15	0.30	0.00	0.00	0.11	0.16	0.00	0.00	0.06
	NO. TOWS	7	N	5	12	29	9	8	46	16	8	3	27
05SEP83	DENSITY	0.00	N	0.00	0.00	0.53	0.00	0.00	0.20	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.32	0.00	0.00	0.12	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	0.96	0.00	0.21
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.00	0.15
	NO. TOWS	6	N	5	11	31	8	8	47	15	8	3	26
03OCT83	DENSITY	2.91	N	0.00	0.34	0.63	6.36	0.00	1.46	1.73	0.00	0.00	0.63
	S.E.	2.91	N	0.00	0.34	0.44	5.91	0.00	1.15	0.87	0.00	0.00	0.32
	NO. TOWS	6	N	5	11	31	7	8	46	17	8	3	28
17OCT83	DENSITY	0.00	N	0.00	0.00	0.26	0.00	0.00	0.10	0.16	0.00	0.00	0.06
	S.E.	0.00	N	0.00	0.00	0.14	0.00	0.00	0.05	0.16	0.00	0.00	0.06
	NO. TOWS	7	N	5	12	30	8	8	46	16	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-117 (CONTINUED).

WHITE PERCH YEARLING

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

N -- STRATUM NOT SAMPLED

TABLE B-117 (CONTINUED).

WHITE PERCH YEARLING

WEEK BEGINNING MONDAY		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	3.76	0.00	0.78	N	5.81	1.71	3.10
	S.E.	N	0.00	0.00	0.00	N	1.03	0.00	0.21	N	2.26	1.71	1.37
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
22AUG83	DENSITY	N	0.97	0.00	0.23	N	7.35	0.00	1.52	N	5.84	0.00	1.97
	S.E.	N	0.97	0.00	0.23	N	3.44	0.00	0.71	N	3.75	0.00	1.27
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
05SEP83	DENSITY	N	0.00	0.00	0.00	N	0.60	0.00	0.13	N	0.26	0.00	0.09
	S.E.	N	0.00	0.00	0.00	N	0.60	0.00	0.13	N	0.26	0.00	0.09
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
19SEP83	DENSITY	N	5.71	0.00	1.32	N	14.77	0.00	3.06	N	18.47	0.77	6.75
	S.E.	N	2.35	0.00	0.55	N	4.44	0.00	0.92	N	5.63	0.77	1.97
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
03OCT83	DENSITY	N	5.90	0.73	1.93	N	6.43	4.37	4.80	N	14.31	0.00	4.83
	S.E.	N	2.34	0.73	0.78	N	2.63	3.66	2.95	N	5.07	0.00	1.71
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
17OCT83	DENSITY	N	3.79	0.00	0.88	N	6.90	0.00	1.43	N	7.33	0.77	2.99
	S.E.	N	0.95	0.00	0.22	N	3.15	0.00	0.65	N	2.70	0.77	1.04
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15

N -- STRATUM NOT SAMPLED

TABLE B-117 (CONTINUED).

WEEK BEGINNING MONDAY		WHITE PERCH				YEARLING			
		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	4.60	0.00	1.65	N	1.83	0.00	0.88
	S.E.	N	1.29	0.00	0.46	N	0.71	0.00	0.34
	NO. TOWS	N	12	6	18	N	15	6	21
22AUG83	DENSITY	N	2.92	0.00	1.05	N	0.89	0.00	0.42
	S.E.	N	2.92	0.00	1.05	N	0.89	0.00	0.42
	NO. TOWS	N	12	6	18	N	15	6	21
05SEP83	DENSITY	N	0.91	0.73	0.79	N	1.37	0.00	0.66
	S.E.	N	0.91	0.73	0.57	N	1.06	0.00	0.51
	NO. TOWS	N	12	6	18	N	15	6	21
19SEP83	DENSITY	N	7.12	0.00	2.55	N	0.47	0.00	0.23
	S.E.	N	1.29	0.00	0.46	N	0.25	0.00	0.12
	NO. TOWS	N	12	6	18	N	15	6	21
03OCT83	DENSITY	N	10.47	1.07	4.44	N	14.53	0.41	7.16
	S.E.	N	1.43	1.07	0.86	N	5.11	0.41	2.45
	NO. TOWS	N	12	6	18	N	15	6	21
17OCT83	DENSITY	N	7.37	1.22	3.42	N	1.37	0.00	0.66
	S.E.	N	1.52	1.22	0.95	N	0.61	0.00	0.29
	NO. TOWS	N	13	6	19	N	14	6	20

N -- STRATUM NOT SAMPLED

TABLE B-117 (CONTINUED).

WEEK BEGINNING MONDAY		WHITE PERCH				YEARLING			
		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	5.56	N	5.56	1.67	2.30	0.14	0.82
	S.E.	N	4.94	N	4.94	1.42	0.69	0.11	0.23
	NO. TOWS	N	8	N	8	66	85	49	200
22AUG83	DENSITY	N	1.24	N	1.24	0.43	1.86	0.00	0.50
	S.E.	N	1.24	N	1.24	0.24	0.57	0.00	0.14
	NO. TOWS	N	8	N	8	64	87	49	200
05SEP83	DENSITY	N	1.53	N	1.53	0.31	0.66	0.06	0.23
	S.E.	N	1.53	N	1.53	0.17	0.28	0.06	0.08
	NO. TOWS	N	8	N	8	63	87	49	199
19SEP83	DENSITY	N	0.32	N	0.32	0.20	4.33	0.05	1.11
	S.E.	N	0.32	N	0.32	0.13	0.67	0.05	0.17
	NO. TOWS	N	8	N	8	64	86	49	199
03OCT83	DENSITY	N	3.69	N	3.69	1.67	7.39	0.60	2.37
	S.E.	N	2.48	N	2.48	0.52	1.21	0.35	0.38
	NO. TOWS	N	8	N	8	65	85	50	200
17OCT83	DENSITY	N	2.14	N	2.14	0.63	3.65	0.14	1.05
	S.E.	N	1.22	N	1.22	0.18	0.58	0.10	0.16
	NO. TOWS	N	8	N	8	64	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.

WHITE PERCH YEARLING

WEEK BEGINNING MONDAY		REGIONS YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL	COMBINED
01AUG83	CPUE	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.	0.60	4.59	12.98	4.64	2.32	10.64	1.50	0.58	2.33	5.17	2.81	8.89	9.64
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
15AUG83	CPUE	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.	0.40	3.63	4.88	2.48	2.22	3.42	1.80	0.40	0.80	1.44	2.50	0.14	7.68
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
29AUG83	CPUE	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.	0.00	0.92	69.84	2.73	1.60	1.08	0.40	0.80	0.37	1.67	0.70	0.00	10.00
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
12SEP83	CPUE	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.	0.00	1.51	4.77	2.29	1.36	1.99	0.00	0.40	1.48	2.46	1.41	0.00	5.49
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
26SEP83	CPUE	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.	0.00	0.19	1.37	3.31	0.98	1.38	0.80	0.80	0.58	0.83	0.10	0.00	3.94
	NO. HAULS	5	24	14	5	5	7	5	5	5	9	10	7	101
10OCT83	CPUE	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.	0.00	0.09	3.06	0.85	0.24	2.16	0.00	0.00	0.50	1.12	0.70	0.14	3.50
	NO. HAULS	5	24	14	7	5	6	5	4	6	9	10	7	102

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

WHITE PERCH — OLDER

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

N -- STRATUM NOT SAMPLED

TABLE B-119 (CONTINUED).

WHITE PERCH OLDER

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

N -- STRATUM NOT SAMPLED

TABLE B-119 (CONTINUED).

WHITE PERCH OLDER

WEEK BEGINNING MONDAY		POUGHKEEPSIE				HYDE PARK				KINGSTON			
		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
	S.E.	N	0.58	0.00	0.14	N	0.54	0.00	0.11	N	0.00	0.36	0.24
	NO. TOWS	N	9	10	19	N	10	11	21	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
	S.E.	N	1.76	0.00	0.41	N	30.14	0.00	6.25	N	8.24	0.00	2.78
	NO. TOWS	N	10	10	20	N	10	10	20	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
	S.E.	N	3.95	0.00	0.92	N	3.95	0.25	0.84	N	1.40	0.00	0.47
	NO. TOWS	N	10	10	20	N	8	11	19	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
	S.E.	N	1.54	0.00	0.36	N	1.36	0.00	0.28	N	0.00	0.42	0.28
	NO. TOWS	N	16	22	38	N	7	12	19	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
	S.E.	N	4.59	0.19	1.07	N	3.91	0.00	0.81	N	0.00	0.00	0.00
	NO. TOWS	N	16	22	38	N	7	12	19	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
	S.E.	N	4.41	0.00	1.02	N	0.44	0.38	0.31	N	0.72	0.00	0.24
	NO. TOWS	N	16	22	38	N	7	12	19	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
	S.E.	N	1.48	0.18	0.37	N	4.73	0.00	0.98	N	1.15	0.00	0.39
	NO. TOWS	N	7	15	22	N	5	9	14	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
	S.E.	N	1.73	0.19	0.43	N	1.67	0.42	0.48	N	3.24	0.57	1.16
	NO. TOWS	N	8	14	22	N	5	9	14	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
	S.E.	N	0.88	0.22	0.27	N	0.00	0.30	0.23	N	0.86	0.00	0.29
	NO. TOWS	N	7	15	22	N	5	9	14	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
	S.E.	N	0.53	0.26	0.23	N	0.00	0.31	0.24	N	0.62	0.00	0.21
	NO. TOWS	N	7	15	22	N	5	9	14	N	4	6	10

N -- STRATUM NOT SAMPLED

TABLE B-119 (CONTINUED).

WEEK BEGINNING MONDAY		WHITE PERCH OLDER							
		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	0.00	0.00	0.00	N	2.78	0.00	1.33
	S.E.	N	0.00	0.00	0.00	N	2.78	0.00	1.33
	NO. TOWS	N	3	3	6	N	3	3	6
09MAY83	DENSITY	N	22.04	0.00	7.89	N	0.91	0.00	0.43
	S.E.	N	12.70	0.00	4.55	N	0.91	0.00	0.43
	NO. TOWS	N	3	3	6	N	3	3	6
16MAY83	DENSITY	N	6.10	0.00	2.19	N	0.00	0.00	0.00
	S.E.	N	3.72	0.00	1.33	N	0.00	0.00	0.00
	NO. TOWS	N	4	3	7	N	3	3	6
23MAY83	DENSITY	N	1.20	0.00	0.43	N	0.00	0.00	0.00
	S.E.	N	0.73	0.00	0.26	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	3	3	6
30MAY83	DENSITY	N	11.40	0.00	4.08	N	0.00	0.00	0.00
	S.E.	N	6.38	0.00	2.29	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	3	3	6
06JUN83	DENSITY	N	5.35	0.00	1.92	N	1.83	0.00	0.88
	S.E.	N	2.44	0.00	0.87	N	0.92	0.00	0.44
	NO. TOWS	N	5	3	8	N	3	3	6
13JUN83	DENSITY	N	5.58	0.00	2.00	N	0.00	0.00	0.00
	S.E.	N	5.58	0.00	2.00	N	0.00	0.00	0.00
	NO. TOWS	N	4	2	6	N	3	3	6
20JUN83	DENSITY	N	2.87	0.00	1.03	N	1.06	0.00	0.50
	S.E.	N	2.87	0.00	1.03	N	1.06	0.00	0.50
	NO. TOWS	N	3	2	5	N	3	3	6
27JUN83	DENSITY	N	3.87	4.49	4.27	N	6.47	1.71	3.98
	S.E.	N	3.87	4.49	3.20	N	3.23	1.71	1.79
	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-119 (CONTINUED).

WEEK BEGINNING MONDAY		WHITE PERCH				OLDER			
		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	0.00	N	0.00	6.77	4.70	0.13	1.91
	S.E.	N	0.00	N	0.00	3.09	1.38	0.06	0.46
	NO. TOWS	N	5	N	5	21	66	107	194
09MAY83	DENSITY	N	0.00	N	0.00	1.37	13.48	0.10	3.50
	S.E.	N	0.00	N	0.00	1.07	2.87	0.04	0.71
	NO. TOWS	N	5	N	5	21	69	104	194
16MAY83	DENSITY	N	0.00	N	0.00	2.20	5.22	0.13	1.58
	S.E.	N	0.00	N	0.00	1.52	0.93	0.05	0.27
	NO. TOWS	N	5	N	5	21	67	106	194
23MAY83	DENSITY	N	1.08	N	1.08	1.07	1.68	0.19	0.64
	S.E.	N	1.08	N	1.08	1.01	0.43	0.11	0.16
	NO. TOWS	N	3	N	3	19	68	99	186
30MAY83	DENSITY	N	0.00	N	0.00	0.34	3.56	0.08	0.96
	S.E.	N	0.00	N	0.00	0.21	1.03	0.04	0.25
	NO. TOWS	N	3	N	3	19	68	99	186
06JUN83	DENSITY	N	2.06	N	2.06	1.65	4.86	0.09	1.41
	S.E.	N	1.04	N	1.04	1.60	0.86	0.04	0.26
	NO. TOWS	N	3	N	3	19	68	99	186
13JUN83	DENSITY	N	1.08	N	1.08	2.93	2.53	0.31	1.11
	S.E.	N	1.08	N	1.08	1.54	0.79	0.11	0.26
	NO. TOWS	N	3	N	3	16	63	108	187
20JUN83	DENSITY	N	6.53	N	6.53	7.58	4.39	0.43	2.11
	S.E.	N	3.28	N	3.28	3.13	0.82	0.12	0.38
	NO. TOWS	N	3	N	3	16	63	108	187
27JUN83	DENSITY	N	0.00	N	0.00	5.17	3.37	0.62	1.74
	S.E.	N	0.00	N	0.00	2.19	0.84	0.36	0.38
	NO. TOWS	N	3	N	3	16	62	109	187
04JUL83	DENSITY	N	0.00	N	0.00	8.10	1.99	0.15	1.38
	S.E.	N	0.00	N	0.00	0.90	0.76	0.06	0.21
	NO. TOWS	N	3	N	3	16	62	109	187

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.

WHITE PERCH — OLDER

WEEK BEGINNING MONDAY		YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.98	N	0.00	0.11	10.86	7.56	1.22	6.09	1.57	5.90	0.00	1.87
	S.E.	0.98	N	0.00	0.11	4.30	7.56	1.22	2.25	0.76	3.65	0.00	0.85
	NO. TOWS	7	N	5	12	32	7	7	46	16	8	3	27
22AUG83	DENSITY	17.72	N	0.43	2.43	4.17	3.18	0.00	2.19	0.00	0.62	0.00	0.14
	S.E.	5.23	N	0.43	0.72	1.73	1.86	0.00	0.75	0.00	0.41	0.00	0.09
	NO. TOWS	7	N	5	12	29	9	8	46	16	8	3	27
05SEP83	DENSITY	0.41	N	0.00	0.05	2.16	1.89	0.00	1.18	0.90	0.00	0.00	0.33
	S.E.	0.41	N	0.00	0.05	0.86	1.24	0.00	0.40	0.74	0.00	0.00	0.27
	NO. TOWS	7	N	5	12	29	8	8	45	16	8	2	26
19SEP83	DENSITY	1.35	N	0.00	0.16	0.00	0.00	0.00	0.00	0.67	0.00	0.00	0.24
	S.E.	0.94	N	0.00	0.11	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.15
	NO. TOWS	6	N	5	11	31	8	8	47	15	8	3	26
03OCT83	DENSITY	0.48	N	0.00	0.06	3.16	1.40	0.00	1.47	7.30	7.80	0.00	4.38
	S.E.	0.48	N	0.00	0.06	1.94	1.40	0.00	0.78	2.41	5.00	0.00	1.41
	NO. TOWS	6	N	5	11	31	7	8	46	17	8	3	28
17OCT83	DENSITY	2.65	N	0.00	0.31	2.21	0.32	0.00	0.90	0.32	0.00	0.00	0.12
	S.E.	1.75	N	0.00	0.20	0.90	0.32	0.00	0.34	0.32	0.00	0.00	0.12
	NO. TOWS	7	N	5	12	30	8	8	46	16	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-120 (CONTINUED).

WHITE PERCH OLDER

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	N	0.00	0.00	0.00	2.66	0.00	0.00	0.15
	S.E.	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	1.67	0.00	0.00	0.10
	NO. TOWS	6	5	3	14	N	4	3	7	5	6	3	14
22AUG83	DENSITY	0.00	0.00	0.00	0.00	N	2.83	0.00	0.39	11.65	13.98	0.00	4.36
	S.E.	0.00	0.00	0.00	0.00	N	1.74	0.00	0.24	3.21	5.37	0.00	1.43
	NO. TOWS	7	5	2	14	N	5	3	8	5	5	3	13
05SEP83	DENSITY	0.48	0.39	0.00	0.09	N	0.00	0.00	0.00	1.48	5.67	0.00	1.58
	S.E.	0.48	0.39	0.00	0.07	N	0.00	0.00	0.00	1.00	4.07	0.00	1.07
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13
19SEP83	DENSITY	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.95	0.00	0.25
	S.E.	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.95	0.00	0.25
	NO. TOWS	6	5	3	14	N	5	3	8	6	5	2	13
03OCT83	DENSITY	0.00	0.57	0.00	0.09	N	0.00	0.00	0.00	1.53	0.00	0.00	0.09
	S.E.	0.00	0.57	0.00	0.09	N	0.00	0.00	0.00	1.01	0.00	0.00	0.06
	NO. TOWS	6	5	3	14	N	4	2	6	5	6	4	15
17OCT83	DENSITY	0.00	0.84	0.00	0.13	N	0.00	0.00	0.00	0.93	0.00	0.00	0.05
	S.E.	0.00	0.84	0.00	0.13	N	0.00	0.00	0.00	0.93	0.00	0.00	0.05
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-120 (CONTINUED).

WHITE PERCH OLDER

WEEK BEGINNING MONDAY		POUGHKEEPSIE				HYDE PARK				KINGSTON			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	2.58	0.00	0.60	N	9.59	0.00	1.99	N	10.52	4.56	6.58
	S.E.	N	1.50	0.00	0.35	N	2.78	0.00	0.58	N	2.72	4.56	3.16
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
22AUG83	DENSITY	N	16.43	0.00	3.81	N	21.10	0.00	4.37	N	74.73	0.00	25.24
	S.E.	N	4.79	0.00	1.11	N	8.26	0.00	1.71	N	17.23	0.00	5.82
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
05SEP83	DENSITY	N	2.45	0.78	1.17	N	1.46	0.57	0.75	N	16.71	0.00	5.65
	S.E.	N	1.97	0.78	0.75	N	0.78	0.57	0.48	N	4.23	0.00	1.43
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
19SEP83	DENSITY	N	1.96	0.00	0.46	N	0.73	0.00	0.15	N	1.17	0.00	0.39
	S.E.	N	1.96	0.00	0.46	N	0.47	0.00	0.10	N	0.81	0.00	0.27
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
03OCT83	DENSITY	N	0.00	0.00	0.00	N	0.89	0.00	0.18	N	1.27	0.00	0.43
	S.E.	N	0.00	0.00	0.00	N	0.56	0.00	0.12	N	0.68	0.00	0.23
	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-120 (CONTINUED).

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

N -- STRATUM NOT SAMPLED

TABLE B-120 (CONTINUED).

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

WHITE PERCH OLDER

WEEK BEGINNING MONDAY		REGIONS YK	TZ	CH	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
	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
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	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.	0.00	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	6	5	5	5	9	10	7	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
	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
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	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.	0.00	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	6	5	5	5	9	10	7	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.	0.00	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	7	5	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	0.00
	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
	NO. HAULS	5	24	14	7	5	6	5	4	6	9	10	7	102

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

AMERICAN SHAD EGGS

WEEK BEGINNING MONDAY		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
	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	3	N	3	6	3	4	3	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
	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	3	N	3	6	3	4	3	10	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
	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	3	N	3	6	3	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	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	3	N	3	6	3	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	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	3	N	3	6	3	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
	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	3	N	3	6	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-122 (CONTINUED).

AMERICAN SHAD EGGS

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	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	0.00	0.00
	NO. TOWS	4	7	25	36	N	4	30	34	5	12	6	23
09MAY83	DENSITY	0.00	0.00	0.27	0.21	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.27	0.21	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	23
16MAY83	DENSITY	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.34	0.00	0.09
	S.E.	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.34	0.00	0.09
	NO. TOWS	4	7	25	36	N	7	30	37	5	10	5	20
23MAY83	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	0.00	0.00
	NO. TOWS	3	6	13	22	N	7	23	30	5	9	6	20
30MAY83	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	0.00	0.00
	NO. TOWS	3	6	15	24	N	6	23	29	5	9	6	20
06JUN83	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	0.00	0.00
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	5	19
13JUN83	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	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	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	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	0.00
	NO. TOWS	5	5	17	27	N	8	25	33	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	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	0.00
	NO. TOWS	5	6	16	27	N	8	25	33	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	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	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28

N -- STRATUM NOT SAMPLED

TABLE B-122 (CONTINUED).

AMERICAN SHAD EGGS

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	0.00	N	119.15	0.94	25.44	N	541.02	164.72	291.84
	S.E.	N	0.00	0.00	0.00	N	48.50	0.66	10.07	N	413.90	117.20	159.91
	NO. TOWS	N	9	10	19	N	10	11	21	N	6	7	13
09MAY83	DENSITY	N	33.01	0.00	7.66	N	2.44	1.09	1.37	N	349.14	1.79	119.13
	S.E.	N	18.37	0.00	4.26	N	1.49	0.76	0.68	N	234.37	1.79	79.18
	NO. TOWS	N	10	10	20	N	10	10	20	N	6	7	13
16MAY83	DENSITY	N	17.86	0.00	4.14	N	11.52	0.54	2.82	N	501.20	30.65	189.61
	S.E.	N	9.38	0.00	2.18	N	5.20	0.36	1.11	N	271.14	27.95	93.44
	NO. TOWS	N	10	10	20	N	8	11	19	N	6	7	13
23MAY83	DENSITY	N	2.66	0.64	1.11	N	4.19	1.17	1.80	N	292.08	0.76	99.17
	S.E.	N	2.43	0.46	0.66	N	1.79	1.17	1.00	N	282.53	0.76	95.44
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6	10
30MAY83	DENSITY	N	0.58	0.00	0.14	N	4.11	0.43	1.20	N	12.22	0.00	4.13
	S.E.	N	0.43	0.00	0.10	N	2.83	0.43	0.68	N	5.81	0.00	1.96
	NO. TOWS	N	16	22	38	N	7	12	19	N	5	5	10
06JUN83	DENSITY	N	0.00	0.00	0.00	N	8.20	0.00	1.70	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	4.93	0.00	1.02	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	2.05	0.00	0.69
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	2.05	0.00	0.69
	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	0.00	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	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-122 (CONTINUED).

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

N -- STRATUM NOT SAMPLED

TABLE B-122 (CONTINUED).

WEEK BEGINNING MONDAY		AMERICAN SHAD				EGGS			
		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	195.83	N	195.83	0.00	133.26	10.45	39.52
	S.E.	N	89.48	N	89.48	0.00	46.61	7.38	12.41
	NO. TOWS	N	5	N	5	21	66	107	194
09MAY83	DENSITY	N	337.52	N	337.52	0.00	1279.46	25.93	330.59
	S.E.	N	120.71	N	120.71	0.00	911.41	12.73	223.52
	NO. TOWS	N	5	N	5	21	69	104	194
16MAY83	DENSITY	N	7566.56	N	7566.56	0.00	1081.29	4.56	267.99
	S.E.	N	2597.50	N	2597.50	0.00	333.65	2.81	81.79
	NO. TOWS	N	5	N	5	21	67	106	194
23MAY83	DENSITY	N	2221.68	N	2221.68	0.00	399.98	1.75	99.17
	S.E.	N	1135.06	N	1135.06	0.00	152.04	0.99	37.27
	NO. TOWS	N	3	N	3	19	68	99	186
30MAY83	DENSITY	N	854.50	N	854.50	0.00	124.90	0.70	31.07
	S.E.	N	525.82	N	525.82	0.00	67.36	0.25	16.51
	NO. TOWS	N	3	N	3	19	68	99	186
06JUN83	DENSITY	N	69.39	N	69.39	0.00	22.44	0.27	5.67
	S.E.	N	37.18	N	37.18	0.00	5.42	0.21	1.34
	NO. TOWS	N	3	N	3	19	68	99	186
13JUN83	DENSITY	N	60.13	N	60.13	0.00	9.26	0.05	2.30
	S.E.	N	60.13	N	60.13	0.00	7.71	0.05	1.89
	NO. TOWS	N	3	N	3	16	63	108	187
20JUN83	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	63	108	187
27JUN83	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
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-123
DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

AMERICAN SHAD

WEEK BEGINNING MONDAY		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
	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	3	N	3	6	3	4	3	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
	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	3	N	3	6	3	4	3	10	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
	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	3	N	3	6	3	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	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	3	N	3	6	3	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	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	3	N	3	6	3	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
	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	3	N	3	6	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	5	6	14	4	6	6	16

YOLK-SAC LARVAE

N -- STRATUM NOT SAMPLED

TABLE B-123 (CONTINUED).

AMERICAN SHAD 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	0.00	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	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	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	0.00	0.00
	NO. TOWS	4	8	24	36	N	4	30	34	5	13	5	23
16MAY83	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	0.00	0.00
	NO. TOWS	4	7	25	36	N	7	30	37	5	10	5	20
23MAY83	DENSITY	0.00	0.00	0.00	0.00	N	0.00	0.14	0.12	2.98	0.35	2.23	1.78
	S.E.	0.00	0.00	0.00	0.00	N	0.00	0.14	0.12	2.34	0.35	2.23	1.52
	NO. TOWS	3	6	13	22	N	7	23	30	5	9	6	20
30MAY83	DENSITY	0.00	0.00	0.00	0.00	N	0.00	0.13	0.11	6.11	3.88	0.00	1.38
	S.E.	0.00	0.00	0.00	0.00	N	0.00	0.13	0.11	5.36	1.73	0.00	0.55
	NO. TOWS	3	6	15	24	N	6	23	29	5	9	6	20
06JUN83	DENSITY	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	1.52	1.03
	S.E.	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.00	0.94	0.64
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	5	19
13JUN83	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	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	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	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	0.00
	NO. TOWS	5	5	17	27	N	8	25	33	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	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	0.00
	NO. TOWS	5	6	16	27	N	8	25	33	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	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	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28

N -- STRATUM NOT SAMPLED

TABLE B-123 (CONTINUED).

AMERICAN SHAD YOLK-SAC LARVAE

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	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	2.19	0.25	0.70	N	19.15	1.19	4.91	N	22.33	3.69	9.99
	S.E.	N	1.30	0.25	0.36	N	5.11	0.64	1.18	N	14.67	3.69	5.52
	NO. TOWS	N	10	10	20	N	8	11	19	N	6	7	13
23MAY83	DENSITY	N	5.17	7.26	6.78	N	27.70	16.40	18.74	N	156.11	45.19	82.66
	S.E.	N	1.65	1.91	1.52	N	11.46	5.54	4.99	N	87.40	13.97	30.94
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6	10
30MAY83	DENSITY	N	21.66	2.30	6.79	N	16.30	13.87	14.38	N	208.40	20.27	83.82
	S.E.	N	7.55	1.75	2.21	N	9.09	5.43	4.70	N	138.25	13.20	47.51
	NO. TOWS	N	16	22	38	N	7	12	19	N	5	5	10
06JUN83	DENSITY	N	1.53	2.14	2.00	N	13.89	2.17	4.60	N	126.64	13.07	51.43
	S.E.	N	0.69	0.89	0.70	N	3.85	1.42	1.38	N	38.36	3.84	13.21
	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	0.69	0.55	N	7.40	5.77	6.32
	S.E.	N	0.00	0.00	0.00	N	0.00	0.46	0.36	N	5.15	4.29	3.33
	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	0.00	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	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-123 (CONTINUED).

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

N -- STRATUM NOT SAMPLED

TABLE B-123 (CONTINUED).

WEEK BEGINNING MONDAY		AMERICAN SHAD				YOLK-SAC LARVAE			
		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	5	N	5	21	66	107	194
09MAY83	DENSITY	N	0.00	N	0.00	0.00	0.12	0.00	0.03
	S.E.	N	0.00	N	0.00	0.00	0.12	0.00	0.03
	NO. TOWS	N	5	N	5	21	69	104	194
16MAY83	DENSITY	N	8.65	N	8.65	0.00	8.78	0.47	2.46
	S.E.	N	7.89	N	7.89	0.00	2.36	0.26	0.60
	NO. TOWS	N	5	N	5	21	67	106	194
23MAY83	DENSITY	N	335.50	N	335.50	0.11	77.14	7.41	23.78
	S.E.	N	242.43	N	242.43	0.09	32.25	1.43	7.96
	NO. TOWS	N	3	N	3	19	68	99	186
30MAY83	DENSITY	N	465.33	N	465.33	0.22	121.68	17.97	41.64
	S.E.	N	90.93	N	90.93	0.19	19.90	11.10	8.77
	NO. TOWS	N	3	N	3	19	68	99	186
06JUN83	DENSITY	N	1740.49	N	1740.49	0.00	307.43	7.84	80.49
	S.E.	N	765.18	N	765.18	0.00	113.58	1.67	27.86
	NO. TOWS	N	3	N	3	19	68	99	186
13JUN83	DENSITY	N	301.91	N	301.91	0.00	46.90	4.26	14.29
	S.E.	N	151.56	N	151.56	0.00	19.46	1.47	4.87
	NO. TOWS	N	3	N	3	16	63	108	187
20JUN83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.13	0.09
	S.E.	N	0.00	N	0.00	0.00	0.00	0.13	0.09
	NO. TOWS	N	3	N	3	16	63	108	187
27JUN83	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
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-124
DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

AMERICAN SHAD — POST YOLK-SAC LARVAE

WEEK BEGINNING MONDAY		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
	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	3	N	3	6	3	4	3	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
	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	3	N	3	6	3	4	3	10	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
	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	3	N	3	6	3	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	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	3	N	3	6	3	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	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	3	N	3	6	3	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
	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	3	N	3	6	3	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	3.52	1.46
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.99	1.24
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	6	16
20JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	1.40	0.00	0.00	0.51
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	1.40	0.00	0.00	0.51
	NO. TOWS	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	5	6	14	4	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			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	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	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	0.00	0.00
	NO. TOWS	4	8	24	36	N	4	30	34	5	13	5	23
16MAY83	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	0.00	0.00
	NO. TOWS	4	7	25	36	N	7	30	37	5	10	5	20
23MAY83	DENSITY	1.14	0.00	0.00	0.07	N	0.00	0.14	0.12	1.81	0.00	7.83	5.42
	S.E.	1.14	0.00	0.00	0.07	N	0.00	0.14	0.12	1.81	0.00	3.26	2.22
	NO. TOWS	3	6	13	22	N	7	23	30	5	9	6	20
30MAY83	DENSITY	0.00	0.57	0.52	0.50	N	0.57	6.88	6.01	46.14	6.45	28.91	24.00
	S.E.	0.00	0.57	0.36	0.30	N	0.57	4.16	3.59	15.09	1.38	19.27	13.11
	NO. TOWS	3	6	15	24	N	6	23	29	5	9	6	20
06JUN83	DENSITY	0.00	0.00	0.24	0.19	N	3.17	6.81	6.30	69.87	0.51	86.25	62.73
	S.E.	0.00	0.00	0.24	0.19	N	3.17	2.91	2.55	54.26	0.51	34.28	23.48
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	5	19
13JUN83	DENSITY	0.00	0.00	0.00	0.00	N	0.54	0.51	0.51	39.33	0.26	7.23	7.26
	S.E.	0.00	0.00	0.00	0.00	N	0.54	0.31	0.28	32.00	0.26	2.46	2.50
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28
20JUN83	DENSITY	3.76	0.68	0.37	0.62	N	1.31	10.72	9.43	45.26	4.59	12.71	12.46
	S.E.	3.11	0.68	0.25	0.29	N	0.64	3.50	3.02	37.40	3.53	6.13	4.78
	NO. TOWS	5	5	17	27	N	8	25	33	3	12	13	28
27JUN83	DENSITY	1.28	0.00	0.62	0.56	N	10.12	17.38	16.38	33.05	12.11	36.70	30.01
	S.E.	1.28	0.00	0.34	0.27	N	5.09	4.88	4.27	31.46	4.98	14.87	10.34
	NO. TOWS	5	6	16	27	N	8	25	33	3	12	13	28
04JUL83	DENSITY	0.00	0.00	0.00	0.00	N	0.35	0.00	0.05	7.42	7.17	0.00	2.32
	S.E.	0.00	0.00	0.00	0.00	N	0.35	0.00	0.05	7.42	3.49	0.00	1.01
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28

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	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	2.79	4.18	3.86	N	0.84	6.84	5.59	N	15.43	25.32	21.98
	S.E.	N	1.54	1.56	1.25	N	0.54	2.04	1.62	N	8.95	7.34	5.72
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6	10
30MAY83	DENSITY	N	55.70	54.83	55.03	N	27.87	363.96	294.31	N	213.58	320.08	284.10
	S.E.	N	11.21	12.76	10.14	N	9.12	128.87	102.18	N	87.98	111.38	79.52
	NO. TOWS	N	16	22	38	N	7	12	19	N	5	5	10
06JUN83	DENSITY	N	11.43	43.52	36.08	N	203.29	143.86	156.17	N	135.05	713.40	518.03
	S.E.	N	4.57	20.47	15.75	N	76.74	79.20	64.77	N	46.16	170.47	113.96
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6	10
13JUN83	DENSITY	N	0.00	38.84	29.83	N	6.98	108.84	87.73	N	80.81	291.23	220.15
	S.E.	N	0.00	13.42	10.31	N	6.98	35.86	28.46	N	54.66	101.82	69.91
	NO. TOWS	N	7	15	22	N	5	9	14	N	5	5	10
20JUN83	DENSITY	N	7.94	45.30	36.63	N	15.48	49.15	42.17	N	106.35	32.34	57.34
	S.E.	N	3.08	19.28	14.83	N	4.94	26.00	20.64	N	60.11	15.40	22.72
	NO. TOWS	N	8	14	22	N	5	9	14	N	5	6	11
27JUN83	DENSITY	N	4.51	23.33	18.96	N	87.96	8.40	24.89	N	185.73	15.85	73.23
	S.E.	N	1.85	12.25	9.42	N	47.77	4.95	10.65	N	54.78	6.22	18.96
	NO. TOWS	N	7	15	22	N	5	9	14	N	4	6	10
04JUL83	DENSITY	N	0.85	2.63	2.22	N	4.08	10.04	8.80	N	5.32	26.06	19.05
	S.E.	N	0.56	1.79	1.38	N	1.28	3.88	3.09	N	2.62	20.71	13.74
	NO. TOWS	N	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			
		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	3	3	6	N	3	3	6
09MAY83	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	3	3	6	N	3	3	6
16MAY83	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	4	3	7	N	3	3	6
23MAY83	DENSITY	N	3.63	1.14	2.03	N	0.00	1.73	0.90
	S.E.	N	2.22	1.14	1.08	N	0.00	0.86	0.45
	NO. TOWS	N	5	3	8	N	3	3	6
30MAY83	DENSITY	N	107.71	144.62	131.40	N	27.22	236.31	136.38
	S.E.	N	67.56	63.60	47.45	N	5.68	198.67	103.76
	NO. TOWS	N	5	3	8	N	3	3	6
06JUN83	DENSITY	N	33.24	302.69	206.20	N	11.21	62.76	38.12
	S.E.	N	12.51	137.77	88.55	N	5.62	23.61	12.61
	NO. TOWS	N	5	3	8	N	3	3	6
13JUN83	DENSITY	N	28.46	2075.52	1342.44	N	15.29	2373.86	1246.68
	S.E.	N	9.89	1465.53	940.70	N	10.74	1134.81	592.50
	NO. TOWS	N	4	2	6	N	3	3	6
20JUN83	DENSITY	N	57.30	32.53	41.40	N	170.67	257.09	215.79
	S.E.	N	10.96	1.21	4.00	N	8.11	201.22	105.13
	NO. TOWS	N	3	2	5	N	3	3	6
27JUN83	DENSITY	N	204.57	18.43	85.09	N	288.99	82.13	180.99
	S.E.	N	99.65	9.45	36.20	N	33.00	7.72	16.28
	NO. TOWS	N	4	2	6	N	3	3	6
04JUL83	DENSITY	N	0.75	30.58	19.90	N	14.60	53.39	34.85
	S.E.	N	0.75	30.58	19.63	N	8.50	8.33	5.95
	NO. TOWS	N	4	2	6	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-124 (CONTINUED).

WEEK BEGINNING MONDAY		AMERICAN SHAD				POST YOLK-SAC LARVAE			
		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	5	N	5	21	66	107	194
09MAY83	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	5	N	5	21	69	104	194
16MAY83	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	5	N	5	21	67	106	194
23MAY83	DENSITY	N	164.34	N	164.34	0.13	23.17	3.54	8.01
	S.E.	N	164.34	N	164.34	0.09	21.04	0.60	5.17
	NO. TOWS	N	3	N	3	19	68	99	186
30MAY83	DENSITY	N	20.75	N	20.75	1.68	46.17	87.68	69.05
	S.E.	N	11.54	N	11.54	0.55	11.01	18.23	12.27
	NO. TOWS	N	3	N	3	19	68	99	186
06JUN83	DENSITY	N	10.29	N	10.29	2.54	32.43	97.14	71.98
	S.E.	N	6.98	N	6.98	1.97	6.48	17.03	11.29
	NO. TOWS	N	3	N	3	19	68	99	186
13JUN83	DENSITY	N	6.51	N	6.51	1.43	13.61	325.99	217.53
	S.E.	N	6.51	N	6.51	1.16	5.14	128.60	84.45
	NO. TOWS	N	3	N	3	16	63	108	187
20JUN83	DENSITY	N	9.65	N	9.65	2.20	42.83	32.43	32.01
	S.E.	N	8.11	N	8.11	1.41	5.56	12.00	7.99
	NO. TOWS	N	3	N	3	16	63	108	187
27JUN83	DENSITY	N	104.93	N	104.93	1.27	99.88	15.85	35.01
	S.E.	N	47.30	N	47.30	1.15	14.72	2.42	3.94
	NO. TOWS	N	3	N	3	16	62	109	187
04JUL83	DENSITY	N	3.03	N	3.03	0.27	3.80	8.26	6.38
	S.E.	N	1.80	N	1.80	0.27	1.25	2.74	1.83
	NO. TOWS	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		AMERICAN SHAD								YOUNG-OF-THE-YEAR			
		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
	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	3	N	3	6	3	4	3	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
	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	3	N	3	6	3	4	3	10	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
	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	3	N	3	6	3	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	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	3	N	3	6	3	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	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	3	N	3	6	3	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
	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	3	N	3	6	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	0.97	0.40
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61	0.26
	NO. TOWS	1	N	8	9	3	5	6	14	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	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	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	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	0.00	0.00
	NO. TOWS	4	8	24	36	N	4	30	34	5	13	5	23
16MAY83	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	0.00	0.00
	NO. TOWS	4	7	25	36	N	7	30	37	5	10	5	20
23MAY83	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	0.00	0.00
	NO. TOWS	3	6	13	22	N	7	23	30	5	9	6	20
30MAY83	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	0.00	0.00
	NO. TOWS	3	6	15	24	N	6	23	29	5	9	6	20
06JUN83	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	0.00	0.00
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	5	19
13JUN83	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	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	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	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	0.00
	NO. TOWS	5	5	17	27	N	8	25	33	3	12	13	28
27JUN83	DENSITY	0.00	0.00	0.00	0.00	N	4.28	2.95	3.14	3.00	16.20	12.47	12.90
	S.E.	0.00	0.00	0.00	0.00	N	1.84	2.13	1.85	3.00	7.04	5.26	4.03
	NO. TOWS	5	6	16	27	N	8	25	33	3	12	13	28
04JUL83	DENSITY	17.64	0.00	5.27	5.17	N	1.23	4.45	4.01	34.22	176.36	6.04	52.51
	S.E.	6.38	0.00	2.49	1.98	N	0.60	1.00	0.87	24.95	48.06	2.75	12.87
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28

N -- STRATUM NOT SAMPLED

TABLE B-125 (CONTINUED).

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

N -- STRATUM NOT SAMPLED

TABLE B-125 (CONTINUED).

WEEK BEGINNING MONDAY		AMERICAN SHAD				YOUNG-OF-THE-YEAR			
		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	5	N	5	21	66	107	194
09MAY83	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	5	N	5	21	69	104	194
16MAY83	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	5	N	5	21	67	106	194
23MAY83	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	19	68	99	186
30MAY83	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	19	68	99	186
06JUN83	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	19	68	99	186
13JUN83	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	63	108	187
20JUN83	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	63	108	187
27JUN83	DENSITY	N	2.02	N	2.02	0.11	40.49	2.03	11.27
	S.E.	N	1.01	N	1.01	0.11	11.07	0.57	2.74
	NO. TOWS	N	3	N	3	16	62	109	187
04JUL83	DENSITY	N	0.00	N	0.00	2.24	21.02	19.59	18.24
	S.E.	N	0.00	N	0.00	0.98	4.61	4.49	3.16
	NO. TOWS	N	3	N	3	16	62	109	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			
		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	1.72
	S.E.	1.17	N	1.92	1.70	3.31	3.66	5.63	2.81	1.43	0.00	0.00	0.52
	NO. TOWS	7	N	5	12	32	7	7	46	16	8	3	27
22AUG83	DENSITY	0.00	N	0.00	0.00	2.56	1.09	0.00	1.18	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	0.71	0.00	0.20
	NO. TOWS	7	N	5	12	29	9	8	46	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	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	0.27
	NO. TOWS	7	N	5	12	29	8	8	45	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	0.19
	S.E.	0.45	N	0.00	0.05	0.18	0.00	0.00	0.07	0.28	0.00	0.00	0.10
	NO. TOWS	6	N	5	11	31	8	8	47	15	8	3	26
03OCT83	DENSITY	0.47	N	0.00	0.05	0.07	0.80	0.27	0.30	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	0.85	0.00	0.23
	NO. TOWS	6	N	5	11	31	7	8	46	17	8	3	28
17OCT83	DENSITY	4.42	N	1.67	1.99	0.89	1.12	0.00	0.55	0.00	2.51	0.00	0.55
	S.E.	2.17	N	1.67	1.50	0.36	0.79	0.00	0.20	0.00	2.10	0.00	0.46
	NO. TOWS	7	N	5	12	30	8	8	46	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			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	2.44	0.00	4.10	3.34	N	0.55	0.00	0.08	17.68	3.85	0.71	2.52
	S.E.	1.35	0.00	4.10	3.20	N	0.55	0.00	0.08	16.95	1.38	0.71	1.15
	NO. TOWS	6	5	3	14	N	4	3	7	5	6	3	14
22AUG83	DENSITY	0.94	0.00	0.00	0.06	N	17.10	0.00	2.36	10.71	9.58	0.00	3.14
	S.E.	0.94	0.00	0.00	0.06	N	14.25	0.00	1.96	3.82	6.81	0.00	1.81
	NO. TOWS	7	5	2	14	N	5	3	8	5	5	3	13
05SEP83	DENSITY	0.53	0.81	0.00	0.16	N	0.00	0.00	0.00	0.47	0.00	0.00	0.03
	S.E.	0.53	0.51	0.00	0.09	N	0.00	0.00	0.00	0.47	0.00	0.00	0.03
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13
19SEP83	DENSITY	0.00	0.00	0.00	0.00	N	0.00	0.67	0.58	0.81	0.00	0.00	0.05
	S.E.	0.00	0.00	0.00	0.00	N	0.00	0.67	0.58	0.81	0.00	0.00	0.05
	NO. TOWS	6	5	3	14	N	5	3	8	6	5	2	13
03OCT83	DENSITY	6.28	0.00	0.00	0.38	N	0.51	0.00	0.07	6.61	0.00	0.00	0.38
	S.E.	4.21	0.00	0.00	0.25	N	0.51	0.00	0.07	2.53	0.00	0.00	0.15
	NO. TOWS	6	5	3	14	N	4	2	6	5	6	4	15
17OCT83	DENSITY	1.28	0.43	0.00	0.15	N	0.57	0.00	0.08	11.32	2.83	0.00	1.40
	S.E.	0.57	0.43	0.00	0.08	N	0.57	0.00	0.08	4.70	1.16	0.00	0.41
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-126 (CONTINUED).

AMERICAN SHAD YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY		POUGHKEEPSIE				HYDE PARK				KINGSTON			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	0.91	0.00	0.21	N	5.16	0.00	1.07	N	18.07	0.00	6.10
	S.E.	N	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	15
22AUG83	DENSITY	N	25.33	5.52	10.12	N	41.40	3.28	11.18	N	51.44	10.10	24.06
	S.E.	N	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	6	15
05SEP83	DENSITY	N	0.95	0.00	0.22	N	1.24	0.00	0.26	N	2.62	0.00	0.89
	S.E.	N	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	6	15
19SEP83	DENSITY	N	1.39	0.00	0.32	N	0.38	0.00	0.08	N	2.91	0.00	0.98
	S.E.	N	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	6	15
03OCT83	DENSITY	N	1.56	0.00	0.36	N	1.29	0.00	0.27	N	7.12	0.00	2.40
	S.E.	N	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	6	15
17OCT83	DENSITY	N	2.78	0.00	0.64	N	2.61	0.00	0.54	N	4.21	0.00	1.42
	S.E.	N	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	6	15

N -- STRATUM NOT SAMPLED

TABLE B-126 (CONTINUED).

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

N -- STRATUM NOT SAMPLED

TABLE B-126 (CONTINUED).

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

AMERICAN SHAD YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY		REGIONS YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL	COMBINED
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.	0.40	1.00	0.47	35.04	15.72	11.31	28.21	35.06	16.94	12.02	35.24	16.20	5.12
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	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.	0.00	0.22	0.00	0.80	5.09	10.40	10.01	27.96	8.55	5.14	11.86	11.01	1.94
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	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.	0.24	0.38	3.14	7.44	4.03	17.50	15.08	9.92	7.88	8.85	13.93	17.83	2.76
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	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.	0.40	0.79	2.13	3.01	6.53	6.70	2.60	8.02	9.61	14.31	3.26	4.51	1.75
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	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.	0.00	0.74	0.15	4.60	4.26	6.48	2.43	8.39	5.83	4.94	2.11	2.74	0.86
	NO. HAULS	5	24	14	5	5	7	5	5	5	9	10	7	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.	0.40	0.58	0.43	0.14	4.66	1.05	4.27	2.39	4.04	3.97	4.38	1.59	0.74
	NO. HAULS	5	24	14	7	5	6	5	4	6	9	10	7	102

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

AMERICAN SHAD YEARLING

WEEK BEGINNING MONDAY		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
	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	3	N	3	6	3	4	3	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
	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	3	N	3	6	3	4	3	10	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
	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	3	N	3	6	3	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	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	3	N	3	6	3	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	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	3	N	3	6	3	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
	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	3	N	3	6	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	5	6	14	4	6	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	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	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	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	0.00	0.00
	NO. TOWS	4	8	24	36	N	4	30	34	5	13	5	23
16MAY83	DENSITY	0.00	0.00	0.14	0.11	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.14	0.11	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	20
23MAY83	DENSITY	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.61	0.00	0.00	0.04
	S.E.	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.61	0.00	0.00	0.04
	NO. TOWS	3	6	13	22	N	7	23	30	5	9	6	20
30MAY83	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	0.00	0.00
	NO. TOWS	3	6	15	24	N	6	23	29	5	9	6	20
06JUN83	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	0.00	0.00
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	5	19
13JUN83	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	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	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	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	0.00
	NO. TOWS	5	5	17	27	N	8	25	33	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	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	0.00
	NO. TOWS	5	6	16	27	N	8	25	33	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	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	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28

N -- STRATUM NOT SAMPLED

TABLE B-128 (CONTINUED).

AMERICAN SHAD YEARLING

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	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	0.00	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	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-128 (CONTINUED).

WEEK BEGINNING MONDAY		AMERICAN SHAD				YEARLING			
		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	3	3	6	N	3	3	6
09MAY83	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	3	3	6	N	3	3	6
16MAY83	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	4	3	7	N	3	3	6
23MAY83	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	5	3	8	N	3	3	6
30MAY83	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	5	3	8	N	3	3	6
06JUN83	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	5	3	8	N	3	3	6
13JUN83	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	4	2	6	N	3	3	6
20JUN83	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	3	2	5	N	3	3	6
27JUN83	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	4	2	6	N	3	3	6
04JUL83	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	4	2	6	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-128 (CONTINUED).

WEEK BEGINNING MONDAY		AMERICAN SHAD				YEARLING			
		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	5	N	5	21	66	107	194
09MAY83	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	5	N	5	21	69	104	194
16MAY83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.01	0.01
	S.E.	N	0.00	N	0.00	0.00	0.00	0.01	0.01
	NO. TOWS	N	5	N	5	21	67	106	194
23MAY83	DENSITY	N	0.00	N	0.00	0.02	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.02	0.00	0.00	0.00
	NO. TOWS	N	3	N	3	19	68	99	186
30MAY83	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	19	68	99	186
06JUN83	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	19	68	99	186
13JUN83	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	63	108	187
20JUN83	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	63	108	187
27JUN83	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
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-129
DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY		AMERICAN SHAD				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	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	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	30	8	8	46	16	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-129 (CONTINUED).

AMERICAN SHAD YEARLING

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	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	3	7	5	6	3	14
22AUG83	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	0.00	0.00
	NO. TOWS	7	5	2	14	N	5	3	8	5	5	3	13
05SEP83	DENSITY	0.00	0.40	0.00	0.06	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.40	0.00	0.06	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	5	3	13
19SEP83	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	5	3	8	6	5	2	13
03OCT83	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	2	6	5	6	4	15
17OCT83	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	0.00	0.00
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-129 (CONTINUED).

AMERICAN SHAD YEARLING

WEEK BEGINNING MONDAY		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-129 (CONTINUED).

WEEK BEGINNING MONDAY		AMERICAN SHAD				YEARLING			
		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	0.00	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-129 (CONTINUED).

WEEK BEGINNING MONDAY		AMERICAN SHAD				YEARLING			
		ALBANY				COMBINED			
		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	66	85	49	200
22AUG83	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	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-130
CATCH PER UNIT EFFORT (NUMBER PER HAUL) BY WEEK AND REGION,
BEACH SEINE SURVEY, HUDSON RIVER ESTUARY, 1983.

AMERICAN SHAD YEARLING

WEEK BEGINNING MONDAY		REGIONS YK	TZ	CH	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
	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
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	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	0.01
	S.E.	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	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	0.01
	S.E.	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	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.	0.00	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	6	5	5	5	9	10	7	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.	0.00	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	7	5	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	0.00
	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
	NO. HAULS	5	24	14	7	5	6	5	4	6	9	10	7	102

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

AMERICAN SHAD OLDER

WEEK BEGINNING MONDAY		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	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	30	8	8	46	16	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-131 (CONTINUED).

AMERICAN SHAD OLDER

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	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	3	7	5	6	3	14
22AUG83	DENSITY	0.00	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	0.00	N	0.47	0.00	0.07	0.00	0.00	0.00	0.00
	NO. TOWS	7	5	2	14	N	5	3	8	5	5	3	13
05SEP83	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	0.00	0.00
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13
19SEP83	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	5	3	8	6	5	2	13
03OCT83	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	2	6	5	6	4	15
17OCT83	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	0.00	0.00
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-131 (CONTINUED).

AMERICAN SHAD OLDER

WEEK BEGINNING MONDAY		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-131 (CONTINUED).

WEEK BEGINNING MONDAY		AMERICAN SHAD				OLDER			
		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	0.00	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	0.18	0.00	0.09
	S.E.	N	0.00	0.00	0.00	N	0.18	0.00	0.09
	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-131 (CONTINUED).

AMERICAN SHAD OLDER

WEEK BEGINNING MONDAY		ALBANY				COMBINED			
		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	66	85	49	200
22AUG83	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	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-132
CATCH PER UNIT EFFORT (NUMBER PER HAUL) BY WEEK AND REGION,
BEACH SEINE SURVEY, HUDSON RIVER ESTUARY, 1983.

AMERICAN SHAD OLDER

WEEK BEGINNING MONDAY		REGIONS YK	TZ	CH	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
	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
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	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.	0.00	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	6	5	5	5	9	10	7	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
	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
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	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.	0.00	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	6	5	5	5	9	10	7	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.	0.00	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	7	5	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	0.00
	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
	NO. HAULS	5	24	14	7	5	6	5	4	6	9	10	7	102

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

ATLANTIC TOMCOD — POST YOLK-SAC LARVAE

WEEK BEGINNING MONDAY		YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW			
		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
	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
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	15
09MAY83	DENSITY	2.94	N	0.00	0.34	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	0.59	2.21	0.00	0.53
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	15
16MAY83	DENSITY	0.00	N	0.00	0.00	0.00	2.19	0.00	0.42	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	2.19	0.00	0.42	0.00	0.00	0.00	0.00
	NO. TOWS	3	N	3	6	3	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	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	3	N	3	6	3	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	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	3	N	3	6	3	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
	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	3	N	3	6	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-133 (CONTINUED).

ATLANTIC TOMCOD POST 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	0.00	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	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	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	0.00	0.00
	NO. TOWS	4	8	24	36	N	4	30	34	5	13	5	23
16MAY83	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	0.00	0.00
	NO. TOWS	4	7	25	36	N	7	30	37	5	10	5	20
23MAY83	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	0.00	0.00
	NO. TOWS	3	6	13	22	N	7	23	30	5	9	6	20
30MAY83	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	0.00	0.00
	NO. TOWS	3	6	15	24	N	6	23	29	5	9	6	20
06JUN83	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	0.00	0.00
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	5	19
13JUN83	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	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	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	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	0.00
	NO. TOWS	5	5	17	27	N	8	25	33	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	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	0.00
	NO. TOWS	5	6	16	27	N	8	25	33	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	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	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28

N -- STRATUM NOT SAMPLED

TABLE B-133 (CONTINUED).

ATLANTIC TOMCOD 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	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	0.00	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	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-133 (CONTINUED).

ATLANTIC TOMCOD — POST YOLK-SAC LARVAE

WEEK BEGINNING MONDAY		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	3	3	6	N	3	3	6
09MAY83	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	3	3	6	N	3	3	6
16MAY83	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	4	3	7	N	3	3	6
23MAY83	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	5	3	8	N	3	3	6
30MAY83	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	5	3	8	N	3	3	6
06JUN83	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	5	3	8	N	3	3	6
13JUN83	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	4	2	6	N	3	3	6
20JUN83	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	3	2	5	N	3	3	6
27JUN83	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	4	2	6	N	3	3	6
04JUL83	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	4	2	6	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-133 (CONTINUED).

WEEK BEGINNING MONDAY		ATLANTIC TOMCOD				POST YOLK-SAC LARVAE			
		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	0.00	N	0.00	0.19	0.00	5.58	3.68
	S.E.	N	0.00	N	0.00	0.19	0.00	5.09	3.34
	NO. TOWS	N	5	N	5	21	66	107	194
09MAY83	DENSITY	N	0.00	N	0.00	0.49	0.13	0.00	0.08
	S.E.	N	0.00	N	0.00	0.38	0.13	0.00	0.05
	NO. TOWS	N	5	N	5	21	69	104	194
16MAY83	DENSITY	N	0.00	N	0.00	0.00	0.24	0.00	0.06
	S.E.	N	0.00	N	0.00	0.00	0.24	0.00	0.06
	NO. TOWS	N	5	N	5	21	67	106	194
23MAY83	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	19	68	99	186
30MAY83	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	19	68	99	186
06JUN83	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	19	68	99	186
13JUN83	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	63	108	187
20JUN83	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	63	108	187
27JUN83	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
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-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
02MAY83	DENSITY	14.15	N	242.19	215.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	12.22	N	229.50	202.88	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
09MAY83	DENSITY	14.83	N	0.00	1.72	0.00	11.87	0.00	2.29	3.41	38.11	0.58	9.87
	S.E.	10.72	N	0.00	1.24	0.00	6.24	0.00	1.20	2.75	30.90	0.58	6.88
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	15
16MAY83	DENSITY	0.00	N	0.00	0.00	2.38	497.01	0.00	96.81	1.70	28.75	0.00	6.95
	S.E.	0.00	N	0.00	0.00	1.19	432.19	0.00	83.40	1.18	28.75	0.00	6.34
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	15
23MAY83	DENSITY	326.67	N	0.00	37.90	1.54	101.88	43.50	38.90	0.00	90.63	0.75	20.25
	S.E.	305.28	N	0.00	35.41	1.54	83.16	35.58	22.15	0.00	40.64	0.75	8.95
	NO. TOWS	3	N	3	6	3	4	4	11	5	4	4	13
30MAY83	DENSITY	224.28	N	1.20	27.08	0.00	540.10	23.67	114.38	0.72	2.11	0.00	0.73
	S.E.	224.28	N	1.20	26.04	0.00	540.10	23.67	104.72	0.72	2.11	0.00	0.53
	NO. TOWS	3	N	3	6	3	3	4	10	5	5	3	13
06JUN83	DENSITY	0.00	N	25.11	22.19	19.58	4.10	1.52	8.85	0.99	4.29	0.00	1.31
	S.E.	0.00	N	25.11	22.19	19.58	3.03	1.52	7.46	0.99	3.38	0.00	0.83
	NO. TOWS	3	N	3	6	3	4	4	11	4	4	4	12
13JUN83	DENSITY	158.67	N	143.20	144.99	0.00	316.87	29.28	73.70	0.00	5.30	0.00	1.17
	S.E.	0.00	N	115.88	102.44	0.00	82.13	27.16	19.67	0.00	3.07	0.00	0.68
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	6	16
20JUN83	DENSITY	1266.46	N	0.38	147.25	140.89	297.04	27.81	122.53	0.00	205.39	2.64	46.29
	S.E.	0.00	N	0.38	0.34	87.00	41.95	11.15	34.22	0.00	72.99	2.64	16.10
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	5	15
27JUN83	DENSITY	157.52	N	0.00	18.27	1.11	282.94	0.00	55.02	0.80	205.14	4.57	47.33
	S.E.	0.00	N	0.00	0.00	1.11	130.33	0.00	25.15	0.80	74.72	4.57	16.55
	NO. TOWS	1	N	8	9	3	4	6	13	4	6	6	16
04JUL83	DENSITY	692.67	N	4.35	84.20	0.00	325.93	0.00	62.90	0.00	95.78	0.00	21.08
	S.E.	0.00	N	4.35	3.84	0.00	63.02	0.00	12.16	0.00	19.49	0.00	4.29
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-134 (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
02MAY83	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	0.00	0.00
	NO. TOWS	4	7	25	36	N	4	30	34	5	12	6	23
09MAY83	DENSITY	0.92	0.00	0.00	0.06	N	0.00	0.10	0.09	0.00	0.00	0.00	0.00
	S.E.	0.92	0.00	0.00	0.06	N	0.00	0.10	0.09	0.00	0.00	0.00	0.00
	NO. TOWS	4	8	24	36	N	4	30	34	5	13	5	23
16MAY83	DENSITY	1.71	59.62	1.33	10.70	N	29.38	0.29	4.30	0.00	3.00	0.00	0.79
	S.E.	1.71	46.66	1.21	7.54	N	15.88	0.16	2.20	0.00	2.34	0.00	0.62
	NO. TOWS	4	7	25	36	N	7	30	37	5	10	5	20
23MAY83	DENSITY	0.00	90.44	0.27	14.71	N	66.50	3.82	12.46	0.00	4.58	0.00	1.21
	S.E.	0.00	30.29	0.27	4.86	N	27.02	1.53	3.95	0.00	2.29	0.00	0.60
	NO. TOWS	3	6	13	22	N	7	23	30	5	9	6	20
30MAY83	DENSITY	0.00	82.06	2.66	15.23	N	127.15	0.42	17.90	0.00	0.31	0.00	0.08
	S.E.	0.00	41.14	2.24	6.82	N	68.60	0.32	9.46	0.00	0.31	0.00	0.08
	NO. TOWS	3	6	15	24	N	6	23	29	5	9	6	20
06JUN83	DENSITY	0.00	143.98	0.00	23.09	N	52.96	0.26	7.52	0.00	10.08	0.00	2.65
	S.E.	0.00	92.25	0.00	14.79	N	25.62	0.18	3.54	0.00	6.13	0.00	1.61
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	5	19
13JUN83	DENSITY	0.00	58.89	0.71	9.99	N	61.60	0.98	9.34	0.00	3.02	0.21	0.93
	S.E.	0.00	34.19	0.41	5.49	N	15.77	0.52	2.22	0.00	1.21	0.21	0.35
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28
20JUN83	DENSITY	0.00	87.32	3.14	16.45	N	39.61	1.86	7.07	0.00	2.53	0.00	0.67
	S.E.	0.00	31.45	1.19	5.13	N	12.54	0.99	1.93	0.00	0.73	0.00	0.19
	NO. TOWS	5	5	17	27	N	8	25	33	3	12	13	28
27JUN83	DENSITY	1.38	120.47	1.41	20.50	N	9.11	6.84	7.16	0.00	5.77	0.20	1.66
	S.E.	0.85	57.42	1.15	9.25	N	5.33	2.20	2.03	0.00	2.12	0.20	0.57
	NO. TOWS	5	6	16	27	N	8	25	33	3	12	13	28
04JUL83	DENSITY	1.24	42.70	0.68	7.45	N	200.56	15.48	41.00	0.00	1.60	0.00	0.42
	S.E.	0.76	19.05	0.39	3.07	N	45.64	3.57	7.01	0.00	0.98	0.00	0.26
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28

N -- STRATUM NOT SAMPLED

TABLE B-134 (CONTINUED).

ATLANTIC TOMCOD 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	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	0.89	0.00	0.21	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.45	0.00	0.11	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	6.24	0.00	1.45	N	0.82	0.00	0.17	N	0.00	0.00	0.00
	S.E.	N	4.09	0.00	0.95	N	0.53	0.00	0.11	N	0.00	0.00	0.00
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6	10
30MAY83	DENSITY	N	0.66	0.00	0.15	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.66	0.00	0.15	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	4.92	0.00	1.14	N	2.12	0.00	0.44	N	0.00	0.00	0.00
	S.E.	N	2.14	0.00	0.50	N	0.84	0.00	0.17	N	0.00	0.00	0.00
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6	10
13JUN83	DENSITY	N	5.65	0.00	1.31	N	0.62	0.00	0.13	N	0.00	0.00	0.00
	S.E.	N	4.57	0.00	1.06	N	0.62	0.00	0.13	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	0.00	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	8	14	22	N	5	9	14	N	5	6	11
27JUN83	DENSITY	N	3.11	0.00	0.72	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	2.26	0.00	0.52	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	0.85	0.00	0.20	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.56	0.00	0.13	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-134 (CONTINUED).

WEEK BEGINNING MONDAY		ATLANTIC TOMCOD				YOUNG-OF-THE-YEAR			
		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	3	3	6	N	3	3	6
09MAY83	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	3	3	6	N	3	3	6
16MAY83	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	4	3	7	N	3	3	6
23MAY83	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	5	3	8	N	3	3	6
30MAY83	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	5	3	8	N	3	3	6
06JUN83	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	5	3	8	N	3	3	6
13JUN83	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	4	2	6	N	3	3	6
20JUN83	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	3	2	5	N	3	3	6
27JUN83	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	4	2	6	N	3	3	6
04JUL83	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	4	2	6	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-134 (CONTINUED).

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

ATLANTIC TOMCOD . YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY		YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	N	0.60	0.53	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	0.64	0.00	0.13	0.00	0.42	0.00	0.09
	NO. TOWS	7	N	5	12	32	7	7	46	16	8	3	27
22AUG83	DENSITY	6.04	N	0.00	0.70	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	3.34	0.00	0.75	0.00	0.41	0.00	0.09
	NO. TOWS	7	N	5	12	29	9	8	46	16	8	3	27
05SEP83	DENSITY	5.52	N	0.00	0.64	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	0.93	0.00	0.19	0.00	0.34	0.00	0.08
	NO. TOWS	7	N	5	12	29	8	8	45	16	8	2	26
19SEP83	DENSITY	3.07	N	0.00	0.36	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	0.90	0.00	0.18	0.00	0.33	0.00	0.07
	NO. TOWS	6	N	5	11	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	0.28	0.00	0.06
	S.E.	0.58	N	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.06
	NO. TOWS	6	N	5	11	31	7	8	46	17	8	3	28
17OCT83	DENSITY	0.72	N	0.42	0.45	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	0.32	0.00	0.06	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-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	N	7.18	12.88	12.09	0.55	5.04	0.00	1.36
	S.E.	1.78	1.10	1.02	0.82	N	2.08	6.44	5.56	0.55	3.44	0.00	0.91
	NO. TOWS	6	5	3	14	N	4	3	7	5	6	3	14
22AUG83	DENSITY	0.00	0.00	0.00	0.00	N	11.77	0.00	1.62	0.53	0.00	0.00	0.03
	S.E.	0.00	0.00	0.00	0.00	N	1.42	0.00	0.20	0.53	0.00	0.00	0.03
	NO. TOWS	7	5	2	14	N	5	3	8	5	5	3	13
05SEP83	DENSITY	0.00	4.29	1.61	1.94	N	4.83	0.89	1.43	0.00	0.89	0.00	0.23
	S.E.	0.00	2.58	1.61	1.32	N	3.24	0.89	0.88	0.00	0.89	0.00	0.23
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13
19SEP83	DENSITY	0.00	0.00	0.00	0.00	N	0.99	0.00	0.14	0.00	1.41	0.00	0.37
	S.E.	0.00	0.00	0.00	0.00	N	0.99	0.00	0.14	0.00	0.95	0.00	0.25
	NO. TOWS	6	5	3	14	N	5	3	8	6	5	2	13
03OCT83	DENSITY	0.00	3.63	0.00	0.58	N	2.19	0.00	0.30	3.91	4.82	0.00	1.50
	S.E.	0.00	3.63	0.00	0.58	N	1.46	0.00	0.20	1.66	1.84	0.00	0.49
	NO. TOWS	6	5	3	14	N	4	2	6	5	6	4	15
17OCT83	DENSITY	0.00	0.00	0.00	0.00	N	1.15	0.00	0.16	1.01	10.40	0.00	2.80
	S.E.	0.00	0.00	0.00	0.00	N	1.15	0.00	0.16	1.01	4.73	0.00	1.25
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-135 (CONTINUED).

ATLANTIC TOMCOD YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY		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	0.55	0.00	0.13	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.55	0.00	0.13	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	0.44	0.00	0.10	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.44	0.00	0.10	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	4.42	0.00	1.03	N	0.75	0.00	0.15	N	0.00	0.00	0.00
	S.E.	N	3.23	0.00	0.75	N	0.47	0.00	0.10	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
03OCT83	DENSITY	N	3.01	0.00	0.70	N	0.90	0.00	0.19	N	0.60	0.00	0.20
	S.E.	N	1.79	0.00	0.41	N	0.57	0.00	0.12	N	0.60	0.00	0.20
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
17OCT83	DENSITY	N	10.54	0.00	2.44	N	0.74	0.00	0.15	N	0.00	0.00	0.00
	S.E.	N	4.63	0.00	1.07	N	0.74	0.00	0.15	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-135 (CONTINUED).

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

ATLANTIC TOMCOD YOUNG-OF-THE-YEAR

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

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

ALEWIFE/BLUEBACK HERRING EGGS

WEEK BEGINNING MONDAY		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
	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	3	N	3	6	3	4	3	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
	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	3	N	3	6	3	4	3	10	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
	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	3	N	3	6	3	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	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	3	N	3	6	3	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	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	3	N	3	6	3	3	4	10	5	5	3	13
06JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.76	0.33	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.76	0.33	0.00	0.00	0.00	0.00
	NO. TOWS	3	N	3	6	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-137 (CONTINUED).

ALEWIFE/BLUEBACK HERRING EGGS

WEEK BEGINNING MONDAY		INDIAN POINT				WEST POINT				CORNWALL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.00	0.53	0.14	0.20	N	0.00	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	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	N	0.00	0.10	0.09	0.00	0.24	0.00	0.06
	S.E.	0.00	0.00	0.00	0.00	N	0.00	0.10	0.09	0.00	0.24	0.00	0.06
	NO. TOWS	4	8	24	36	N	4	30	34	5	13	5	23
16MAY83	DENSITY	0.00	0.00	2.86	2.23	N	0.00	0.09	0.07	0.62	7.79	0.54	2.45
	S.E.	0.00	0.00	2.73	2.13	N	0.00	0.09	0.07	0.62	2.19	0.54	0.68
	NO. TOWS	4	7	25	36	N	7	30	37	5	10	5	20
23MAY83	DENSITY	0.00	0.00	0.00	0.00	N	0.00	0.73	0.63	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	0.63	6.44	0.00	1.70
	NO. TOWS	3	6	13	22	N	7	23	30	5	9	6	20
30MAY83	DENSITY	0.00	0.00	0.00	0.00	N	13.95	0.13	2.03	0.00	1.43	3.28	2.60
	S.E.	0.00	0.00	0.00	0.00	N	13.20	0.13	1.82	0.00	0.95	2.63	1.80
	NO. TOWS	3	6	15	24	N	6	23	29	5	9	6	20
06JUN83	DENSITY	0.00	0.00	0.00	0.00	N	0.00	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	0.00	1.41	0.00	0.37
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	5	19
13JUN83	DENSITY	0.00	0.00	0.00	0.00	N	0.00	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	0.00	1.06	0.20	0.31
	NO. TOWS	5	5	16	26	N	8	25	33	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	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	0.00
	NO. TOWS	5	5	17	27	N	8	25	33	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	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	0.00
	NO. TOWS	5	6	16	27	N	8	25	33	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	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	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28

N -- STRATUM NOT SAMPLED

TABLE B-137 (CONTINUED).

ALEWIFE/BLUEBACK HERRING EGGS

WEEK BEGINNING MONDAY		POUGHKEEPSIE				HYDE PARK				KINGSTON			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	25.53	0.00	5.93	N	89.99	2.80	20.87	N	33.83	13.88	20.62
	S.E.	N	25.53	0.00	5.93	N	57.21	2.17	11.98	N	28.35	7.75	10.86
	NO. TOWS	N	9	10	19	N	10	11	21	N	6	7	13
09MAY83	DENSITY	N	206.16	2.26	49.57	N	1075.10	6.33	227.83	N	1902.88	3.57	645.18
	S.E.	N	78.54	1.85	18.28	N	881.19	3.60	182.65	N	1498.30	3.57	506.14
	NO. TOWS	N	10	10	20	N	10	10	20	N	6	7	13
16MAY83	DENSITY	N	834.35	9.70	201.07	N	2112.34	28.51	460.38	N	9116.38	67.13	3124.05
	S.E.	N	430.31	8.83	100.09	N	1438.99	19.91	298.65	N	4235.44	60.07	1431.32
	NO. TOWS	N	10	10	20	N	8	11	19	N	6	7	13
23MAY83	DENSITY	N	725.38	37.01	196.75	N	619.77	65.02	179.99	N	101590	687.16	34773.13
	S.E.	N	285.66	19.44	67.95	N	174.15	42.49	49.37	N	101157	668.36	34174.55
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6	10
30MAY83	DENSITY	N	34.31	0.00	7.96	N	36.76	45.84	43.96	N	60.61	3.52	22.81
	S.E.	N	21.98	0.00	5.10	N	20.18	43.11	34.43	N	48.28	2.50	16.39
	NO. TOWS	N	16	22	38	N	7	12	19	N	5	5	10
06JUN83	DENSITY	N	2.61	0.00	0.61	N	21.23	1.23	5.37	N	2169.97	0.00	733.04
	S.E.	N	1.72	0.00	0.40	N	10.46	0.75	2.25	N	2139.81	0.00	722.85
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6	10
13JUN83	DENSITY	N	1.00	0.18	0.37	N	0.00	0.00	0.00	N	9.86	14.48	12.92
	S.E.	N	1.00	0.18	0.27	N	0.00	0.00	0.00	N	6.44	14.48	9.83
	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	0.00	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	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-137 (CONTINUED).

ALEWIFE/BLUEBACK HERRING EGGS

WEEK BEGINNING MONDAY		SAUGERTIES				CATSKILL			
		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).

ALEWIFE/BLUEBACK HERRING EGGS

WEEK BEGINNING MONDAY		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	1862.69	N	1862.69	0.00	260.93	1.44	64.89
	S.E.	N	368.89	N	368.89	0.00	47.91	0.59	11.75
	NO. TOWS	N	5	N	5	21	66	107	194
09MAY83	DENSITY	N	202.52	N	202.52	0.00	18336.87	35.68	4517.28
	S.E.	N	170.63	N	170.63	0.00	9475.48	25.02	2322.23
	NO. TOWS	N	5	N	5	21	69	104	194
16MAY83	DENSITY	N	403916	N	403916	0.02	53714.99	16.14	13174.62
	S.E.	N	133274	N	133274	0.02	17063.01	4.88	4181.66
	NO. TOWS	N	5	N	5	21	67	106	194
23MAY83	DENSITY	N	5219.26	N	5219.26	0.02	11999.22	87.02	2997.81
	S.E.	N	3752.65	N	3752.65	0.02	8781.74	45.87	2152.37
	NO. TOWS	N	3	N	3	19	68	99	186
30MAY83	DENSITY	N	12012.09	N	12012.09	0.00	1769.73	20.59	447.23
	S.E.	N	4777.39	N	4777.39	0.00	617.92	4.01	151.46
	NO. TOWS	N	3	N	3	19	68	99	186
06JUN83	DENSITY	N	725.57	N	725.57	0.00	1064.48	3.23	262.99
	S.E.	N	350.91	N	350.91	0.00	404.85	1.20	99.22
	NO. TOWS	N	3	N	3	19	68	99	186
13JUN83	DENSITY	N	2547.86	N	2547.86	0.00	471.60	2.81	117.42
	S.E.	N	2058.39	N	2058.39	0.00	287.22	1.59	70.40
	NO. TOWS	N	3	N	3	16	63	108	187
20JUN83	DENSITY	N	355.86	N	355.86	0.00	49.53	0.00	12.14
	S.E.	N	313.51	N	313.51	0.00	40.12	0.00	9.83
	NO. TOWS	N	3	N	3	16	63	108	187
27JUN83	DENSITY	N	0.00	N	0.00	0.00	0.14	0.00	0.03
	S.E.	N	0.00	N	0.00	0.00	0.14	0.00	0.03
	NO. TOWS	N	3	N	3	16	62	109	187
04JUL83	DENSITY	N	0.00	N	0.00	0.00	0.16	0.00	0.04
	S.E.	N	0.00	N	0.00	0.00	0.16	0.00	0.04
	NO. TOWS	N	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,
ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

ALEWIFE/BLUEBACK HERRING — YOLK-SAC LARVAE

WEEK BEGINNING MONDAY		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	1.40	0.00	0.00	0.53	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	1.40	0.00	0.00	0.53	0.00	0.00	0.00	0.00
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	15
09MAY83	DENSITY	1.40	N	1.52	1.51	0.00	0.00	1.08	0.46	18.26	1.10	2.80	8.07
	S.E.	1.40	N	1.52	1.35	0.00	0.00	1.08	0.46	3.92	1.10	1.66	1.61
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	15
16MAY83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	1.21	0.52	2.19	1.31	1.39	1.67
	S.E.	0.00	N	0.00	0.00	0.00	0.00	1.21	0.52	1.38	1.31	1.39	0.82
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	15
23MAY83	DENSITY	0.00	N	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	0.81	0.00	0.00	0.30
	NO. TOWS	3	N	3	6	3	4	4	11	5	4	4	13
30MAY83	DENSITY	0.00	N	0.00	0.00	1.02	0.00	0.00	0.39	1.39	2.21	1.19	1.49
	S.E.	0.00	N	0.00	0.00	1.02	0.00	0.00	0.39	0.85	0.90	1.19	0.62
	NO. TOWS	3	N	3	6	3	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	1.52	0.63
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.36
	NO. TOWS	3	N	3	6	3	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	0.50	0.21
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.21
	NO. TOWS	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-138 (CONTINUED).

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

N -- STRATUM NOT SAMPLED

TABLE B-138 (CONTINUED).

ALEWIFE/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	N	26.78	26.02	26.20	N	50.88	23.26	28.99	N	5.52	13.18	10.59
	S.E.	N	6.54	7.33	5.83	N	11.08	8.84	7.37	N	2.56	8.63	5.78
	NO. TOWS	N	9	10	19	N	10	11	21	N	6	7	13
09MAY83	DENSITY	N	73.62	51.74	56.82	N	90.24	57.81	64.53	N	195.95	62.80	107.78
	S.E.	N	18.01	15.76	12.80	N	30.82	22.56	18.99	N	60.60	23.75	25.81
	NO. TOWS	N	10	10	20	N	10	10	20	N	6	7	13
16MAY83	DENSITY	N	40.30	68.17	61.70	N	226.11	69.72	102.13	N	157.74	243.09	214.26
	S.E.	N	11.52	28.53	22.07	N	63.87	21.11	21.34	N	90.40	163.67	112.60
	NO. TOWS	N	10	10	20	N	8	11	19	N	6	7	13
23MAY83	DENSITY	N	374.44	113.97	174.41	N	613.59	189.30	277.23	N	928.01	651.27	744.75
	S.E.	N	150.95	36.34	44.79	N	284.77	61.09	76.35	N	574.08	230.65	246.86
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6	10
30MAY83	DENSITY	N	114.43	16.17	38.97	N	282.88	91.01	130.78	N	1051.08	79.39	407.64
	S.E.	N	29.89	3.63	7.48	N	145.37	23.72	35.51	N	363.36	37.28	125.20
	NO. TOWS	N	16	22	38	N	7	12	19	N	5	5	10
06JUN83	DENSITY	N	34.89	30.74	31.71	N	124.54	73.24	83.87	N	764.33	22.79	273.29
	S.E.	N	10.97	7.62	6.38	N	68.72	33.70	30.27	N	601.76	10.54	203.40
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6	10
13JUN83	DENSITY	N	2.45	0.21	0.73	N	2.08	13.80	11.37	N	33.77	43.53	40.23
	S.E.	N	1.67	0.21	0.42	N	1.43	4.62	3.68	N	12.95	4.69	5.37
	NO. TOWS	N	7	15	22	N	5	9	14	N	5	5	10
20JUN83	DENSITY	N	0.35	0.42	0.40	N	0.00	0.00	0.00	N	0.00	0.57	0.38
	S.E.	N	0.35	0.42	0.33	N	0.00	0.00	0.00	N	0.00	0.57	0.38
	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	0.30	0.23	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.30	0.23	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-138 (CONTINUED).

ALEWIFE/BLUEBACK HERRING YOLK-SAC LARVAE

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

N -- STRATUM NOT SAMPLED

TABLE B-138 (CONTINUED).

WEEK BEGINNING MONDAY		ALEWIFE/BLUEBACK HERRING ALBANY SHOAL	BOTTOM	CHANNEL	REGION	YOLK-SAC LARVAE COMBINED 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.

ALEWIFE/BLUEBACK HERRING — POST YOLK-SAC LARVAE

WEEK BEGINNING MONDAY		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
	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	3	N	3	6	3	4	3	10	6	3	6	15
09MAY83	DENSITY	7.35	N	1.29	2.00	5.61	0.00	5.66	4.55	126.39	4.56	13.55	52.75
	S.E.	7.35	N	1.29	1.43	1.33	0.00	3.06	1.40	29.87	2.89	5.49	11.15
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	15
16MAY83	DENSITY	3.57	N	0.00	0.41	7.13	1.03	19.75	11.36	106.81	56.36	72.62	81.52
	S.E.	2.00	N	0.00	0.23	3.57	1.03	12.77	5.64	33.77	54.17	14.75	18.21
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	15
23MAY83	DENSITY	0.00	N	1.13	1.00	19.10	4.79	6.05	10.74	22.52	13.88	41.88	28.65
	S.E.	0.00	N	1.13	1.00	4.67	2.96	2.09	2.06	9.07	6.13	37.35	15.91
	NO. TOWS	3	N	3	6	3	4	4	11	5	4	4	13
30MAY83	DENSITY	21.60	N	20.68	20.79	206.01	11.21	73.68	111.67	71.19	46.02	237.44	134.65
	S.E.	11.69	N	18.91	16.77	204.05	6.05	71.70	83.08	25.48	19.84	13.65	11.73
	NO. TOWS	3	N	3	6	3	3	4	10	5	5	3	13
06JUN83	DENSITY	35.49	N	128.47	117.68	21.88	13.18	217.88	104.25	534.16	10.14	124.51	248.84
	S.E.	24.19	N	78.37	69.34	7.11	8.18	87.88	37.82	216.77	3.63	52.95	82.10
	NO. TOWS	3	N	3	6	3	4	4	11	4	4	4	12
13JUN83	DENSITY	0.00	N	0.00	0.00	22.35	0.96	22.00	18.07	789.75	185.82	4796.36	2319.73
	S.E.	0.00	N	0.00	0.00	18.91	0.96	13.42	9.18	475.46	127.34	1825.63	777.81
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	6	16
20JUN83	DENSITY	0.00	N	0.40	0.36	3.92	14.31	19.82	12.74	1504.06	112.81	162.58	641.17
	S.E.	0.00	N	0.40	0.36	3.92	6.66	17.93	7.94	623.38	73.50	54.87	229.20
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	5	15
27JUN83	DENSITY	0.00	N	0.00	0.00	1.05	0.00	0.00	0.40	0.84	44.01	0.00	9.99
	S.E.	0.00	N	0.00	0.00	1.05	0.00	0.00	0.40	0.84	44.01	0.00	9.69
	NO. TOWS	1	N	8	9	3	4	6	13	4	6	6	16
04JUL83	DENSITY	3.48	N	0.00	0.40	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	1	N	8	9	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-139 (CONTINUED).

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

N -- STRATUM NOT SAMPLED

TABLE B-139 (CONTINUED).

ALEWIFE/BLUEBACK HERRING 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	N	1.13	2.44	2.14	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.84	0.91	0.73	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	26.97	18.30	20.32	N	25.43	55.91	49.59	N	12.15	7.76	9.24
	S.E.	N	6.94	5.40	4.45	N	8.46	30.83	24.51	N	5.31	2.04	2.25
	NO. TOWS	N	10	10	20	N	10	10	20	N	6	7	13
16MAY83	DENSITY	N	140.00	774.25	627.07	N	177.67	69.03	91.55	N	77.32	76.07	76.50
	S.E.	N	44.76	296.46	227.90	N	59.42	21.15	20.80	N	28.06	25.37	19.29
	NO. TOWS	N	10	10	20	N	8	11	19	N	6	7	13
23MAY83	DENSITY	N	370.49	437.52	421.97	N	165.35	382.13	337.21	N	96.08	752.92	531.04
	S.E.	N	130.00	112.59	91.57	N	67.05	97.95	78.88	N	39.93	196.80	131.02
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6	10
30MAY83	DENSITY	N	1584.28	6408.90	5289.31	N	9142.01	23088.46	20198.05	N	10909.05	26215.05	21044.54
	S.E.	N	626.83	2313.25	1782.39	N	2285.17	7824.17	6220.66	N	1974.17	5364.28	3614.24
	NO. TOWS	N	16	22	38	N	7	12	19	N	5	5	10
06JUN83	DENSITY	N	1499.54	4048.67	3457.12	N	1625.36	3269.96	2929.12	N	402.22	3060.58	2162.57
	S.E.	N	962.58	1468.31	1149.49	N	579.32	1390.82	1109.09	N	148.29	961.64	638.75
	NO. TOWS	N	16	22	38	N	7	12	19	N	4	6	10
13JUN83	DENSITY	N	757.90	4568.73	3684.39	N	517.41	4952.50	4033.33	N	2468.96	11145.78	8214.67
	S.E.	N	436.38	1135.42	877.80	N	276.72	1548.33	1228.78	N	615.28	5451.36	3615.82
	NO. TOWS	N	7	15	22	N	5	9	14	N	5	5	10
20JUN83	DENSITY	N	615.99	592.34	597.83	N	717.91	1548.90	1376.68	N	3421.45	1671.49	2262.64
	S.E.	N	150.76	84.60	73.79	N	101.99	294.56	234.47	N	1399.42	639.66	634.74
	NO. TOWS	N	8	14	22	N	5	9	14	N	5	6	11
27JUN83	DENSITY	N	282.73	695.69	599.86	N	1241.56	574.29	712.58	N	1047.40	2158.72	1783.30
	S.E.	N	42.90	116.95	90.36	N	458.15	117.58	133.06	N	383.82	649.98	449.52
	NO. TOWS	N	7	15	22	N	5	9	14	N	4	6	10
04JUL83	DENSITY	N	76.13	275.84	229.50	N	424.17	384.96	393.08	N	285.45	1898.73	1353.75
	S.E.	N	32.74	42.56	33.55	N	226.96	161.61	136.48	N	94.40	1289.48	854.48
	NO. TOWS	N	7	15	22	N	5	9	14	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	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	3	3	6	N	3	3	6
09MAY83	DENSITY	N	0.98	3.30	2.47	N	0.98	0.00	0.47
	S.E.	N	0.98	3.30	2.15	N	0.98	0.00	0.47
	NO. TOWS	N	3	3	6	N	3	3	6
16MAY83	DENSITY	N	164.31	50.56	91.29	N	14.27	2.56	8.15
	S.E.	N	54.51	23.36	24.61	N	6.00	1.34	2.95
	NO. TOWS	N	4	3	7	N	3	3	6
23MAY83	DENSITY	N	266.13	234.11	245.58	N	2.22	6.21	4.30
	S.E.	N	129.46	107.29	83.02	N	2.22	3.97	2.33
	NO. TOWS	N	5	3	8	N	3	3	6
30MAY83	DENSITY	N	2183.34	16540.87	11399.21	N	2900.57	1610.30	2226.93
	S.E.	N	595.19	3899.68	2512.20	N	784.14	141.67	381.98
	NO. TOWS	N	5	3	8	N	3	3	6
06JUN83	DENSITY	N	212.09	2932.42	1958.23	N	218.65	1285.76	775.78
	S.E.	N	66.09	188.66	123.39	N	138.65	504.96	271.83
	NO. TOWS	N	5	3	8	N	3	3	6
13JUN83	DENSITY	N	690.24	4931.39	3412.56	N	1393.69	30143.73	16403.82
	S.E.	N	237.38	1950.01	1254.56	N	576.47	12194.21	6372.44
	NO. TOWS	N	4	2	6	N	3	3	6
20JUN83	DENSITY	N	4383.11	4741.31	4613.03	N	5407.71	10006.36	7808.62
	S.E.	N	932.76	1586.62	1071.81	N	935.44	1891.32	1083.93
	NO. TOWS	N	3	2	5	N	3	3	6
27JUN83	DENSITY	N	1542.35	1319.97	1399.61	N	8503.65	2772.81	5511.63
	S.E.	N	658.45	197.76	267.80	N	1712.79	729.99	902.93
	NO. TOWS	N	4	2	6	N	3	3	6
04JUL83	DENSITY	N	306.63	639.89	520.54	N	709.71	14239.48	7773.48
	S.E.	N	82.36	399.91	258.39	N	448.51	9086.12	4748.62
	NO. TOWS	N	4	2	6	N	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	0.00	N	0.00	0.35	0.89	1.48	1.22
	S.E.	N	0.00	N	0.00	0.14	0.19	0.70	0.46
	NO. TOWS	N	5	N	5	21	66	107	194
09MAY83	DENSITY	N	5.09	N	5.09	38.95	15.27	36.11	31.29
	S.E.	N	5.09	N	5.09	7.45	2.23	5.23	3.56
	NO. TOWS	N	5	N	5	21	69	104	194
16MAY83	DENSITY	N	0.67	N	0.67	94.16	79.01	175.06	143.57
	S.E.	N	0.67	N	0.67	32.13	11.62	45.96	30.48
	NO. TOWS	N	5	N	5	21	67	106	194
23MAY83	DENSITY	N	0.00	N	0.00	40.35	104.53	201.25	161.73
	S.E.	N	0.00	N	0.00	11.51	22.64	26.60	18.36
	NO. TOWS	N	3	N	3	19	68	99	186
30MAY83	DENSITY	N	258.41	N	258.41	358.35	2502.91	6507.88	4921.86
	S.E.	N	150.97	N	150.97	123.29	269.14	907.16	599.43
	NO. TOWS	N	3	N	3	19	68	99	186
06JUN83	DENSITY	N	121.75	N	121.75	711.42	546.45	2681.67	1964.71
	S.E.	N	71.38	N	71.38	404.97	138.04	451.31	300.91
	NO. TOWS	N	3	N	3	19	68	99	186
13JUN83	DENSITY	N	401.22	N	401.22	722.85	820.02	4590.29	3286.13
	S.E.	N	198.37	N	198.37	239.94	125.44	820.26	539.99
	NO. TOWS	N	3	N	3	16	63	108	187
20JUN83	DENSITY	N	2604.62	N	2604.62	499.73	2109.11	1489.52	1544.06
	S.E.	N	752.23	N	752.23	155.96	228.79	169.85	125.76
	NO. TOWS	N	3	N	3	16	63	108	187
27JUN83	DENSITY	N	2661.76	N	2661.76	52.11	1925.24	673.78	919.36
	S.E.	N	1101.15	N	1101.15	7.95	288.82	67.28	83.44
	NO. TOWS	N	3	N	3	16	62	109	187
04JUL83	DENSITY	N	427.46	N	427.46	39.45	291.85	1049.83	764.75
	S.E.	N	89.80	N	89.80	30.15	68.53	519.52	341.56
	NO. TOWS	N	3	N	3	16	62	109	187

N -- STRATUM NOT SAMPLED

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

ALEWIFE/BLUEBACK HERRING — YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY		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
	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	3	N	3	6	3	4	3	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
	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	3	N	3	6	3	4	3	10	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
	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	3	N	3	6	3	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	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	3	N	3	6	3	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	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	3	N	3	6	3	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
	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	3	N	3	6	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-140 (CONTINUED).

ALEWIFE/BLUEBACK 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	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	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	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	0.00	0.00
	NO. TOWS	4	8	24	36	N	4	30	34	5	13	5	23
16MAY83	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	0.00	0.00
	NO. TOWS	4	7	25	36	N	7	30	37	5	10	5	20
23MAY83	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	0.00	0.00
	NO. TOWS	3	6	13	22	N	7	23	30	5	9	6	20
30MAY83	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	0.00	0.00
	NO. TOWS	3	6	15	24	N	6	23	29	5	9	6	20
06JUN83	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	0.00	0.00
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	5	19
13JUN83	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	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28
20JUN83	DENSITY	0.00	0.00	0.00	0.00	N	0.00	0.12	0.10	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	N	0.00	0.12	0.10	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	17	27	N	8	25	33	3	12	13	28
27JUN83	DENSITY	0.00	0.00	0.00	0.00	N	0.00	0.11	0.09	0.00	1.05	1.40	1.22
	S.E.	0.00	0.00	0.00	0.00	N	0.00	0.11	0.09	0.00	0.81	0.84	0.61
	NO. TOWS	5	6	16	27	N	8	25	33	3	12	13	28
04JUL83	DENSITY	1.87	0.61	0.82	0.85	N	0.63	1.41	1.30	111.99	147.12	6.82	49.84
	S.E.	1.87	0.61	0.51	0.43	N	0.63	0.58	0.51	57.11	41.51	3.10	11.61
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28

N -- STRATUM NOT SAMPLED

TABLE B-140 (CONTINUED).

ALEWIFE/BLUEBACK 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	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	0.00	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	8	14	22	N	5	9	14	N	5	6	11
27JUN83	DENSITY	N	5.99	0.00	1.39	N	5.66	0.00	1.17	N	0.77	0.00	0.26
	S.E.	N	3.80	0.00	0.88	N	4.90	0.00	1.02	N	0.77	0.00	0.26
	NO. TOWS	N	7	15	22	N	5	9	14	N	4	6	10
04JUL83	DENSITY	N	44.97	34.61	37.01	N	23.51	29.50	28.26	N	0.00	0.00	0.00
	S.E.	N	40.71	16.87	16.04	N	5.96	8.78	7.07	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-140 (CONTINUED).

ALEWIFE/BLUEBACK HERRING YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	3	3	6	N	3	3	6
09MAY83	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	3	3	6	N	3	3	6
16MAY83	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	4	3	7	N	3	3	6
23MAY83	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	5	3	8	N	3	3	6
30MAY83	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	5	3	8	N	3	3	6
06JUN83	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	5	3	8	N	3	3	6
13JUN83	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	4	2	6	N	3	3	6
20JUN83	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	3	2	5	N	3	3	6
27JUN83	DENSITY	N	0.76	0.00	0.27	N	10.32	0.00	4.93
	S.E.	N	0.76	0.00	0.27	N	6.14	0.00	2.93
	NO. TOWS	N	4	2	6	N	3	3	6
04JUL83	DENSITY	N	0.00	0.00	0.00	N	3.10	1.13	2.07
	S.E.	N	0.00	0.00	0.00	N	3.10	1.13	1.59
	NO. TOWS	N	4	2	6	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-140 (CONTINUED).

ALEWIFE/BLUEBACK HERRING YOUNG-OF-THE-YEAR

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

N -- STRATUM NOT SAMPLED

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

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

N -- STRATUM NOT SAMPLED

TABLE B-141 (CONTINUED).

BLUEBACK 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
08AUG83	DENSITY	4.20	30.01	2.05	6.66	N	2.75	1.08	1.31	80.60	102.39	0.00	31.62
	S.E.	1.68	8.77	2.05	2.13	N	2.08	1.08	0.98	66.12	27.07	0.00	8.09
	NO. TOWS	6	5	3	14	N	4	3	7	5	6	3	14
22AUG83	DENSITY	2.65	2.21	0.00	0.51	N	5.45	0.00	0.75	34.82	20.16	0.00	7.33
	S.E.	1.48	1.09	0.00	0.20	N	4.77	0.00	0.66	13.58	12.36	0.00	3.35
	NO. TOWS	7	5	2	14	N	5	3	8	5	5	3	13
05SEP83	DENSITY	0.00	3.83	0.00	0.61	N	3.22	0.00	0.44	30.59	6.34	0.00	3.44
	S.E.	0.00	2.43	0.00	0.39	N	1.33	0.00	0.18	16.01	5.80	0.00	1.79
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13
19SEP83	DENSITY	2.62	1.20	0.00	0.35	N	6.37	0.00	0.88	0.85	23.58	6.31	10.54
	S.E.	1.31	0.74	0.00	0.14	N	4.66	0.00	0.64	0.54	11.03	6.31	5.18
	NO. TOWS	6	5	3	14	N	5	3	8	6	5	2	13
03OCT83	DENSITY	11.75	8.95	0.00	2.15	N	8.99	0.00	1.24	31.70	12.33	0.00	5.08
	S.E.	7.74	4.39	0.00	0.85	N	6.66	0.00	0.92	9.87	3.39	0.00	1.06
	NO. TOWS	6	5	3	14	N	4	2	6	5	6	4	15
17OCT83	DENSITY	23.90	86.62	0.00	15.33	N	170.15	1.53	24.78	261.87	231.12	1.43	76.98
	S.E.	8.80	34.16	0.00	5.50	N	72.95	1.53	10.15	146.55	61.34	0.72	18.25
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-141 (CONTINUED).

BLUEBACK HERRING YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY		POUGHKEEPSIE				HYDE PARK				KINGSTON			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	211.03	31.05	72.81	N	445.68	4.94	96.29	N	867.39	60.92	333.36
	S.E.	N	80.84	27.24	28.10	N	130.43	2.63	27.11	N	77.29	18.06	28.72
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
22AUG83	DENSITY	N	113.88	13.70	36.95	N	127.77	9.72	34.19	N	125.41	29.05	61.60
	S.E.	N	20.49	3.29	5.39	N	24.26	0.67	5.06	N	45.76	6.96	16.13
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
05SEP83	DENSITY	N	39.80	0.00	9.24	N	116.14	32.99	50.23	N	235.86	56.61	117.16
	S.E.	N	19.67	0.00	4.56	N	25.96	14.92	13.00	N	49.11	36.36	29.24
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
19SEP83	DENSITY	N	103.39	5.05	27.87	N	155.25	3.20	34.71	N	388.71	0.99	131.97
	S.E.	N	33.92	3.07	8.22	N	47.33	2.00	9.94	N	93.01	0.67	31.42
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
03OCT83	DENSITY	N	116.74	13.24	37.26	N	300.70	38.36	92.73	N	767.91	0.00	259.41
	S.E.	N	51.43	8.34	13.54	N	65.81	19.00	20.32	N	261.05	0.00	88.19
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
17OCT83	DENSITY	N	159.80	0.65	37.58	N	960.41	1.10	199.92	N	369.78	1.86	126.15
	S.E.	N	71.03	0.65	16.49	N	338.98	0.64	70.25	N	53.50	1.23	18.09
	NO. TOWS	N	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	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	797.17	60.89	324.57	N	854.21	21.91	419.68
	S.E.	N	85.06	20.54	33.19	N	113.54	11.90	54.61
	NO. TOWS	N	12	6	18	N	15	6	21
22AUG83	DENSITY	N	58.57	5.28	24.36	N	452.32	8.01	220.35
	S.E.	N	22.23	5.28	8.65	N	97.57	6.47	46.75
	NO. TOWS	N	12	6	18	N	15	6	21
05SEP83	DENSITY	N	267.81	5.30	99.31	N	176.26	0.00	84.24
	S.E.	N	51.68	2.40	18.57	N	63.92	0.00	30.55
	NO. TOWS	N	12	6	18	N	15	6	21
19SEP83	DENSITY	N	102.63	4.15	39.41	N	125.73	35.72	78.74
	S.E.	N	33.76	1.68	12.14	N	41.05	35.72	27.07
	NO. TOWS	N	12	6	18	N	15	6	21
03OCT83	DENSITY	N	585.45	19.74	222.33	N	250.86	0.38	120.08
	S.E.	N	115.37	12.72	42.11	N	77.48	0.38	37.03
	NO. TOWS	N	12	6	18	N	15	6	21
17OCT83	DENSITY	N	261.82	9.07	99.58	N	172.22	1.56	83.12
	S.E.	N	32.82	6.54	12.48	N	33.69	1.56	16.12
	NO. TOWS	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	REGION	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.

BLUEBACK HERRING YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY		REGIONS YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL	COMBINED
01AUG83	CPUE	0.60	7.00	11.86	26.00	211.20	113.50	133.80	1489.2	597.20	194.56	176.80	331.14	129.18
	S.E.	0.40	3.69	5.44	12.12	101.14	52.91	55.91	862.94	497.10	67.32	98.65	94.86	30.48
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
15AUG83	CPUE	0.00	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.	0.00	0.00	1.42	3.43	101.23	38.76	1227.3	669.99	44.92	103.49	181.79	43.08	56.77
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
29AUG83	CPUE	0.20	0.08	3.93	0.00	87.20	89.33	374.80	1812.8	552.00	414.22	48.40	170.00	126.29
	S.E.	0.20	0.08	3.93	0.00	49.04	38.44	228.41	960.03	370.64	185.03	21.21	73.64	30.06
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
12SEP83	CPUE	0.20	0.58	0.07	0.00	1183.2	34.33	392.40	21.00	518.80	148.00	72.60	32.71	89.70
	S.E.	0.20	0.35	0.07	0.00	1166.2	10.23	355.72	8.23	460.20	58.46	38.90	14.90	33.87
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
26SEP83	CPUE	0.00	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.	0.00	0.00	0.00	0.00	48.90	33.66	56.44	692.60	52.06	88.34	10.75	43.03	11.81
	NO. HAULS	5	24	14	5	5	7	5	5	5	9	10	7	101
10OCT83	CPUE	0.00	0.04	0.00	0.43	276.00	36.33	152.00	155.75	396.67	14.33	10.00	8.57	37.45
	S.E.	0.00	0.04	0.00	0.43	269.53	21.49	146.55	113.92	145.42	12.23	6.42	3.75	10.66
	NO. HAULS	5	24	14	7	5	6	5	4	6	9	10	7	102

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

BLUEBACK HERRING — YEARLING

WEEK BEGINNING MONDAY		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
	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	3	N	3	6	3	4	3	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	0.53	0.22
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.22
	NO. TOWS	3	N	3	6	3	4	3	10	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
	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	3	N	3	6	3	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	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	3	N	3	6	3	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	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	3	N	3	6	3	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
	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	3	N	3	6	3	4	4	11	4	4	4	12
13JUN83	DENSITY	0.00	N	0.38	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	6	16
20JUN83	DENSITY	0.00	N	0.36	0.32	1.06	0.00	0.00	0.40	0.00	0.63	0.00	0.14
	S.E.	0.00	N	0.36	0.32	1.06	0.00	0.00	0.40	0.00	0.63	0.00	0.14
	NO. TOWS	1	N	8	9	3	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	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	1	N	8	9	3	4	6	13	4	6	6	16
04JUL83	DENSITY	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.00	0.00	0.30
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.00	0.00	0.30
	NO. TOWS	1	N	8	9	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-143 (CONTINUED).

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

N -- STRATUM NOT SAMPLED

TABLE B-143 (CONTINUED).

BLUEBACK HERRING YEARLING

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	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	0.32	0.25	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.00	0.32	0.25	N	0.00	0.00	0.00
	NO. TOWS	N	7	15	22	N	5	9	14	N	5	5	10
20JUN83	DENSITY	N	0.36	0.00	0.08	N	0.57	0.00	0.12	N	0.00	0.00	0.00
	S.E.	N	0.36	0.00	0.08	N	0.57	0.00	0.12	N	0.00	0.00	0.00
	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-143 (CONTINUED).

WEEK BEGINNING MONDAY		BLUEBACK HERRING				YEARLING			
		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	3	3	6	N	3	3	6
09MAY83	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	3	3	6	N	3	3	6
16MAY83	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	4	3	7	N	3	3	6
23MAY83	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	5	3	8	N	3	3	6
30MAY83	DENSITY	N	0.00	0.00	0.00	N	1.06	0.00	0.51
	S.E.	N	0.00	0.00	0.00	N	1.06	0.00	0.51
	NO. TOWS	N	5	3	8	N	3	3	6
06JUN83	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	5	3	8	N	3	3	6
13JUN83	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	4	2	6	N	3	3	6
20JUN83	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	3	2	5	N	3	3	6
27JUN83	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	4	2	6	N	3	3	6
04JUL83	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	4	2	6	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-143 (CONTINUED).

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

BLUEBACK HERRING — YEARLING

WEEK BEGINNING MONDAY		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).

BLUEBACK HERRING YEARLING

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	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	3	7	5	6	3	14
22AUG83	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	0.00	0.00
	NO. TOWS	7	5	2	14	N	5	3	8	5	5	3	13
05SEP83	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	0.00	0.00
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13
19SEP83	DENSITY	0.92	0.00	0.00	0.06	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.92	0.00	0.00	0.06	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	5	2	13
03OCT83	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	2	6	5	6	4	15
17OCT83	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	0.00	0.00
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-144 (CONTINUED).

BLUEBACK HERRING YEARLING

WEEK BEGINNING MONDAY		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	0.88	0.68	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.00	0.88	0.68	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-144 (CONTINUED).

WEEK BEGINNING MONDAY		BLUEBACK HERRING				YEARLING			
		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	0.23	0.00	0.08	N	0.00	0.00	0.00
	S.E.	N	0.23	0.00	0.08	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	0.43	0.00	0.21
	S.E.	N	0.00	0.00	0.00	N	0.30	0.00	0.14
	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-144 (CONTINUED).

WEEK BEGINNING MONDAY		BLUEBACK HERRING				YEARLING			
		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	0.30	N	0.30	0.00	0.06	0.00	0.02
	S.E.	N	0.30	N	0.30	0.00	0.05	0.00	0.01
	NO. TOWS	N	8	N	8	66	85	49	200
22AUG83	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	87	49	200
05SEP83	DENSITY	N	1.21	N	1.21	0.00	0.21	0.00	0.05
	S.E.	N	0.90	N	0.90	0.00	0.12	0.00	0.03
	NO. TOWS	N	8	N	8	63	87	49	199
19SEP83	DENSITY	N	0.00	N	0.00	0.05	0.00	0.14	0.09
	S.E.	N	0.00	N	0.00	0.05	0.00	0.14	0.09
	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	0.17	0.55	0.00	0.15
	S.E.	N	0.00	N	0.00	0.17	0.55	0.00	0.14
	NO. TOWS	N	8	N	8	64	86	50	200

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.

BLUEBACK HERRING YEARLING

WEEK BEGINNING MONDAY		REGIONS												
		YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL	COMBINED
01AUG83	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	0.01
	S.E.	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	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.	0.00	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	6	5	5	5	9	10	7	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
	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
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	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.	0.00	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	6	5	5	5	9	10	7	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.	0.00	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	7	5	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	0.00
	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
	NO. HAULS	5	24	14	7	5	6	5	4	6	9	10	7	102

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

BLUEBACK HERRING OLDER

WEEK BEGINNING MONDAY		YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	1.32	N	0.00	0.15	0.00	0.76	0.00	0.15	0.00	0.00	0.00	0.00
	S.E.	1.32	N	0.00	0.15	0.00	0.76	0.00	0.15	0.00	0.00	0.00	0.00
	NO. TOWS	3	N	3	6	3	4	3	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
	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	3	N	3	6	3	4	3	10	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
	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	3	N	3	6	3	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	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	3	N	3	6	3	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	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	3	N	3	6	3	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
	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	3	N	3	6	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	0.50	0.00	0.11
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.11
	NO. TOWS	1	N	8	9	3	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	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	1	N	8	9	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-146 (CONTINUED).

BLUEBACK HERRING OLDER

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	N	0.00	0.24	0.21	0.00	0.00	0.00	0.00
	S.E.	0.10	0.00	0.22	0.17	N	0.00	0.17	0.14	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	0.43	0.27	0.28	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.43	0.18	0.16	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	23
16MAY83	DENSITY	0.00	0.00	0.13	0.10	N	0.55	0.00	0.08	0.00	0.98	0.00	0.26
	S.E.	0.00	0.00	0.13	0.10	N	0.55	0.00	0.08	0.00	0.98	0.00	0.26
	NO. TOWS	4	7	25	36	N	7	30	37	5	10	5	20
23MAY83	DENSITY	0.00	0.00	1.14	0.89	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.89	0.69	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	20
30MAY83	DENSITY	0.00	0.00	0.22	0.17	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.22	0.17	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	20
06JUN83	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	0.00	0.00
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	5	19
13JUN83	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	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28
20JUN83	DENSITY	0.75	0.00	0.00	0.05	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.75	0.00	0.00	0.05	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	28
27JUN83	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	0.00	0.00
	NO. TOWS	5	6	16	27	N	8	25	33	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	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	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28

N -- STRATUM NOT SAMPLED

TABLE B-146 (CONTINUED).

BLUEBACK HERRING OLDER

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	0.00	N	0.35	0.00	0.07	N	1.56	0.00	0.53
	S.E.	N	0.00	0.00	0.00	N	0.35	0.00	0.07	N	1.56	0.00	0.53
	NO. TOWS	N	9	10	19	N	10	11	21	N	6	7	13
09MAY83	DENSITY	N	0.00	0.00	0.00	N	0.30	0.00	0.06	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.30	0.00	0.06	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	1.71	0.00	0.58
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	1.24	0.00	0.42
	NO. TOWS	N	10	10	20	N	8	11	19	N	6	7	13
23MAY83	DENSITY	N	0.38	0.00	0.09	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.26	0.00	0.06	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	0.00	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	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	0.53	0.00	0.12	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.53	0.00	0.12	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-146 (CONTINUED).

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

N -- STRATUM NOT SAMPLED

TABLE B-146 (CONTINUED).

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

BLUEBACK HERRING OLDER

WEEK BEGINNING MONDAY		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	0.00	N	0.00	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	0.00	0.09	0.00	0.00	0.03	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-147 (CONTINUED).

BLUEBACK HERRING OLDER

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	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	3	7	5	6	3	14
22AUG83	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	0.00	0.00
	NO. TOWS	7	5	2	14	N	5	3	8	5	5	3	13
05SEP83	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	0.00	0.00
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13
19SEP83	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	5	3	8	6	5	2	13
03OCT83	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	2	6	5	6	4	15
17OCT83	DENSITY	0.00	0.45	0.00	0.07	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.45	0.00	0.07	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	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-147 (CONTINUED).

BLUEBACK HERRING OLDER

WEEK BEGINNING MONDAY		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-147 (CONTINUED).

BLUEBACK HERRING OLDER

WEEK BEGINNING MONDAY		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	0.00	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	0.17	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
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-147 (CONTINUED).

BLUEBACK HERRING OLDER

WEEK BEGINNING MONDAY		ALBANY				COMBINED			
		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	66	85	49	200
22AUG83	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	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	0.05	0.03	0.00	0.01
	S.E.	N	0.00	N	0.00	0.05	0.03	0.00	0.01
	NO. TOWS	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				CROTON-HAVERSTRAW			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	N	0.00	0.00	0.24	0.00	0.00	0.09	2.48	0.29	0.00	0.97
	S.E.	0.00	N	0.00	0.00	0.13	0.00	0.00	0.05	1.39	0.29	0.00	0.51
	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	0.15	1.26	0.00	0.33
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.65	0.00	0.15
	NO. TOWS	7	N	5	12	29	9	8	46	16	8	3	27
05SEP83	DENSITY	53.91	N	0.00	6.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	53.91	N	0.00	6.25	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	0.87	N	0.00	0.10	0.09	0.00	0.00	0.03	0.19	1.93	0.00	0.49
	S.E.	0.55	N	0.00	0.06	0.09	0.00	0.00	0.03	0.19	1.59	0.00	0.36
	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	1.00	0.00	0.22
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68	0.00	0.15
	NO. TOWS	6	N	5	11	31	7	8	46	17	8	3	28
17OCT83	DENSITY	0.41	N	0.00	0.05	0.37	0.25	0.00	0.19	0.00	2.88	0.00	0.63
	S.E.	0.41	N	0.00	0.05	0.18	0.25	0.00	0.08	0.00	2.05	0.00	0.45
	NO. TOWS	7	N	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			
		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	0.24
	S.E.	0.45	0.00	1.02	0.80	N	0.00	0.00	0.00	2.04	0.00	0.00	0.12
	NO. TOWS	6	5	3	14	N	4	3	7	5	6	3	14
22AUG83	DENSITY	0.42	0.54	0.00	0.11	N	0.00	0.00	0.00	7.30	2.33	0.00	1.04
	S.E.	0.42	0.54	0.00	0.09	N	0.00	0.00	0.00	4.38	2.33	0.00	0.66
	NO. TOWS	7	5	2	14	N	5	3	8	5	5	3	13
05SEP83	DENSITY	0.00	0.00	0.00	0.00	N	0.53	0.00	0.07	0.47	0.45	0.00	0.15
	S.E.	0.00	0.00	0.00	0.00	N	0.53	0.00	0.07	0.47	0.45	0.00	0.12
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13
19SEP83	DENSITY	0.59	0.00	0.00	0.04	N	0.92	0.00	0.13	0.89	0.47	0.00	0.17
	S.E.	0.59	0.00	0.00	0.04	N	0.92	0.00	0.13	0.56	0.47	0.00	0.13
	NO. TOWS	6	5	3	14	N	5	3	8	6	5	2	13
03OCT83	DENSITY	5.30	0.00	0.00	0.32	N	0.51	0.00	0.07	4.37	0.00	0.00	0.25
	S.E.	4.78	0.00	0.00	0.29	N	0.51	0.00	0.07	3.20	0.00	0.00	0.19
	NO. TOWS	6	5	3	14	N	4	2	6	5	6	4	15
17OCT83	DENSITY	0.41	0.42	0.00	0.09	N	2.29	0.00	0.32	32.22	0.55	0.00	2.01
	S.E.	0.41	0.42	0.00	0.07	N	2.29	0.00	0.32	31.59	0.55	0.00	1.84
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-148 (CONTINUED).

ALEWIFE — YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY		POUGHKEEPSIE SHOAL	POUGHKEEPSIE BOTTOM	POUGHKEEPSIE CHANNEL	POUGHKEEPSIE REGION	HYDE PARK SHOAL	HYDE PARK BOTTOM	HYDE PARK CHANNEL	HYDE PARK REGION	KINGSTON SHOAL	KINGSTON BOTTOM	KINGSTON CHANNEL	KINGSTON REGION
08AUG83	DENSITY	N	6.51	2.08	3.11	N	11.60	0.00	2.40	N	18.59	0.75	6.78
	S.E.	N	3.49	2.08	1.79	N	4.36	0.00	0.90	N	3.88	0.48	1.35
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
22AUG83	DENSITY	N	4.47	0.00	1.04	N	3.55	0.00	0.73	N	9.29	0.36	3.37
	S.E.	N	3.22	0.00	0.75	N	1.62	0.00	0.34	N	4.64	0.36	1.58
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
05SEP83	DENSITY	N	2.04	0.00	0.47	N	1.70	0.66	0.88	N	11.83	3.22	6.13
	S.E.	N	1.55	0.00	0.36	N	0.80	0.66	0.55	N	4.15	3.22	2.55
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
19SEP83	DENSITY	N	1.33	0.00	0.31	N	2.25	0.50	0.86	N	1.99	0.00	0.67
	S.E.	N	0.86	0.00	0.20	N	1.19	0.50	0.47	N	0.81	0.00	0.27
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
03OCT83	DENSITY	N	2.70	0.00	0.63	N	1.35	1.90	1.79	N	28.81	0.00	9.73
	S.E.	N	1.19	0.00	0.28	N	0.60	1.90	1.51	N	13.27	0.00	4.48
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
17OCT83	DENSITY	N	0.47	0.00	0.11	N	6.02	0.00	1.25	N	7.84	0.00	2.65
	S.E.	N	0.47	0.00	0.11	N	2.71	0.00	0.56	N	1.44	0.00	0.49
	NO. TOWS	N	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	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	12.10	2.29	5.80	N	8.56	0.00	4.09
	S.E.	N	3.02	1.71	1.54	N	2.22	0.00	1.06
	NO. TOWS	N	12	6	18	N	15	6	21
22AUG83	DENSITY	N	4.62	1.06	2.33	N	15.35	1.67	8.21
	S.E.	N	1.81	1.06	0.94	N	5.25	1.67	2.66
	NO. TOWS	N	12	6	18	N	15	6	21
05SEP83	DENSITY	N	3.81	0.00	1.37	N	2.05	0.00	0.98
	S.E.	N	2.61	0.00	0.93	N	0.82	0.00	0.39
	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	16.70	0.72	6.44	N	1.13	0.00	0.54
	S.E.	N	3.79	0.72	1.43	N	0.81	0.00	0.39
	NO. TOWS	N	12	6	18	N	15	6	21
17OCT83	DENSITY	N	3.29	0.41	1.44	N	1.15	0.00	0.55
	S.E.	N	0.71	0.41	0.36	N	0.47	0.00	0.23
	NO. TOWS	N	13	6	19	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	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	20.56	N	20.56	0.91	8.33	0.65	2.56
	S.E.	N	7.68	N	7.68	0.35	1.25	0.36	0.39
	NO. TOWS	N	8	N	8	66	85	49	200
22AUG83	DENSITY	N	7.18	N	7.18	0.32	5.40	0.20	1.48
	S.E.	N	3.65	N	3.65	0.16	1.07	0.13	0.28
	NO. TOWS	N	8	N	8	64	87	49	200
05SEP83	DENSITY	N	4.49	N	4.49	6.45	2.72	0.26	1.47
	S.E.	N	1.88	N	1.88	6.43	0.57	0.21	0.66
	NO. TOWS	N	8	N	8	63	87	49	199
19SEP83	DENSITY	N	0.00	N	0.00	0.26	0.67	0.04	0.22
	S.E.	N	0.00	N	0.00	0.10	0.18	0.04	0.05
	NO. TOWS	N	8	N	8	64	86	49	199
03OCT83	DENSITY	N	0.00	N	0.00	0.46	5.04	0.22	1.42
	S.E.	N	0.00	N	0.00	0.29	1.24	0.18	0.33
	NO. TOWS	N	8	N	8	65	85	50	200
17OCT83	DENSITY	N	0.00	N	0.00	1.44	2.01	0.03	0.66
	S.E.	N	0.00	N	0.00	1.15	0.30	0.03	0.14
	NO. TOWS	N	8	N	8	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.

ALEWIFE YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY		REGIONS YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL	COMBINED
01AUG83	CPUE	0.00	0.21	0.00	4.80	23.40	1.17	0.40	2.80	1.20	5.56	2.50	0.00	1.71
	S.E.	0.00	0.17	0.00	3.50	22.15	1.17	0.24	1.46	0.80	2.61	1.53	0.00	0.52
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
15AUG83	CPUE	0.00	0.00	0.00	0.00	8.40	1.17	0.80	17.40	0.80	1.33	0.50	0.14	0.61
	S.E.	0.00	0.00	0.00	0.00	3.41	1.17	0.80	14.27	0.80	0.69	0.40	0.14	0.17
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
29AUG83	CPUE	0.20	0.00	1.64	2.60	1.20	0.67	0.60	3.60	0.00	16.00	0.20	0.00	2.20
	S.E.	0.20	0.00	1.64	2.60	1.20	0.67	0.60	1.33	0.00	11.23	0.20	0.00	1.20
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
12SEP83	CPUE	0.00	0.08	0.00	0.00	1.40	1.83	3.40	7.20	9.80	4.89	1.40	1.14	1.61
	S.E.	0.00	0.06	0.00	0.00	1.40	1.83	2.93	6.95	4.79	2.01	1.19	1.14	0.40
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
26SEP83	CPUE	0.00	0.00	0.00	0.00	4.60	0.14	2.80	7.40	1.60	5.89	0.80	0.29	1.05
	S.E.	0.00	0.00	0.00	0.00	2.27	0.14	2.80	4.39	0.81	4.79	0.59	0.29	0.52
	NO. HAULS	5	24	14	5	5	7	5	5	5	9	10	7	101
10OCT83	CPUE	0.00	0.00	0.00	0.57	0.60	0.00	0.80	1.75	1.00	2.11	0.40	0.00	0.40
	S.E.	0.00	0.00	0.00	0.57	0.40	0.00	0.80	1.18	0.63	2.11	0.27	0.00	0.23
	NO. HAULS	5	24	14	7	5	6	5	4	6	9	10	7	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
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
	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	3	N	3	6	3	4	3	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
	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	3	N	3	6	3	4	3	10	6	3	6	15
16MAY83	DENSITY	0.00	N	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	1.32	0.00	0.00	0.48
	NO. TOWS	3	N	3	6	3	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	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	3	N	3	6	3	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	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	3	N	3	6	3	3	4	10	5	5	3	13
06JUN83	DENSITY	0.91	N	0.00	0.11	0.98	0.00	0.00	0.37	0.87	0.00	0.00	0.32
	S.E.	0.91	N	0.00	0.11	0.98	0.00	0.00	0.37	0.87	0.00	0.00	0.32
	NO. TOWS	3	N	3	6	3	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	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	1	N	8	9	3	5	6	14	4	6	6	16
20JUN83	DENSITY	0.00	N	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	0.53	0.23	0.00	0.00	0.00	0.00
	NO. TOWS	1	N	8	9	3	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	0.62	0.00	0.14
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62	0.00	0.14
	NO. TOWS	1	N	8	9	3	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	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	1	N	8	9	3	5	6	14	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
02MAY83	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	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	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	0.00	0.00
	NO. TOWS	4	8	24	36	N	4	30	34	5	13	5	23
16MAY83	DENSITY	1.77	0.00	0.42	0.43	N	0.00	0.22	0.19	0.00	0.00	0.00	0.00
	S.E.	1.77	0.00	0.31	0.26	N	0.00	0.15	0.13	0.00	0.00	0.00	0.00
	NO. TOWS	4	7	25	36	N	7	30	37	5	10	5	20
23MAY83	DENSITY	0.00	0.00	0.50	0.39	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.50	0.39	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	20
30MAY83	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	0.00	0.00
	NO. TOWS	3	6	15	24	N	6	23	29	5	9	6	20
06JUN83	DENSITY	0.00	0.00	0.00	0.00	N	0.63	0.00	0.09	0.72	0.00	0.00	0.04
	S.E.	0.00	0.00	0.00	0.00	N	0.63	0.00	0.09	0.72	0.00	0.00	0.04
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	5	19
13JUN83	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	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28
20JUN83	DENSITY	0.00	0.00	0.00	0.00	N	0.42	0.00	0.06	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	N	0.42	0.00	0.06	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	17	27	N	8	25	33	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	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	0.00
	NO. TOWS	5	6	16	27	N	8	25	33	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	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	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28

N -- STRATUM NOT SAMPLED

TABLE B-150 (CONTINUED).

ALEWIFE YEARLING

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	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	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	3	3	6	N	3	3	6
09MAY83	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	3	3	6	N	3	3	6
16MAY83	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	4	3	7	N	3	3	6
23MAY83	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	5	3	8	N	3	3	6
30MAY83	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	5	3	8	N	3	3	6
06JUN83	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	5	3	8	N	3	3	6
13JUN83	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	4	2	6	N	3	3	6
20JUN83	DENSITY	N	0.00	0.00	0.00	N	2.11	0.00	1.01
	S.E.	N	0.00	0.00	0.00	N	2.11	0.00	1.01
	NO. TOWS	N	3	2	5	N	3	3	6
27JUN83	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	4	2	6	N	3	3	6
04JUL83	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	4	2	6	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-150 (CONTINUED).

WEEK BEGINNING MONDAY		ALEWIFE				YEARLING			
		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	5	N	5	21	66	107	194
09MAY83	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	5	N	5	21	69	104	194
16MAY83	DENSITY	N	0.00	N	0.00	0.42	0.00	0.07	0.09
	S.E.	N	0.00	N	0.00	0.34	0.00	0.04	0.04
	NO. TOWS	N	5	N	5	21	67	106	194
23MAY83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.05	0.04
	S.E.	N	0.00	N	0.00	0.00	0.00	0.05	0.04
	NO. TOWS	N	3	N	3	19	68	99	186
30MAY83	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	19	68	99	186
06JUN83	DENSITY	N	0.00	N	0.00	0.88	0.03	0.00	0.09
	S.E.	N	0.00	N	0.00	0.58	0.03	0.00	0.06
	NO. TOWS	N	3	N	3	19	68	99	186
13JUN83	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	63	108	187
20JUN83	DENSITY	N	0.00	N	0.00	0.00	0.37	0.05	0.12
	S.E.	N	0.00	N	0.00	0.00	0.30	0.05	0.08
	NO. TOWS	N	3	N	3	16	63	108	187
27JUN83	DENSITY	N	0.00	N	0.00	0.00	0.04	0.00	0.01
	S.E.	N	0.00	N	0.00	0.00	0.04	0.00	0.01
	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-151
DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
FALL SHOALS 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
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	0.36	N	0.00	0.04	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
	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	0.69	N	0.00	0.08	0.00	0.49	0.00	0.10	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
	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	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.41	0.00	0.11
	S.E.	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.41	0.00	0.11
	NO. TOWS	6	5	3	14	N	4	3	7	5	6	3	14
22AUG83	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	0.00	0.00
	NO. TOWS	7	5	2	14	N	5	3	8	5	5	3	13
05SEP83	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	0.00	0.00
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13
19SEP83	DENSITY	0.00	0.00	0.00	0.00	N	0.53	0.00	0.07	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	N	0.53	0.00	0.07	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	N	5	3	8	6	5	2	13
03OCT83	DENSITY	0.38	0.00	0.00	0.02	N	0.00	0.00	0.00	0.00	0.86	0.00	0.23
	S.E.	0.38	0.00	0.00	0.02	N	0.00	0.00	0.00	0.00	0.54	0.00	0.14
	NO. TOWS	6	5	3	14	N	4	2	6	5	6	4	15
17OCT83	DENSITY	0.00	0.43	0.00	0.07	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.43	0.00	0.07	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	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-151 (CONTINUED).

WEEK BEGINNING MONDAY		ALEWIFE YEARLING											
		POUGHKEEPSIE				HYDE PARK				KINGSTON			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	0.55	0.00	0.13	N	0.89	0.00	0.19	N	1.05	0.00	0.36
	S.E.	N	0.55	0.00	0.13	N	0.58	0.00	0.12	N	0.58	0.00	0.20
	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-151 (CONTINUED).

WEEK BEGINNING MONDAY		ALEWIFE				YEARLING			
		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	0.19	0.00	0.07	N	0.50	0.35	0.43
	S.E.	N	0.19	0.00	0.07	N	0.27	0.35	0.23
	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	1.13	0.00	0.41	N	0.26	0.00	0.12
	S.E.	N	0.94	0.00	0.34	N	0.26	0.00	0.12
	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-151 (CONTINUED).

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

ALEWIFE YEARLING

WEEK BEGINNING MONDAY		REGIONS YK	TZ	CH	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
	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
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	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.	0.00	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	6	5	5	5	9	10	7	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
	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
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
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	0.01
	S.E.	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	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.	0.00	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	7	5	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	0.00
	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
	NO. HAULS	5	24	14	7	5	6	5	4	6	9	10	7	102

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

ALEWIFE

WEEK BEGINNING MONDAY		YONKERS SHOAL	YONKERS BOTTOM	YONKERS CHANNEL	YONKERS REGION	TAPPAN ZEE SHOAL	TAPPAN ZEE BOTTOM	TAPPAN ZEE CHANNEL	TAPPAN ZEE REGION	CROTON-HAVERSTRAW SHOAL	CROTON-HAVERSTRAW BOTTOM	CROTON-HAVERSTRAW CHANNEL	CROTON-HAVERSTRAW 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
	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	3	N	3	6	3	4	3	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
	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	3	N	3	6	3	4	3	10	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
	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	3	N	3	6	3	4	3	10	6	3	6	15
23MAY83	DENSITY	0.00	N	0.00	0.00	0.00	1.52	0.00	0.29	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	1.52	0.00	0.29	0.00	0.00	0.00	0.00
	NO. TOWS	3	N	3	6	3	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	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	3	N	3	6	3	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
	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	3	N	3	6	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	5	6	14	4	6	6	16

OLDER

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	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	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	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	0.00	0.00
	NO. TOWS	4	8	24	36	N	4	30	34	5	13	5	23
16MAY83	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	0.00	0.00
	NO. TOWS	4	7	25	36	N	7	30	37	5	10	5	20
23MAY83	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	0.00	0.00
	NO. TOWS	3	6	13	22	N	7	23	30	5	9	6	20
30MAY83	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	0.00	0.00
	NO. TOWS	3	6	15	24	N	6	23	29	5	9	6	20
06JUN83	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	0.00	0.00
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	5	19
13JUN83	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	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	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	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	0.00
	NO. TOWS	5	5	17	27	N	8	25	33	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	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	0.00
	NO. TOWS	5	6	16	27	N	8	25	33	3	12	13	28
04JUL83	DENSITY	0.00	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	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	28

N -- STRATUM NOT SAMPLED

TABLE B-153 (CONTINUED).

ALEWIFE OLDER

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	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	0.00	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	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-153 (CONTINUED).

WEEK BEGINNING MONDAY		ALEWIFE				OLDER			
		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	3	3	6	N	3	3	6
09MAY83	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	3	3	6	N	3	3	6
16MAY83	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	4	3	7	N	3	3	6
23MAY83	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	5	3	8	N	3	3	6
30MAY83	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	5	3	8	N	3	3	6
06JUN83	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	5	3	8	N	3	3	6
13JUN83	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	4	2	6	N	3	3	6
20JUN83	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	3	2	5	N	3	3	6
27JUN83	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	4	2	6	N	3	3	6
04JUL83	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	4	2	6	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-153 (CONTINUED).

WEEK BEGINNING MONDAY		ALEWIFE				OLDER			
		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	5	N	5	21	66	107	194
09MAY83	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	5	N	5	21	69	104	194
16MAY83	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	5	N	5	21	67	106	194
23MAY83	DENSITY	N	0.00	N	0.00	0.00	0.17	0.00	0.04
	S.E.	N	0.00	N	0.00	0.00	0.17	0.00	0.04
	NO. TOWS	N	3	N	3	19	68	99	186
30MAY83	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	19	68	99	186
06JUN83	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	19	68	99	186
13JUN83	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	63	108	187
20JUN83	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	63	108	187
27JUN83	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
04JUL83	DENSITY	N	0.00	N	0.00	0.00	0.02	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.02	0.00	0.00
	NO. TOWS	N	3	N	3	16	62	109	187

N -- STRATUM NOT SAMPLED

TABLE B-154
DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

WEEK BEGINNING MONDAY		ALEWIFE				OLDER							
		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	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	30	8	8	46	16	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-154 (CONTINUED).

WEEK BEGINNING MONDAY		ALEWIFE				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	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	3	7	5	6	3	14
22AUG83	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	0.00	0.00
	NO. TOWS	7	5	2	14	N	5	3	8	5	5	3	13
05SEP83	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	0.00	0.00
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13
19SEP83	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	5	3	8	6	5	2	13
03OCT83	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	2	6	5	6	4	15
17OCT83	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	0.00	0.00
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-154 (CONTINUED).

ALEWIFE OLDER

WEEK BEGINNING MONDAY		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-154 (CONTINUED).

WEEK BEGINNING MONDAY		ALEWIFE				OLDER			
		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	0.27	0.00	0.10	N	0.00	0.00	0.00
	S.E.	N	0.27	0.00	0.10	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-154 (CONTINUED).

WEEK BEGINNING MONDAY		ALEWIFE				OLDER			
		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	0.00	N	0.00	0.00	0.03	0.00	0.01
	S.E.	N	0.00	N	0.00	0.00	0.03	0.00	0.01
	NO. TOWS	N	8	N	8	66	85	49	200
22AUG83	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	87	49	200
05SEP83	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	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-155
CATCH PER UNIT EFFORT (NUMBER PER HAUL) BY WEEK AND REGION,
BEACH SEINE SURVEY, HUDSON RIVER ESTUARY, 1983.

ALEWIFE OLDER

WEEK BEGINNING MONDAY		REGIONS YK	TZ	CH	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
	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
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	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.	0.00	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	6	5	5	5	9	10	7	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
	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
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	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.	0.00	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	6	5	5	5	9	10	7	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.	0.00	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	7	5	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	0.00
	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
	NO. HAULS	5	24	14	7	5	6	5	4	6	9	10	7	102

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

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

N -- STRATUM NOT SAMPLED

TABLE B-156 (CONTINUED).

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

N -- STRATUM NOT SAMPLED

TABLE B-156 (CONTINUED).

BAY ANCHOVY YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY		POUGHKEEPSIE				HYDE PARK				KINGSTON			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	11.38	0.69	3.17	N	4.57	1.49	2.13	N	29.76	86.03	67.02
	S.E.	N	10.82	0.69	2.57	N	0.85	0.94	0.76	N	8.61	53.84	35.77
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
22AUG83	DENSITY	N	67.10	0.00	15.57	N	0.00	0.00	0.00	N	0.91	0.00	0.31
	S.E.	N	28.90	0.00	6.71	N	0.00	0.00	0.00	N	0.91	0.00	0.31
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
05SEP83	DENSITY	N	299.41	86.14	135.63	N	0.00	0.00	0.00	N	22.41	26.20	24.92
	S.E.	N	81.56	47.20	40.89	N	0.00	0.00	0.00	N	7.71	26.20	17.54
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
19SEP83	DENSITY	N	324.54	197.62	227.08	N	30.02	22.24	23.85	N	4.25	9.80	7.92
	S.E.	N	155.56	112.63	93.73	N	8.61	15.64	12.53	N	1.07	6.16	4.10
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
03OCT83	DENSITY	N	279.02	100.28	141.76	N	21.43	17.97	18.69	N	276.69	22.64	108.46
	S.E.	N	151.64	44.90	49.27	N	4.71	2.80	2.42	N	267.94	6.35	90.61
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
17OCT83	DENSITY	N	149.42	16.79	47.57	N	21.43	6.61	9.68	N	5.78	2.48	3.59
	S.E.	N	66.63	16.79	20.14	N	21.43	3.83	5.38	N	1.51	2.06	1.46
	NO. TOWS	N	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	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	25.27	13.62	17.79	N	11.57	4.83	8.05
	S.E.	N	6.26	4.94	3.89	N	2.80	2.55	1.89
	NO. TOWS	N	12	6	18	N	15	6	21
22AUG83	DENSITY	N	0.64	0.00	0.23	N	0.00	20.86	10.89
	S.E.	N	0.45	0.00	0.16	N	0.00	20.86	10.89
	NO. TOWS	N	12	6	18	N	15	6	21
05SEP83	DENSITY	N	0.19	0.00	0.07	N	1.71	0.00	0.82
	S.E.	N	0.19	0.00	0.07	N	0.90	0.00	0.43
	NO. TOWS	N	12	6	18	N	15	6	21
19SEP83	DENSITY	N	5.37	10.62	8.74	N	9.06	0.00	4.33
	S.E.	N	3.23	6.71	4.46	N	3.64	0.00	1.74
	NO. TOWS	N	12	6	18	N	15	6	21
03OCT83	DENSITY	N	0.00	8.46	5.43	N	3.24	1.50	2.33
	S.E.	N	0.00	5.46	3.50	N	0.99	0.76	0.62
	NO. TOWS	N	12	6	18	N	15	6	21
17OCT83	DENSITY	N	2.14	0.00	0.77	N	2.11	0.00	1.01
	S.E.	N	0.97	0.00	0.35	N	1.10	0.00	0.53
	NO. TOWS	N	13	6	19	N	14	6	20

N -- STRATUM NOT SAMPLED

TABLE B-156 (CONTINUED).

WEEK BEGINNING MONDAY		BAY ANCHOVY				YOUNG-OF-THE-YEAR			
		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	0.57	N	0.57	390.60	59.79	97.13	116.83
	S.E.	N	0.37	N	0.37	66.18	8.49	33.55	23.06
	NO. TOWS	N	8	N	8	66	85	49	200
22AUG83	DENSITY	N	0.00	N	0.00	402.36	281.34	60.77	148.40
	S.E.	N	0.00	N	0.00	39.55	43.63	13.88	14.58
	NO. TOWS	N	8	N	8	64	87	49	200
05SEP83	DENSITY	N	0.00	N	0.00	897.65	342.81	271.77	350.71
	S.E.	N	0.00	N	0.00	82.67	43.89	71.77	49.01
	NO. TOWS	N	8	N	8	63	87	49	199
19SEP83	DENSITY	N	0.61	N	0.61	718.91	184.68	59.51	155.00
	S.E.	N	0.61	N	0.61	149.81	36.59	18.34	21.03
	NO. TOWS	N	8	N	8	64	86	49	199
03OCT83	DENSITY	N	0.00	N	0.00	517.79	179.60	93.58	156.36
	S.E.	N	0.00	N	0.00	59.38	41.78	14.08	14.98
	NO. TOWS	N	8	N	8	65	85	50	200
17OCT83	DENSITY	N	0.00	N	0.00	292.46	117.72	27.99	75.98
	S.E.	N	0.00	N	0.00	70.67	23.42	7.76	10.35
	NO. TOWS	N	8	N	8	64	86	50	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.

BAY ANCHOVY YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY		REGIONS YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL	COMBINED
01AUG83	CPUE	12.40	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.74
	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	0.31
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
15AUG83	CPUE	0.00	0.17	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06
	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	0.05
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
29AUG83	CPUE	0.20	34.50	0.00	0.00	2.20	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	8.45
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
12SEP83	CPUE	0.00	2.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78
	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	0.46
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
26SEP83	CPUE	0.00	0.29	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10
	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	0.05
	NO. HAULS	5	24	14	5	5	7	5	5	5	9	10	7	101
10OCT83	CPUE	5.80	0.92	8.79	0.00	0.00	0.50	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	1.41
	NO. HAULS	5	24	14	7	5	6	5	4	6	9	10	7	102

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

BAY ANCHOVY

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

YEARLING

N -- STRATUM NOT SAMPLED

TABLE B-158 (CONTINUED).

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

N -- STRATUM NOT SAMPLED

TABLE B-158 (CONTINUED).

BAY ANCHOVY YEARLING

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	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	0.00	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	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-158 (CONTINUED).

WEEK BEGINNING MONDAY		BAY ANCHOVY YEARLING							
		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	3	3	6	N	3	3	6
09MAY83	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	3	3	6	N	3	3	6
16MAY83	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	4	3	7	N	3	3	6
23MAY83	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	5	3	8	N	3	3	6
30MAY83	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	5	3	8	N	3	3	6
06JUN83	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	5	3	8	N	3	3	6
13JUN83	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	4	2	6	N	3	3	6
20JUN83	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	3	2	5	N	3	3	6
27JUN83	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	4	2	6	N	3	3	6
04JUL83	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	4	2	6	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-158 (CONTINUED).

WEEK BEGINNING MONDAY		BAY ANCHOVY				YEARLING			
		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	5	N	5	21	66	107	194
09MAY83	DENSITY	N	0.00	N	0.00	0.34	0.13	0.22	0.21
	S.E.	N	0.00	N	0.00	0.17	0.13	0.21	0.14
	NO. TOWS	N	5	N	5	21	69	104	194
16MAY83	DENSITY	N	0.00	N	0.00	3.38	0.11	8.49	5.93
	S.E.	N	0.00	N	0.00	1.61	0.11	4.29	2.82
	NO. TOWS	N	5	N	5	21	67	106	194
23MAY83	DENSITY	N	0.00	N	0.00	13.06	0.10	10.23	8.03
	S.E.	N	0.00	N	0.00	6.62	0.10	4.80	3.22
	NO. TOWS	N	3	N	3	19	68	99	186
30MAY83	DENSITY	N	0.00	N	0.00	16.66	0.35	20.35	15.08
	S.E.	N	0.00	N	0.00	5.44	0.35	13.97	9.19
	NO. TOWS	N	3	N	3	19	68	99	186
06JUN83	DENSITY	N	0.00	N	0.00	12.78	2.12	8.28	7.21
	S.E.	N	0.00	N	0.00	8.31	1.84	7.80	5.21
	NO. TOWS	N	3	N	3	19	68	99	186
13JUN83	DENSITY	N	0.00	N	0.00	147.30	0.53	17.80	26.30
	S.E.	N	0.00	N	0.00	9.14	0.30	8.98	5.96
	NO. TOWS	N	3	N	3	16	63	108	187
20JUN83	DENSITY	N	0.00	N	0.00	49.64	4.85	44.34	35.18
	S.E.	N	0.00	N	0.00	17.88	0.70	8.23	5.68
	NO. TOWS	N	3	N	3	16	63	108	187
27JUN83	DENSITY	N	0.00	N	0.00	127.88	6.01	22.42	28.77
	S.E.	N	0.00	N	0.00	21.62	2.09	13.77	9.30
	NO. TOWS	N	3	N	3	16	62	109	187
04JUL83	DENSITY	N	0.00	N	0.00	375.77	36.32	10.03	52.43
	S.E.	N	0.00	N	0.00	232.94	9.30	2.77	23.08
	NO. TOWS	N	3	N	3	16	62	109	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			
		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).

BAY ANCHOVY YEARLING

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

N -- STRATUM NOT SAMPLED

TABLE B-159 . (CONTINUED).

BAY ANCHOVY YEARLING

WEEK BEGINNING MONDAY ·		POUGHKEEPSIE				HYDE PARK				KINGSTON			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	19.43	5.50	8.73	N	0.84	0.00	0.17	N	0.48	0.58	0.55
	S.E.	N	17.00	4.58	5.29	N	0.56	0.00	0.12	N	0.48	0.58	0.42
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
22AUG83	DENSITY	N	33.60	0.00	7.80	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	21.10	0.00	4.90	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	20.20	12.51	14.29	N	0.00	0.00	0.00	N	1.56	0.46	0.83
	S.E.	N	6.16	12.51	9.71	N	0.00	0.00	0.00	N	0.90	0.46	0.43
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
19SEP83	DENSITY	N	13.91	0.88	3.91	N	1.14	0.00	0.24	N	0.00	0.00	0.00
	S.E.	N	6.11	0.88	1.57	N	0.79	0.00	0.16	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
03OCT83	DENSITY	N	23.94	0.73	6.12	N	0.38	0.56	0.53	N	0.00	0.00	0.00
	S.E.	N	10.79	0.73	2.57	N	0.38	0.56	0.45	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
17OCT83	DENSITY	N	10.97	0.00	2.54	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	5.63	0.00	1.31	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-159 (CONTINUED).

WEEK BEGINNING MONDAY		BAY ANCHOVY YEARLING							
		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	0.00	0.42	0.22
	S.E.	N	0.00	0.00	0.00	N	0.00	0.42	0.22
	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	0.17	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
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-159 (CONTINUED).

WEEK BEGINNING MONDAY		BAY ANCHOVY				YEARLING			
		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	0.00	N	0.00	133.18	36.38	40.65	48.70
	S.E.	N	0.00	N	0.00	17.00	7.93	6.69	5.09
	NO. TOWS	N	8	N	8	66	85	49	200
22AUG83	DENSITY	N	0.00	N	0.00	27.31	6.24	0.28	4.40
	S.E.	N	0.00	N	0.00	6.01	2.65	0.22	0.89
	NO. TOWS	N	8	N	8	64	87	49	200
05SEP83	DENSITY	N	0.00	N	0.00	49.35	7.58	8.48	12.27
	S.E.	N	0.00	N	0.00	6.80	0.96	2.42	1.74
	NO. TOWS	N	8	N	8	63	87	49	199
19SEP83	DENSITY	N	0.00	N	0.00	5.15	3.47	0.38	1.60
	S.E.	N	0.00	N	0.00	1.22	0.85	0.28	0.30
	NO. TOWS	N	8	N	8	64	86	49	199
03OCT83	DENSITY	N	0.00	N	0.00	7.84	5.09	1.21	2.81
	S.E.	N	0.00	N	0.00	0.93	1.36	0.37	0.42
	NO. TOWS	N	8	N	8	65	85	50	200
17OCT83	DENSITY	N	0.00	N	0.00	3.51	2.62	0.37	1.23
	S.E.	N	0.00	N	0.00	0.74	0.75	0.21	0.24
	NO. TOWS	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.

BAY ANCHOVY YEARLING

WEEK BEGINNING MONDAY		REGIONS YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL	COMBINED
01AUG83	CPUE	11.20	4.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.73
	S.E.	9.74	1.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.98
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
15AUG83	CPUE	0.00	0.21	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	0.12	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	5	5	9	10	7	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
	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
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
12SEP83	CPUE	0.20	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10
	S.E.	0.20	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
26SEP83	CPUE	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
	S.E.	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63
	NO. HAULS	5	24	14	5	5	7	5	5	5	9	10	7	101
10OCT83	CPUE	2.00	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.	2.00	0.00	0.00	0.00	0.00	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	4	6	9	10	7	102

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

BAY ANCHOVY — OLDER

WEEK BEGINNING MONDAY		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
	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	3	N	3	6	3	4	3	10	6	3	6	15
09MAY83	DENSITY	15.85	N	0.00	1.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	15.85	N	0.00	1.84	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
16MAY83	DENSITY	2.51	N	40.79	36.35	0.00	0.00	10.86	4.66	0.00	0.00	0.00	0.00
	S.E.	2.51	N	19.18	16.96	0.00	0.00	10.86	4.66	0.00	0.00	0.00	0.00
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	15
23MAY83	DENSITY	5.95	N	0.00	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	5.95	N	0.00	0.69	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	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
	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	3	N	3	6	3	3	4	10	5	5	3	13
06JUN83	DENSITY	0.00	N	0.00	0.00	0.00	0.83	0.00	0.16	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.00	0.83	0.00	0.16	0.00	0.00	0.00	0.00
	NO. TOWS	3	N	3	6	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-161 (CONTINUED).

BAY ANCHOVY 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	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	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	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	0.00	0.00
	NO. TOWS	4	8	24	36	N	4	30	34	5	13	5	23
16MAY83	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	0.00	0.00
	NO. TOWS	4	7	25	36	N	7	30	37	5	10	5	20
23MAY83	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	0.00	0.00
	NO. TOWS	3	6	13	22	N	7	23	30	5	9	6	20
30MAY83	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	0.00	0.00
	NO. TOWS	3	6	15	24	N	6	23	29	5	9	6	20
06JUN83	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	0.00	0.00
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	5	19
13JUN83	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	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	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	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	0.00
	NO. TOWS	5	5	17	27	N	8	25	33	3	12	13	28
27JUN83	DENSITY	0.00	0.00	0.20	0.16	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.20	0.16	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	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	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28

N -- STRATUM NOT SAMPLED

TABLE B-161 (CONTINUED).

BAY ANCHOVY OLDER

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	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	0.00	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	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-161 (CONTINUED).

BAY ANCHOVY OLDER

WEEK BEGINNING MONDAY		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	3	3	6	N	3	3	6
09MAY83	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	3	3	6	N	3	3	6
16MAY83	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	4	3	7	N	3	3	6
23MAY83	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	5	3	8	N	3	3	6
30MAY83	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	5	3	8	N	3	3	6
06JUN83	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	5	3	8	N	3	3	6
13JUN83	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	4	2	6	N	3	3	6
20JUN83	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	3	2	5	N	3	3	6
27JUN83	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	4	2	6	N	3	3	6
04JUL83	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	4	2	6	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-161 (CONTINUED).

BAY ANCHOVY OLDER

WEEK BEGINNING MONDAY		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	5	N	5	21	66	107	194
09MAY83	DENSITY	N	0.00	N	0.00	1.89	0.00	0.00	0.19
	S.E.	N	0.00	N	0.00	1.89	0.00	0.00	0.19
	NO. TOWS	N	5	N	5	21	69	104	194
16MAY83	DENSITY	N	0.00	N	0.00	0.30	0.00	6.56	4.34
	S.E.	N	0.00	N	0.00	0.30	0.00	2.80	1.84
	NO. TOWS	N	5	N	5	21	67	106	194
23MAY83	DENSITY	N	0.00	N	0.00	0.71	0.00	0.00	0.07
	S.E.	N	0.00	N	0.00	0.71	0.00	0.00	0.07
	NO. TOWS	N	3	N	3	19	68	99	186
30MAY83	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	19	68	99	186
06JUN83	DENSITY	N	0.00	N	0.00	0.00	0.09	0.00	0.02
	S.E.	N	0.00	N	0.00	0.00	0.09	0.00	0.02
	NO. TOWS	N	3	N	3	19	68	99	186
13JUN83	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	63	108	187
20JUN83	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	63	108	187
27JUN83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.02	0.01
	S.E.	N	0.00	N	0.00	0.00	0.00	0.02	0.01
	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-162
DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

BAY ANCHOVY — OLDER

WEEK BEGINNING MONDAY		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	0.62	0.00	0.00	0.24	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.62	0.00	0.00	0.24	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	0.48	0.43	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	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	0.09	0.00	0.00	0.03	0.00	0.00	0.00	0.00
	S.E.	0.00	N	0.00	0.00	0.09	0.00	0.00	0.03	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	0.00	N	0.46	0.41	0.33	0.00	0.00	0.12	0.36	0.00	0.00	0.13
	S.E.	0.00	N	0.46	0.41	0.33	0.00	0.00	0.12	0.36	0.00	0.00	0.13
	NO. TOWS	7	N	5	12	30	8	8	46	16	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-162 (CONTINUED).

BAY ANCHOVY OLDER

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	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	3	7	5	6	3	14
22AUG83	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	0.00	0.00
	NO. TOWS	7	5	2	14	N	5	3	8	5	5	3	13
05SEP83	DENSITY	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	2.72	0.00	0.72
	S.E.	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	2.72	0.00	0.72
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13
19SEP83	DENSITY	0.00	0.00	0.00	0.00	N	0.00	0.86	0.74	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	N	0.00	0.86	0.74	0.00	0.00	0.00	0.00
	NO. TOWS	6	5	3	14	N	5	3	8	6	5	2	13
03OCT83	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	2	6	5	6	4	15
17OCT83	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	0.00	0.00
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-162 (CONTINUED).

BAY ANCHOVY OLDER

WEEK BEGINNING MONDAY		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-162 (CONTINUED).

WEEK BEGINNING MONDAY		BAY ANCHOVY				OLDER			
		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	0.00	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-162 (CONTINUED).

BAY ANCHOVY OLDER

WEEK BEGINNING MONDAY		ALBANY				COMBINED			
		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	66	85	49	200
22AUG83	DENSITY	N	0.00	N	0.00	0.34	0.00	0.00	0.03
	S.E.	N	0.00	N	0.00	0.34	0.00	0.00	0.03
	NO. TOWS	N	8	N	8	64	87	49	200
05SEP83	DENSITY	N	0.00	N	0.00	0.00	0.18	0.07	0.09
	S.E.	N	0.00	N	0.00	0.00	0.18	0.07	0.06
	NO. TOWS	N	8	N	8	63	87	49	199
19SEP83	DENSITY	N	0.00	N	0.00	0.05	0.00	0.10	0.07
	S.E.	N	0.00	N	0.00	0.05	0.00	0.10	0.07
	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	0.27	0.00	0.06	0.07
	S.E.	N	0.00	N	0.00	0.20	0.00	0.06	0.05
	NO. TOWS	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.

BAY ANCHOVY OLDER

WEEK BEGINNING MONDAY		REGIONS YK	TZ	CH	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
	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
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	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.	0.00	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	6	5	5	5	9	10	7	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
	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
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	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.	0.00	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	6	5	5	5	9	10	7	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.	0.00	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	7	5	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	0.00
	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
	NO. HAULS	5	24	14	7	5	6	5	4	6	9	10	7	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-HAVERSTRAW			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	14.80	N	6.98	7.89	11.31	1.00	2.81	5.67	4.73	8.73	0.00	3.65
	S.E.	4.12	N	6.26	5.55	2.97	1.00	2.10	1.45	1.68	4.97	0.00	1.25
	NO. TOWS	7	N	5	12	32	7	7	46	16	8	3	27
22AUG83	DENSITY	3.58	N	0.00	0.42	21.12	4.04	0.00	8.77	1.45	5.76	0.00	1.79
	S.E.	3.58	N	0.00	0.42	4.58	1.52	0.00	1.76	0.65	1.53	0.00	0.41
	NO. TOWS	7	N	5	12	29	9	8	46	16	8	3	27
05SEP83	DENSITY	6.29	N	0.86	1.49	1.92	2.17	1.06	1.60	5.67	1.81	2.42	3.47
	S.E.	2.59	N	0.54	0.56	0.45	0.90	0.75	0.40	2.18	0.99	2.42	1.30
	NO. TOWS	7	N	5	12	29	8	8	45	16	8	2	26
19SEP83	DENSITY	2.98	N	0.00	0.35	0.53	0.33	0.00	0.26	0.38	2.35	0.00	0.66
	S.E.	2.48	N	0.00	0.29	0.32	0.33	0.00	0.14	0.26	1.09	0.00	0.26
	NO. TOWS	6	N	5	11	31	8	8	47	15	8	3	26
03OCT83	DENSITY	8.75	N	0.00	1.01	0.42	5.85	0.33	1.43	0.65	0.94	0.00	0.45
	S.E.	2.42	N	0.00	0.28	0.18	4.15	0.33	0.82	0.30	0.63	0.00	0.18
	NO. TOWS	6	N	5	11	31	7	8	46	17	8	3	28
17OCT83	DENSITY	6.27	N	3.76	4.05	0.82	2.48	0.00	0.79	0.00	0.38	0.00	0.08
	S.E.	3.10	N	3.76	3.34	0.38	1.42	0.00	0.31	0.00	0.38	0.00	0.08
	NO. TOWS	7	N	5	12	30	8	8	46	16	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-164 (CONTINUED).

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

N -- STRATUM NOT SAMPLED

TABLE B-164 (CONTINUED).

WEAKFISH YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY		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	0.98	0.00	0.23	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.98	0.00	0.23	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	1.51	0.00	0.35	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.99	0.00	0.23	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-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	N	0.00	N	0.00	9.41	1.61	3.08	3.34
	S.E.	N	0.00	N	0.00	1.75	0.43	1.57	1.05
	NO. TOWS	N	8	N	8	66	85	49	200
22AUG83	DENSITY	N	0.00	N	0.00	12.87	1.59	0.00	1.65
	S.E.	N	0.00	N	0.00	2.60	0.27	0.00	0.26
	NO. TOWS	N	8	N	8	64	87	49	200
05SEP83	DENSITY	N	0.00	N	0.00	3.56	1.00	0.46	0.90
	S.E.	N	0.00	N	0.00	0.67	0.23	0.18	0.15
	NO. TOWS	N	8	N	8	63	87	49	199
19SEP83	DENSITY	N	0.00	N	0.00	0.86	0.40	0.00	0.18
	S.E.	N	0.00	N	0.00	0.36	0.16	0.00	0.05
	NO. TOWS	N	8	N	8	64	86	49	199
03OCT83	DENSITY	N	0.00	N	0.00	1.54	1.50	0.03	0.54
	S.E.	N	0.00	N	0.00	0.32	0.73	0.03	0.18
	NO. TOWS	N	8	N	8	65	85	50	200
17OCT83	DENSITY	N	0.00	N	0.00	1.27	0.64	0.51	0.62
	S.E.	N	0.00	N	0.00	0.43	0.24	0.51	0.34
	NO. TOWS	N	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.

WEAKFISH YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY		REGIONS YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL	COMBINED
01AUG83	CPUE	0.00	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.	0.00	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	5	24	14	5	5	6	5	5	5	9	10	7	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	0.01
	S.E.	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
29AUG83	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	0.01
	S.E.	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
12SEP83	CPUE	3.20	0.13	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	0.07	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	24	14	5	5	6	5	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	0.00	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	0.00	0.01
	NO. HAULS	5	24	14	5	5	7	5	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	0.00
	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
	NO. HAULS	5	24	14	7	5	6	5	4	6	9	10	7	102

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

WEEK BEGINNING MONDAY		WHITE CATFISH								YOUNG-OF-THE-YEAR			
		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
	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	3	N	3	6	3	4	3	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
	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	3	N	3	6	3	4	3	10	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
	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	3	N	3	6	3	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	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	3	N	3	6	3	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	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	3	N	3	6	3	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
	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	3	N	3	6	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	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		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	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	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	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	0.00	0.00
	NO. TOWS	4	8	24	36	N	4	30	34	5	13	5	23
16MAY83	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	0.00	0.00
	NO. TOWS	4	7	25	36	N	7	30	37	5	10	5	20
23MAY83	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	0.00	0.00
	NO. TOWS	3	6	13	22	N	7	23	30	5	9	6	20
30MAY83	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	0.00	0.00
	NO. TOWS	3	6	15	24	N	6	23	29	5	9	6	20
06JUN83	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	0.00	0.00
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	5	19
13JUN83	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	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	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	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	0.00
	NO. TOWS	5	5	17	27	N	8	25	33	3	12	13	28
27JUN83	DENSITY	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.26	0.00	0.07
	S.E.	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.26	0.00	0.07
	NO. TOWS	5	6	16	27	N	8	25	33	3	12	13	28
04JUL83	DENSITY	0.00	0.00	0.00	0.00	N	0.00	0.11	0.10	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	N	0.00	0.11	0.10	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	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	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	0.00	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	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-166 (CONTINUED).

WEEK BEGINNING MONDAY		WHITE CATFISH				YOUNG-OF-THE-YEAR			
		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	3	3	6	N	3	3	6
09MAY83	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	3	3	6	N	3	3	6
16MAY83	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	4	3	7	N	3	3	6
23MAY83	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	5	3	8	N	3	3	6
30MAY83	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	5	3	8	N	3	3	6
06JUN83	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	5	3	8	N	3	3	6
13JUN83	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	4	2	6	N	3	3	6
20JUN83	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	3	2	5	N	3	3	6
27JUN83	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	4	2	6	N	3	3	6
04JUL83	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	4	2	6	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-166 (CONTINUED).

WEEK BEGINNING MONDAY		WHITE CATFISH				YOUNG-OF-THE-YEAR			
		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	5	N	5	21	66	107	194
09MAY83	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	5	N	5	21	69	104	194
16MAY83	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	5	N	5	21	67	106	194
23MAY83	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	19	68	99	186
30MAY83	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	19	68	99	186
06JUN83	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	19	68	99	186
13JUN83	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	63	108	187
20JUN83	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	63	108	187
27JUN83	DENSITY	N	0.00	N	0.00	0.00	0.02	0.00	0.00
	S.E.	N	0.00	N	0.00	0.00	0.02	0.00	0.00
	NO. TOWS	N	3	N	3	16	62	109	187
04JUL83	DENSITY	N	0.00	N	0.00	0.00	0.00	0.01	0.01
	S.E.	N	0.00	N	0.00	0.00	0.00	0.01	0.01
	NO. TOWS	N	3	N	3	16	62	109	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								YOUNG-OF-THE-YEAR			
		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	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	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	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	3	7	5	6	3	14
22AUG83	DENSITY	0.00	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	0.00	N	0.00	0.00	0.00	0.48	0.00	0.00	0.03
	NO. TOWS	7	5	2	14	N	5	3	8	5	5	3	13
05SEP83	DENSITY	0.00	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	0.00	N	0.00	0.00	0.00	0.51	0.45	0.00	0.12
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13
19SEP83	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	5	3	8	6	5	2	13
03OCT83	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	2	6	5	6	4	15
17OCT83	DENSITY	0.00	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	0.00	N	0.56	0.00	0.08	0.69	0.55	0.00	0.15
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-167 (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
08AUG83	DENSITY	N	0.55	0.00	0.13	N	0.38	0.00	0.08	N	1.57	0.00	0.53
	S.E.	N	0.55	0.00	0.13	N	0.38	0.00	0.08	N	0.54	0.00	0.18
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
22AUG83	DENSITY	N	1.04	0.00	0.24	N	0.88	0.00	0.18	N	0.54	0.00	0.18
	S.E.	N	0.64	0.00	0.15	N	0.88	0.00	0.18	N	0.54	0.00	0.18
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
05SEP83	DENSITY	N	0.00	0.00	0.00	N	0.29	0.00	0.06	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.29	0.00	0.06	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	0.43	0.00	0.14
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.43	0.00	0.14
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
03OCT83	DENSITY	N	1.02	0.73	0.80	N	0.44	0.00	0.09	N	1.29	0.00	0.44
	S.E.	N	0.63	0.73	0.58	N	0.44	0.00	0.09	N	0.51	0.00	0.17
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
17OCT83	DENSITY	N	0.45	0.00	0.10	N	0.00	0.00	0.00	N	0.25	0.00	0.08
	S.E.	N	0.45	0.00	0.10	N	0.00	0.00	0.00	N	0.25	0.00	0.08
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15

N -- STRATUM NOT SAMPLED

TABLE B-167 (CONTINUED).

WEEK BEGINNING MONDAY		WHITE CATFISH				YOUNG-OF-THE-YEAR			
		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	1.81	0.00	0.65	N	5.29	0.00	2.53
	S.E.	N	0.82	0.00	0.29	N	1.09	0.00	0.52
	NO. TOWS	N	12	6	18	N	15	6	21
22AUG83	DENSITY	N	0.00	0.00	0.00	N	0.55	0.00	0.26
	S.E.	N	0.00	0.00	0.00	N	0.29	0.00	0.14
	NO. TOWS	N	12	6	18	N	15	6	21
05SEP83	DENSITY	N	0.38	0.00	0.14	N	0.00	0.00	0.00
	S.E.	N	0.26	0.00	0.09	N	0.00	0.00	0.00
	NO. TOWS	N	12	6	18	N	15	6	21
19SEP83	DENSITY	N	1.01	0.00	0.36	N	0.46	0.00	0.22
	S.E.	N	0.46	0.00	0.17	N	0.34	0.00	0.16
	NO. TOWS	N	12	6	18	N	15	6	21
03OCT83	DENSITY	N	0.96	0.44	0.62	N	1.88	0.00	0.90
	S.E.	N	0.44	0.44	0.32	N	0.91	0.00	0.44
	NO. TOWS	N	12	6	18	N	15	6	21
17OCT83	DENSITY	N	1.67	0.00	0.60	N	0.16	0.00	0.08
	S.E.	N	0.57	0.00	0.20	N	0.16	0.00	0.08
	NO. TOWS	N	13	6	19	N	14	6	20

N -- STRATUM NOT SAMPLED

TABLE B-167 (CONTINUED).

WEEK BEGINNING MONDAY		WHITE CATFISH				YOUNG-OF-THE-YEAR			
		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	4.79	N	4.79	0.00	1.78	0.00	0.44
	S.E.	N	2.25	N	2.25	0.00	0.35	0.00	0.09
	NO. TOWS	N	8	N	8	66	85	49	200
22AUG83	DENSITY	N	1.15	N	1.15	0.02	0.45	0.00	0.11
	S.E.	N	0.79	N	0.79	0.02	0.15	0.00	0.04
	NO. TOWS	N	8	N	8	64	87	49	200
05SEP83	DENSITY	N	0.00	N	0.00	0.02	0.09	0.00	0.02
	S.E.	N	0.00	N	0.00	0.02	0.05	0.00	0.01
	NO. TOWS	N	8	N	8	63	87	49	199
19SEP83	DENSITY	N	0.93	N	0.93	0.00	0.33	0.00	0.08
	S.E.	N	0.65	N	0.65	0.00	0.12	0.00	0.03
	NO. TOWS	N	8	N	8	64	86	49	199
03OCT83	DENSITY	N	0.35	N	0.35	0.00	0.68	0.15	0.26
	S.E.	N	0.35	N	0.35	0.00	0.17	0.12	0.09
	NO. TOWS	N	8	N	8	65	85	50	200
17OCT83	DENSITY	N	0.89	N	0.89	0.04	0.47	0.00	0.12
	S.E.	N	0.44	N	0.44	0.03	0.12	0.00	0.03
	NO. TOWS	N	8	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		REGIONS YK	TZ	CH	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
	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
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	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.	0.00	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	6	5	5	5	9	10	7	100
29AUG83	CPUE	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
12SEP83	CPUE	0.00	0.13	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
	S.E.	0.00	0.09	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	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.	0.00	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	7	5	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	0.00
	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
	NO. HAULS	5	24	14	7	5	6	5	4	6	9	10	7	102

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				YEARLING							
		YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	0.90	N	0.00	0.10	0.00	0.00	0.00	0.00	0.61	0.00	0.00	0.22
	S.E.	0.90	N	0.00	0.10	0.00	0.00	0.00	0.00	0.61	0.00	0.00	0.22
	NO. TOWS	3	N	3	6	3	4	3	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
	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	3	N	3	6	3	4	3	10	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
	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	3	N	3	6	3	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	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	3	N	3	6	3	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	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	3	N	3	6	3	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
	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	3	N	3	6	3	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	0.47	0.00	0.10
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.10
	NO. TOWS	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-169 (CONTINUED).

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

N -- STRATUM NOT SAMPLED

TABLE B-169 (CONTINUED).

WHITE CATFISH YEARLING

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	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	0.30	0.00	0.07	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	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	0.20	0.00	0.05	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	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	0.39	0.00	0.09	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	0.00	N	0.78	0.00	0.26
	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	0.00	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	8	14	22	N	5	9	14	N	5	6	11
27JUN83	DENSITY	N	0.98	0.00	0.23	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	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-169 (CONTINUED).

WEEK BEGINNING MONDAY		WHITE CATFISH YEARLING							
		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	3	3	6	N	3	3	6
09MAY83	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	3	3	6	N	3	3	6
16MAY83	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	4	3	7	N	3	3	6
23MAY83	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	5	3	8	N	3	3	6
30MAY83	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	5	3	8	N	3	3	6
06JUN83	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	5	3	8	N	3	3	6
13JUN83	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	4	2	6	N	3	3	6
20JUN83	DENSITY	N	0.00	0.00	0.00	N	1.06	0.00	0.50
	S.E.	N	0.00	0.00	0.00	N	1.06	0.00	0.50
	NO. TOWS	N	3	2	5	N	3	3	6
27JUN83	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	4	2	6	N	3	3	6
04JUL83	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	4	2	6	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-169 (CONTINUED).

WEEK BEGINNING MONDAY		WHITE CATFISH				YEARLING			
		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	0.00	N	0.00	0.25	0.00	0.00	0.02
	S.E.	N	0.00	N	0.00	0.18	0.00	0.00	0.02
	NO. TOWS	N	5	N	5	21	66	107	194
09MAY83	DENSITY	N	0.00	N	0.00	0.00	0.04	0.00	0.01
	S.E.	N	0.00	N	0.00	0.00	0.04	0.00	0.01
	NO. TOWS	N	5	N	5	21	69	104	194
16MAY83	DENSITY	N	0.00	N	0.00	0.05	0.15	0.00	0.04
	S.E.	N	0.00	N	0.00	0.05	0.13	0.00	0.03
	NO. TOWS	N	5	N	5	21	67	106	194
23MAY83	DENSITY	N	0.00	N	0.00	0.00	0.11	0.00	0.03
	S.E.	N	0.00	N	0.00	0.00	0.09	0.00	0.02
	NO. TOWS	N	3	N	3	19	68	99	186
30MAY83	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	3	N	3	19	68	99	186
06JUN83	DENSITY	N	0.00	N	0.00	0.00	0.22	0.00	0.05
	S.E.	N	0.00	N	0.00	0.00	0.09	0.00	0.02
	NO. TOWS	N	3	N	3	19	68	99	186
13JUN83	DENSITY	N	0.00	N	0.00	0.00	0.18	0.01	0.05
	S.E.	N	0.00	N	0.00	0.00	0.09	0.01	0.02
	NO. TOWS	N	3	N	3	16	63	108	187
20JUN83	DENSITY	N	0.00	N	0.00	0.04	0.18	0.00	0.05
	S.E.	N	0.00	N	0.00	0.04	0.15	0.00	0.04
	NO. TOWS	N	3	N	3	16	63	108	187
27JUN83	DENSITY	N	0.00	N	0.00	0.04	0.14	0.00	0.04
	S.E.	N	0.00	N	0.00	0.04	0.08	0.00	0.02
	NO. TOWS	N	3	N	3	16	62	109	187
04JUL83	DENSITY	N	0.00	N	0.00	0.11	0.00	0.00	0.01
	S.E.	N	0.00	N	0.00	0.04	0.00	0.00	0.00
	NO. TOWS	N	3	N	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	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	0.15	0.00	0.00	0.05
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.05
	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	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	30	8	8	46	16	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-170 (CONTINUED).

WHITE CATFISH YEARLING

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	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	3	7	5	6	3	14
22AUG83	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	0.00	0.00
	NO. TOWS	7	5	2	14	N	5	3	8	5	5	3	13
05SEP83	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	0.00	0.00
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13
19SEP83	DENSITY	0.00	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	0.00	N	0.00	0.00	0.00	1.88	0.90	0.00	0.26
	NO. TOWS	6	5	3	14	N	5	3	8	6	5	2	13
03OCT83	DENSITY	0.81	0.00	0.00	0.05	N	0.00	0.00	0.00	0.54	0.00	0.00	0.03
	S.E.	0.81	0.00	0.00	0.05	N	0.00	0.00	0.00	0.54	0.00	0.00	0.03
	NO. TOWS	6	5	3	14	N	4	2	6	5	6	4	15
17OCT83	DENSITY	0.00	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	0.00	N	1.15	0.00	0.16	1.55	3.15	0.00	0.83
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-170 (CONTINUED).

WHITE CATFISH YEARLING

WEEK BEGINNING MONDAY		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	0.49	0.00	0.11	N	1.15	0.00	0.24	N	2.02	0.00	0.68
	S.E.	N	0.49	0.00	0.11	N	1.15	0.00	0.24	N	0.82	0.00	0.28
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
03OCT83	DENSITY	N	0.00	0.00	0.00	N	0.44	1.90	1.60	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.44	1.90	1.51	N	0.00	0.00	0.00
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
17OCT83	DENSITY	N	1.40	0.00	0.33	N	0.87	0.00	0.18	N	0.25	0.37	0.33
	S.E.	N	0.57	0.00	0.13	N	0.87	0.00	0.18	N	0.25	0.37	0.26
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15

N -- STRATUM NOT SAMPLED

TABLE B-170 (CONTINUED).

WEEK BEGINNING MONDAY		WHITE CATFISH				YEARLING			
		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	0.00	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	0.80	0.00	0.29	N	0.65	0.00	0.31
	S.E.	N	0.34	0.00	0.12	N	0.29	0.00	0.14
	NO. TOWS	N	12	6	18	N	15	6	21
03OCT83	DENSITY	N	0.00	0.00	0.00	N	0.57	0.00	0.27
	S.E.	N	0.00	0.00	0.00	N	0.42	0.00	0.20
	NO. TOWS	N	12	6	18	N	15	6	21
17OCT83	DENSITY	N	1.18	0.00	0.42	N	0.00	0.00	0.00
	S.E.	N	0.47	0.00	0.17	N	0.00	0.00	0.00
	NO. TOWS	N	13	6	19	N	14	6	20

N -- STRATUM NOT SAMPLED

TABLE B-170 (CONTINUED).

WEEK BEGINNING MONDAY		WHITE CATFISH				YEARLING			
		ALBANY				COMBINED			
		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	66	85	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	0.00	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	63	87	49	199
19SEP83	DENSITY	N	0.31	N	0.31	0.11	0.59	0.00	0.15
	S.E.	N	0.31	N	0.31	0.07	0.15	0.00	0.04
	NO. TOWS	N	8	N	8	64	86	49	199
03OCT83	DENSITY	N	6.52	N	6.52	0.07	0.94	0.17	0.35
	S.E.	N	5.37	N	5.37	0.05	0.69	0.17	0.20
	NO. TOWS	N	8	N	8	65	85	50	200
17OCT83	DENSITY	N	1.54	N	1.54	0.09	0.97	0.02	0.26
	S.E.	N	1.24	N	1.24	0.06	0.29	0.02	0.07
	NO. TOWS	N	8	N	8	64	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		REGIONS												
		YK	TZ	CH	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
	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
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	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.	0.00	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	6	5	5	5	9	10	7	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.	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	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.	0.00	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	6	5	5	5	9	10	7	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.	0.00	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	7	5	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	0.00
	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
	NO. HAULS	5	24	14	7	5	6	5	4	6	9	10	7	102

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

WHITE CATFISH OLDER

WEEK BEGINNING MONDAY		YONKERS				TAPPAN ZEE				CROTON-HAVERSTRAW			
		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	0.00	0.22
	S.E.	1.32	N	0.00	0.15	0.00	0.00	0.00	0.00	0.61	0.00	0.00	0.22
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	15
09MAY83	DENSITY	0.00	N	0.00	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	0.00	1.14	0.00	0.22	0.00	2.17	0.00	0.48
	NO. TOWS	3	N	3	6	3	4	3	10	6	3	6	15
16MAY83	DENSITY	0.00	N	0.00	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	0.00	1.09	0.00	0.21	0.54	0.00	0.00	0.20
	NO. TOWS	3	N	3	6	3	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	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	3	N	3	6	3	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	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	3	N	3	6	3	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	0.74	0.00	0.16
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.74	0.00	0.16
	NO. TOWS	3	N	3	6	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-172 (CONTINUED).

WHITE CATFISH 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	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	0.00	0.00
	NO. TOWS	4	7	25	36	N	4	30	34	5	12	6	23
09MAY83	DENSITY	0.92	0.00	0.00	0.06	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.92	0.00	0.00	0.06	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	23
16MAY83	DENSITY	1.66	1.07	0.00	0.27	N	0.46	0.00	0.06	0.00	0.00	0.00	0.00
	S.E.	1.66	1.07	0.00	0.20	N	0.46	0.00	0.06	0.00	0.00	0.00	0.00
	NO. TOWS	4	7	25	36	N	7	30	37	5	10	5	20
23MAY83	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	0.00	0.00
	NO. TOWS	3	6	13	22	N	7	23	30	5	9	6	20
30MAY83	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	0.00	0.00
	NO. TOWS	3	6	15	24	N	6	23	29	5	9	6	20
06JUN83	DENSITY	0.00	0.58	0.00	0.09	N	0.50	0.00	0.07	0.00	0.43	0.00	0.11
	S.E.	0.00	0.58	0.00	0.09	N	0.50	0.00	0.07	0.00	0.43	0.00	0.11
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	5	19
13JUN83	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	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28
20JUN83	DENSITY	0.75	0.00	0.00	0.05	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.75	0.00	0.00	0.05	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	28
27JUN83	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	0.00	0.00
	NO. TOWS	5	6	16	27	N	8	25	33	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	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	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28

N -- STRATUM NOT SAMPLED

TABLE B-172 (CONTINUED).

WHITE CATFISH OLDER

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	0.00	N	0.35	0.00	0.07	N	0.00	0.00	0.00
	S.E.	N	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	13
09MAY83	DENSITY	N	0.62	0.00	0.14	N	0.93	0.00	0.19	N	0.00	0.00	0.00
	S.E.	N	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	13
16MAY83	DENSITY	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.62	0.00	0.21
	S.E.	N	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	13
23MAY83	DENSITY	N	0.00	0.00	0.00	N	0.81	0.00	0.17	N	0.00	0.00	0.00
	S.E.	N	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	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	0.18	0.00	0.04	N	0.44	0.00	0.09	N	0.00	0.00	0.00
	S.E.	N	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	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	0.00	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	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-172 (CONTINUED).

WEEK BEGINNING MONDAY		WHITE CATFISH				OLDER			
		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	3	3	6	N	3	3	6
09MAY83	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	3	3	6	N	3	3	6
16MAY83	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	4	3	7	N	3	3	6
23MAY83	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	5	3	8	N	3	3	6
30MAY83	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	5	3	8	N	3	3	6
06JUN83	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	5	3	8	N	3	3	6
13JUN83	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	4	2	6	N	3	3	6
20JUN83	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	3	2	5	N	3	3	6
27JUN83	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	4	2	6	N	3	3	6
04JUL83	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	4	2	6	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-172 (CONTINUED).

WEEK BEGINNING MONDAY		WHITE CATFISH OLDER							
		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	DENSITY	N	0.00	N	0.00	0.30	0.02	0.00	0.04
	S.E.	N	0.00	N	0.00	0.22	0.02	0.00	0.02
	NO. TOWS	N	5	N	5	21	66	107	194
09MAY83	DENSITY	N	0.00	N	0.00	0.05	0.48	0.00	0.12
	S.E.	N	0.00	N	0.00	0.05	0.19	0.00	0.05
	NO. TOWS	N	5	N	5	21	69	104	194
16MAY83	DENSITY	N	0.00	N	0.00	0.22	0.26	0.00	0.09
	S.E.	N	0.00	N	0.00	0.16	0.15	0.00	0.04
	NO. TOWS	N	5	N	5	21	67	106	194
23MAY83	DENSITY	N	0.00	N	0.00	0.00	0.05	0.00	0.01
	S.E.	N	0.00	N	0.00	0.00	0.05	0.00	0.01
	NO. TOWS	N	3	N	3	19	68	99	186
30MAY83	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	19	68	99	186
06JUN83	DENSITY	N	0.00	N	0.00	0.00	0.18	0.00	0.04
	S.E.	N	0.00	N	0.00	0.00	0.08	0.00	0.02
	NO. TOWS	N	3	N	3	19	68	99	186
13JUN83	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	63	108	187
20JUN83	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	3	N	3	16	63	108	187
27JUN83	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
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-173
DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

WHITE CATFISH OLDER

WEEK BEGINNING MONDAY		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	0.15	0.00	0.00	0.05
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.05
	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	0.38	0.00	0.08
	S.E.	0.00	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.00	0.08
	NO. TOWS	6	N	5	11	31	7	8	46	17	8	3	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	N	5	12	30	8	8	46	16	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-173 (CONTINUED).

WHITE CATFISH OLDER

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	N	0.00	0.00	0.00	0.52	0.00	0.00	0.03
	S.E.	0.00	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	N	4	3	7	5	6	3	14
22AUG83	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	0.00	0.00
	NO. TOWS	7	5	2	14	N	5	3	8	5	5	3	13
05SEP83	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	0.00	0.00
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13
19SEP83	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	5	3	8	6	5	2	13
03OCT83	DENSITY	0.40	0.00	0.00	0.02	N	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	S.E.	0.40	0.00	0.00	0.02	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	5	6	4	15
17OCT83	DENSITY	0.00	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	0.00	N	0.00	0.00	0.00	1.05	0.00	0.00	0.06
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-173 (CONTINUED).

WHITE CATFISH OLDER

WEEK BEGINNING MONDAY		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	0.26	0.00	0.09
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.26	0.00	0.09
	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	0.81	0.00	0.27
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.58	0.00	0.20
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15
03OCT83	DENSITY	N	0.00	0.00	0.00	N	0.44	0.00	0.09	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.44	0.00	0.09	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-173 (CONTINUED).

WEEK BEGINNING MONDAY		WHITE CATFISH OLDER							
		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	0.00	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	0.16	0.00	0.08
	S.E.	N	0.00	0.00	0.00	N	0.16	0.00	0.08
	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-173 (CONTINUED).

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

WHITE CATFISH OLDER

WEEK BEGINNING MONDAY		REGIONS YK	TZ	CH	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
	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
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	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.	0.00	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	6	5	5	5	9	10	7	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
	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
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	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.	0.00	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	6	5	5	5	9	10	7	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.	0.00	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	7	5	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	0.00
	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
	NO. HAULS	5	24	14	7	5	6	5	4	6	9	10	7	102

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

SPOTTAIL SHINER — YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY		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	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	30	8	8	46	16	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-175 (CONTINUED).

SPOTTAIL SHINER 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	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	3	7	5	6	3	14
22AUG83	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	0.00	0.00
	NO. TOWS	7	5	2	14	N	5	3	8	5	5	3	13
05SEP83	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	0.00	0.00
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13
19SEP83	DENSITY	0.00	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	0.00	N	0.00	0.00	0.00	0.44	0.00	0.00	0.03
	NO. TOWS	6	5	3	14	N	5	3	8	6	5	2	13
03OCT83	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	2	6	5	6	4	15
17OCT83	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	0.00	0.00
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-175 (CONTINUED).

SPOTTAIL SHINER YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY		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	1.08	0.00	0.37
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	1.08	0.00	0.37
	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	0.31	0.00	0.11
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.31	0.00	0.11
	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	0.58	0.00	0.20
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.58	0.00	0.20
	NO. TOWS	N	5	3	8	N	6	4	10	N	9	6	15

N -- STRATUM NOT SAMPLED

TABLE B-175 (CONTINUED).

WEEK BEGINNING MONDAY		SPOTTAIL SHINER				YOUNG-OF-THE-YEAR			
		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	0.19	0.00	0.07	N	0.49	0.00	0.24
	S.E.	N	0.19	0.00	0.07	N	0.26	0.00	0.13
	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-175 (CONTINUED).

WEEK BEGINNING MONDAY		SPOTTAIL SHINER				YOUNG-OF-THE-YEAR			
		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	1.38	N	1.38	0.00	0.36	0.00	0.09
	S.E.	N	0.81	N	0.81	0.00	0.15	0.00	0.04
	NO. TOWS	N	8	N	8	66	85	49	200
22AUG83	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	87	49	200
05SEP83	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	63	87	49	199
19SEP83	DENSITY	N	0.00	N	0.00	0.02	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.02	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	0.03	0.00	0.01
	S.E.	N	0.00	N	0.00	0.00	0.03	0.00	0.01
	NO. TOWS	N	8	N	8	65	85	50	200
17OCT83	DENSITY	N	0.00	N	0.00	0.00	0.05	0.00	0.01
	S.E.	N	0.00	N	0.00	0.00	0.05	0.00	0.01
	NO. TOWS	N	8	N	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		REGIONS YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL	COMBINED
01AUG83	CPUE	0.00	0.00	2.29	8.40	12.00	6.50	3.60	36.00	22.40	19.11	27.20	36.43	10.98
	S.E.	0.00	0.00	1.79	6.23	8.81	2.93	2.42	11.95	9.47	4.51	10.84	18.15	2.09
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
15AUG83	CPUE	0.00	0.08	0.93	1.40	17.80	9.17	7.40	22.00	9.60	1.44	3.80	27.00	4.79
	S.E.	0.00	0.06	0.93	1.40	13.92	3.50	3.96	13.96	4.70	1.09	1.74	7.65	0.80
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
29AUG83	CPUE	0.00	0.75	1.50	0.00	3.40	8.67	18.20	10.00	5.00	11.22	3.30	21.57	5.38
	S.E.	0.00	0.75	1.50	0.00	2.01	2.23	6.64	2.49	3.27	6.06	1.79	12.80	1.30
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
12SEP83	CPUE	0.00	0.04	0.00	0.40	2.40	10.67	7.20	5.60	5.80	7.00	3.20	22.57	4.27
	S.E.	0.00	0.04	0.00	0.40	1.12	3.96	2.48	2.91	2.78	4.06	1.58	15.42	1.35
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	100
26SEP83	CPUE	0.00	0.00	0.64	0.40	17.80	2.71	23.80	148.40	15.80	6.67	7.00	40.43	8.17
	S.E.	0.00	0.00	0.64	0.40	11.67	1.38	8.74	141.70	7.20	3.96	3.97	18.73	2.00
	NO. HAULS	5	24	14	5	5	7	5	5	5	9	10	7	101
10OCT83	CPUE	0.00	0.00	0.71	0.57	4.40	0.50	5.60	6.75	18.67	10.11	10.10	6.14	4.17
	S.E.	0.00	0.00	0.64	0.37	2.62	0.34	4.86	4.50	12.79	4.62	4.24	5.65	1.07
	NO. HAULS	5	24	14	7	5	6	5	4	6	9	10	7	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			
		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
	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	3	N	3	6	3	4	3	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
	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	3	N	3	6	3	4	3	10	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
	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	3	N	3	6	3	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	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	3	N	3	6	3	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	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	3	N	3	6	3	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
	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	3	N	3	6	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-177 (CONTINUED).

SPOTTAIL SHINER 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	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	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	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	0.00	0.00
	NO. TOWS	4	8	24	36	N	4	30	34	5	13	5	23
16MAY83	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	0.00	0.00
	NO. TOWS	4	7	25	36	N	7	30	37	5	10	5	20
23MAY83	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	0.00	0.00
	NO. TOWS	3	6	13	22	N	7	23	30	5	9	6	20
30MAY83	DENSITY	0.00	0.00	0.00	0.00	N	1.33	0.00	0.18	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	N	1.33	0.00	0.18	0.00	0.00	0.00	0.00
	NO. TOWS	3	6	15	24	N	6	23	29	5	9	6	20
06JUN83	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	0.00	0.00
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	5	19
13JUN83	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	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28
20JUN83	DENSITY	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.26	0.00	0.07
	S.E.	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.26	0.00	0.07
	NO. TOWS	5	5	17	27	N	8	25	33	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	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	0.00
	NO. TOWS	5	6	16	27	N	8	25	33	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	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	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28

N -- STRATUM NOT SAMPLED

TABLE B-177 (CONTINUED).

SPOTTAIL SHINER YEARLING

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	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	0.57	0.00	0.19
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.57	0.00	0.19
	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	0.17	0.00	0.04	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.17	0.00	0.04	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	0.49	0.00	0.11	N	0.00	0.00	0.00	N	0.00	0.00	0.00
	S.E.	N	0.49	0.00	0.11	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	0.00	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	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	0.74	0.00	0.25
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.74	0.00	0.25
	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-177 (CONTINUED).

WEEK BEGINNING MONDAY		SPOTTAIL SHINER YEARLING							
		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	3	3	6	N	3	3	6
09MAY83	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	3	3	6	N	3	3	6
16MAY83	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	4	3	7	N	3	3	6
23MAY83	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	5	3	8	N	3	3	6
30MAY83	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	5	3	8	N	3	3	6
06JUN83	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	5	3	8	N	3	3	6
13JUN83	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	4	2	6	N	3	3	6
20JUN83	DENSITY	N	2.87	0.00	1.03	N	0.00	0.00	0.00
	S.E.	N	2.87	0.00	1.03	N	0.00	0.00	0.00
	NO. TOWS	N	3	2	5	N	3	3	6
27JUN83	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	4	2	6	N	3	3	6
04JUL83	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	4	2	6	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-177 (CONTINUED).

WEEK BEGINNING MONDAY		SPOTTAIL SHINER				YEARLING			
		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	5	N	5	21	66	107	194
09MAY83	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	5	N	5	21	69	104	194
16MAY83	DENSITY	N	0.00	N	0.00	0.00	0.05	0.00	0.01
	S.E.	N	0.00	N	0.00	0.00	0.05	0.00	0.01
	NO. TOWS	N	5	N	5	21	67	106	194
23MAY83	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	19	68	99	186
30MAY83	DENSITY	N	0.00	N	0.00	0.00	0.07	0.00	0.02
	S.E.	N	0.00	N	0.00	0.00	0.07	0.00	0.02
	NO. TOWS	N	3	N	3	19	68	99	186
06JUN83	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	3	N	3	19	68	99	186
13JUN83	DENSITY	N	0.00	N	0.00	0.00	0.06	0.00	0.02
	S.E.	N	0.00	N	0.00	0.00	0.06	0.00	0.02
	NO. TOWS	N	3	N	3	16	63	108	187
20JUN83	DENSITY	N	0.00	N	0.00	0.00	0.34	0.00	0.08
	S.E.	N	0.00	N	0.00	0.00	0.33	0.00	0.08
	NO. TOWS	N	3	N	3	16	63	108	187
27JUN83	DENSITY	N	0.00	N	0.00	0.00	0.06	0.00	0.02
	S.E.	N	0.00	N	0.00	0.00	0.06	0.00	0.02
	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-178
DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

SPOTTAIL SHINER YEARLING

WEEK BEGINNING MONDAY		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	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	30	8	8	46	16	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-178 (CONTINUED).

SPOTTAIL SHINER YEARLING

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	N	0.67	0.00	0.09	0.00	0.00	0.00	0.00
	S.E.	0.00	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	N	4	3	7	5	6	3	14
22AUG83	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	0.00	0.00
	NO. TOWS	7	5	2	14	N	5	3	8	5	5	3	13
05SEP83	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	0.00	0.00
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13
19SEP83	DENSITY	0.00	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	0.00	N	0.00	0.00	0.00	0.44	0.00	0.00	0.03
	NO. TOWS	6	5	3	14	N	5	3	8	6	5	2	13
03OCT83	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	2	6	5	6	4	15
17OCT83	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	0.00	0.00
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-178 (CONTINUED).

SPOTTAIL SHINER YEARLING

WEEK BEGINNING MONDAY		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	0.27	0.00	0.09
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.27	0.00	0.09
	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	0.98	0.00	0.33
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	0.98	0.00	0.33
	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	2.01	0.00	0.68
	S.E.	N	0.00	0.00	0.00	N	0.00	0.00	0.00	N	2.01	0.00	0.68
	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	0.43	0.00	0.09	N	0.87	0.00	0.30
	S.E.	N	0.00	0.00	0.00	N	0.43	0.00	0.09	N	0.87	0.00	0.30
	NO. TOWS	N	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	N	1.07	0.00	0.38	N	0.52	0.00	0.25
	S.E.	N	0.39	0.00	0.14	N	0.28	0.00	0.13
	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	0.20	0.00	0.10
	S.E.	N	0.00	0.00	0.00	N	0.20	0.00	0.10
	NO. TOWS	N	12	6	18	N	15	6	21
17OCT83	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	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	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	DENSITY	N	0.83	N	0.83	0.00	0.36	0.00	0.09
	S.E.	N	0.41	N	0.41	0.00	0.09	0.00	0.02
	NO. TOWS	N	8	N	8	66	85	49	200
22AUG83	DENSITY	N	0.00	N	0.00	0.00	0.08	0.00	0.02
	S.E.	N	0.00	N	0.00	0.00	0.08	0.00	0.02
	NO. TOWS	N	8	N	8	64	87	49	200
05SEP83	DENSITY	N	0.00	N	0.00	0.00	0.17	0.00	0.04
	S.E.	N	0.00	N	0.00	0.00	0.17	0.00	0.04
	NO. TOWS	N	8	N	8	63	87	49	199
19SEP83	DENSITY	N	0.00	N	0.00	0.02	0.00	0.00	0.00
	S.E.	N	0.00	N	0.00	0.02	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	0.03	0.00	0.01
	S.E.	N	0.00	N	0.00	0.00	0.03	0.00	0.01
	NO. TOWS	N	8	N	8	65	85	50	200
17OCT83	DENSITY	N	0.59	N	0.59	0.00	0.20	0.00	0.05
	S.E.	N	0.59	N	0.59	0.00	0.11	0.00	0.03
	NO. TOWS	N	8	N	8	64	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.

SPOTTAIL SHINER YEARLING

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

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

SPOTTAIL SHINER OLDER

WEEK BEGINNING MONDAY		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
	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	3	N	3	6	3	4	3	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
	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	3	N	3	6	3	4	3	10	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
	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	3	N	3	6	3	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	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	3	N	3	6	3	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	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	3	N	3	6	3	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
	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	3	N	3	6	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-180 (CONTINUED).

SPOTTAIL SHINER 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	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	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	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	0.00	0.00
	NO. TOWS	4	8	24	36	N	4	30	34	5	13	5	23
16MAY83	DENSITY	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.40	0.00	0.11
	S.E.	0.00	0.00	0.00	0.00	N	0.00	0.00	0.00	0.00	0.40	0.00	0.11
	NO. TOWS	4	7	25	36	N	7	30	37	5	10	5	20
23MAY83	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	0.00	0.00
	NO. TOWS	3	6	13	22	N	7	23	30	5	9	6	20
30MAY83	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	0.00	0.00
	NO. TOWS	3	6	15	24	N	6	23	29	5	9	6	20
06JUN83	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	0.00	0.00
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	5	19
13JUN83	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	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	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	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	0.00
	NO. TOWS	5	5	17	27	N	8	25	33	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	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	0.00
	NO. TOWS	5	6	16	27	N	8	25	33	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	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	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28

N -- STRATUM NOT SAMPLED

TABLE B-180 (CONTINUED).

SPOTTAIL SHINER OLDER

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	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	0.30	0.00	0.07	N	1.23	0.00	0.25	N	0.00	0.47	0.31
	S.E.	N	0.30	0.00	0.07	N	0.50	0.00	0.10	N	0.00	0.47	0.31
	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	0.00	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	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-180 (CONTINUED).

WEEK BEGINNING MONDAY		SPOTTAIL SHINER				OLDER			
		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	3	3	6	N	3	3	6
09MAY83	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	3	3	6	N	3	3	6
16MAY83	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	4	3	7	N	3	3	6
23MAY83	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	5	3	8	N	3	3	6
30MAY83	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	5	3	8	N	3	3	6
06JUN83	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	5	3	8	N	3	3	6
13JUN83	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	4	2	6	N	3	3	6
20JUN83	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	3	2	5	N	3	3	6
27JUN83	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	4	2	6	N	3	3	6
04JUL83	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	4	2	6	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-180 (CONTINUED).

WEEK BEGINNING MONDAY		SPOTTAIL SHINER				OLDER			
		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	5	N	5	21	66	107	194
09MAY83	DENSITY	N	0.00	N	0.00	0.00	0.11	0.03	0.05
	S.E.	N	0.00	N	0.00	0.00	0.05	0.03	0.02
	NO. TOWS	N	5	N	5	21	69	104	194
16MAY83	DENSITY	N	0.00	N	0.00	0.00	0.03	0.00	0.01
	S.E.	N	0.00	N	0.00	0.00	0.03	0.00	0.01
	NO. TOWS	N	5	N	5	21	67	106	194
23MAY83	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	19	68	99	186
30MAY83	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	19	68	99	186
06JUN83	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	19	68	99	186
13JUN83	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	63	108	187
20JUN83	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	63	108	187
27JUN83	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
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-181
CATCH PER UNIT EFFORT (NUMBER PER HAUL) BY WEEK AND REGION,
BEACH SEINE SURVEY, HUDSON RIVER ESTUARY, 1983.

SPOTTAIL SHINER OLDER

WEEK BEGINNING MONDAY		REGIONS YK	TZ	CH	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
	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
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	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.	0.00	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	6	5	5	5	9	10	7	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
	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
	NO. HAULS	5	24	14	5	5	6	5	5	5	9	10	7	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.	0.00	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	6	5	5	5	9	10	7	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.	0.00	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	7	5	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	0.00
	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
	NO. HAULS	5	24	14	7	5	6	5	4	6	9	10	7	102

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

ATLANTIC STURGEON YEARLING

WEEK BEGINNING MONDAY		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
	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	3	N	3	6	3	4	3	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
	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	3	N	3	6	3	4	3	10	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
	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	3	N	3	6	3	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	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	3	N	3	6	3	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	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	3	N	3	6	3	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
	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	3	N	3	6	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	5	6	14	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	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	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	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	0.00	0.00
	NO. TOWS	4	8	24	36	N	4	30	34	5	13	5	23
16MAY83	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	0.00	0.00
	NO. TOWS	4	7	25	36	N	7	30	37	5	10	5	20
23MAY83	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	0.00	0.00
	NO. TOWS	3	6	13	22	N	7	23	30	5	9	6	20
30MAY83	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	0.00	0.00
	NO. TOWS	3	6	15	24	N	6	23	29	5	9	6	20
06JUN83	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	0.00	0.00
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	5	19
13JUN83	DENSITY	0.00	0.00	0.00	0.00	N	0.99	0.00	0.14	0.00	0.00	0.00	0.00
	S.E.	0.00	0.00	0.00	0.00	N	0.99	0.00	0.14	0.00	0.00	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	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	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	0.00
	NO. TOWS	5	5	17	27	N	8	25	33	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	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	0.00
	NO. TOWS	5	6	16	27	N	8	25	33	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	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	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28

N -- STRATUM NOT SAMPLED

TABLE B-182 (CONTINUED).

ATLANTIC STURGEON YEARLING

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	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	0.00	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	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-182 (CONTINUED).

ATLANTIC STURGEON YEARLING

WEEK BEGINNING MONDAY		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	3	3	6	N	3	3	6
09MAY83	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	3	3	6	N	3	3	6
16MAY83	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	4	3	7	N	3	3	6
23MAY83	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	5	3	8	N	3	3	6
30MAY83	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	5	3	8	N	3	3	6
06JUN83	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	5	3	8	N	3	3	6
13JUN83	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	4	2	6	N	3	3	6
20JUN83	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	3	2	5	N	3	3	6
27JUN83	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	4	2	6	N	3	3	6
04JUL83	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	4	2	6	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-182 (CONTINUFD).

ATLANTIC STURGEON YEARLING

WEEK BEGINNING MONDAY		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	5	N	5	21	66	107	194
09MAY83	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	5	N	5	21	69	104	194
16MAY83	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	5	N	5	21	67	106	194
23MAY83	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	19	68	99	186
30MAY83	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	19	68	99	186
06JUN83	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	19	68	99	186
13JUN83	DENSITY	N	0.00	N	0.00	0.00	0.05	0.00	0.01
	S.E.	N	0.00	N	0.00	0.00	0.05	0.00	0.01
	NO. TOWS	N	3	N	3	16	63	108	187
20JUN83	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	63	108	187
27JUN83	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
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-183
DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

ATLANTIC STURGEON YEARLING

WEEK BEGINNING MONDAY		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	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	30	8	8	46	16	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-183 (CONTINUED).

ATLANTIC STURGEON YEARLING

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	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	3	7	5	6	3	14
22AUG83	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	0.00	0.00
	NO. TOWS	7	5	2	14	N	5	3	8	5	5	3	13
05SEP83	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	0.00	0.00
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13
19SEP83	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	5	3	8	6	5	2	13
03OCT83	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	2	6	5	6	4	15
17OCT83	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	0.00	0.00
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-183 (CONTINUED).

ATLANTIC STURGEON YEARLING

WEEK BEGINNING MONDAY		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	0.38	0.00	0.08	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.38	0.00	0.08	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-183 (CONTINUED).

ATLANTIC STURGEON YEARLING

WEEK BEGINNING MONDAY		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	0.00	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-183 (CONTINUED).

ATLANTIC STURGEON YEARLING

WEEK BEGINNING MONDAY		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
08AUG83	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	66	85	49	200
22AUG83	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	87	49	200
05SEP83	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	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-184
DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

ATLANTIC STURGEON OLDER

WEEK BEGINNING MONDAY		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
	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	3	N	3	6	3	4	3	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
	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	3	N	3	6	3	4	3	10	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
	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	3	N	3	6	3	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	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	3	N	3	6	3	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	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	3	N	3	6	3	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
	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	3	N	3	6	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	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	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	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	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	0.00	0.00
	NO. TOWS	4	8	24	36	N	4	30	34	5	13	5	23
16MAY83	DENSITY	0.00	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	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	20
23MAY83	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	0.00	0.00
	NO. TOWS	3	6	13	22	N	7	23	30	5	9	6	20
30MAY83	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	0.00	0.00
	NO. TOWS	3	6	15	24	N	6	23	29	5	9	6	20
06JUN83	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	0.00	0.00
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	5	19
13JUN83	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	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28
20JUN83	DENSITY	0.00	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	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	28
27JUN83	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	0.00	0.00
	NO. TOWS	5	6	16	27	N	8	25	33	3	12	13	28
04JUL83	DENSITY	0.00	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	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	28

N -- STRATUM NOT SAMPLED

TABLE B-184 (CONTINUED).

ATLANTIC STURGEON OLDER

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	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	0.00	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	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-184 (CONTINUED).

ATLANTIC STURGEON OLDER

WEEK BEGINNING MONDAY		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	3	3	6	N	3	3	6
09MAY83	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	3	3	6	N	3	3	6
16MAY83	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	4	3	7	N	3	3	6
23MAY83	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	5	3	8	N	3	3	6
30MAY83	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	5	3	8	N	3	3	6
06JUN83	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	5	3	8	N	3	3	6
13JUN83	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	4	2	6	N	3	3	6
20JUN83	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	3	2	5	N	3	3	6
27JUN83	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	4	2	6	N	3	3	6
04JUL83	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	4	2	6	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-184 (CONTINUED).

ATLANTIC STURGEON OLDER

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

ATLANTIC STURGEON — OLDER

WEEK BEGINNING MONDAY		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	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	30	8	8	46	16	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-185 (CONTINUED).

ATLANTIC STURGEON OLDER

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	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	3	7	5	6	3	14
22AUG83	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	0.00	0.00
	NO. TOWS	7	5	2	14	N	5	3	8	5	5	3	13
05SEP83	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	0.00	0.00
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13
19SEP83	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	5	3	8	6	5	2	13
03OCT83	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	2	6	5	6	4	15
17OCT83	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	0.00	0.00
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-185 (CONTINUED).

ATLANTIC STURGEON OLDER

WEEK BEGINNING MONDAY		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	3.13	0.00	0.73	N	0.88	0.00	0.18	N	0.00	0.00	0.00
	S.E.	N	1.36	0.00	0.32	N	0.56	0.00	0.12	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-185 (CONTINUED).

ATLANTIC STURGEON OLDER

WEEK BEGINNING MONDAY		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	0.25	0.00	0.09	N	0.87	0.00	0.41
	S.E.	N	0.25	0.00	0.09	N	0.70	0.00	0.33
	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	0.22	0.00	0.08	N	0.16	0.00	0.08
	S.E.	N	0.22	0.00	0.08	N	0.16	0.00	0.08
	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-185 (CONTINUED).

ATLANTIC STURGEON OLDER

WEEK BEGINNING MONDAY		ALBANY				COMBINED			
		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	66	85	49	200
22AUG83	DENSITY	N	4.08	N	4.08	0.00	1.11	0.00	0.27
	S.E.	N	1.75	N	1.75	0.00	0.30	0.00	0.07
	NO. TOWS	N	8	N	8	64	87	49	200
05SEP83	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	63	87	49	199
19SEP83	DENSITY	N	0.00	N	0.00	0.00	0.05	0.00	0.01
	S.E.	N	0.00	N	0.00	0.00	0.03	0.00	0.01
	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-186
DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
ICHTHYOPLANKTON SURVEY, HUDSON RIVER ESTUARY, 1983.

SHORTNOSE STURGEON — YOUNG-OF-THE-YEAR

WEEK BEGINNING MONDAY		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
	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	3	N	3	6	3	4	3	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
	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	3	N	3	6	3	4	3	10	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
	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	3	N	3	6	3	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	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	3	N	3	6	3	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	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	3	N	3	6	3	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
	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	3	N	3	6	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-186 (CONTINUED).

SHORTNOSE STURGEON 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	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	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	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	0.00	0.00
	NO. TOWS	4	8	24	36	N	4	30	34	5	13	5	23
16MAY83	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	0.00	0.00
	NO. TOWS	4	7	25	36	N	7	30	37	5	10	5	20
23MAY83	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	0.00	0.00
	NO. TOWS	3	6	13	22	N	7	23	30	5	9	6	20
30MAY83	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	0.00	0.00
	NO. TOWS	3	6	15	24	N	6	23	29	5	9	6	20
06JUN83	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	0.00	0.00
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	5	19
13JUN83	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	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	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	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	0.00
	NO. TOWS	5	5	17	27	N	8	25	33	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	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	0.00
	NO. TOWS	5	6	16	27	N	8	25	33	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	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	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28

N -- STRATUM NOT SAMPLED

TABLE B-186 (CONTINUED).

SHORTNOSE STURGEON 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	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	0.42	0.00	0.09	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.42	0.00	0.09	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	0.00	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	8	14	22	N	5	9	14	N	5	6	11
27JUN83	DENSITY	N	0.00	0.00	0.00	N	0.58	0.00	0.12	N	0.00	0.00	0.00
	S.E.	N	0.00	0.00	0.00	N	0.58	0.00	0.12	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-186 (CONTINUED).

WEEK BEGINNING MONDAY		SHORTNOSE STURGEON				YOUNG-OF-THE-YEAR			
		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	3	3	6	N	3	3	6
09MAY83	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	3	3	6	N	3	3	6
16MAY83	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	4	3	7	N	3	3	6
23MAY83	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	5	3	8	N	3	3	6
30MAY83	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	5	3	8	N	3	3	6
06JUN83	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	5	3	8	N	3	3	6
13JUN83	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	4	2	6	N	3	3	6
20JUN83	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	3	2	5	N	3	3	6
27JUN83	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	4	2	6	N	3	3	6
04JUL83	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	4	2	6	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-186 (CONTINUED).

WEEK BEGINNING MONDAY		SHORTNOSE STURGEON				YOUNG-OF-THE-YEAR			
		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	5	N	5	21	66	107	194
09MAY83	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	5	N	5	21	69	104	194
16MAY83	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	5	N	5	21	67	106	194
23MAY83	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	19	68	99	186
30MAY83	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	19	68	99	186
06JUN83	DENSITY	N	0.00	N	0.00	0.00	0.03	0.00	0.01
	S.E.	N	0.00	N	0.00	0.00	0.03	0.00	0.01
	NO. TOWS	N	3	N	3	19	68	99	186
13JUN83	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	63	108	187
20JUN83	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	63	108	187
27JUN83	DENSITY	N	0.00	N	0.00	0.00	0.04	0.00	0.01
	S.E.	N	0.00	N	0.00	0.00	0.04	0.00	0.01
	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-187
DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

SHORTNOSE STURGEON — YEARLING

WEEK BEGINNING MONDAY		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	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	30	8	8	46	16	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-187 (CONTINUED).

SHORTNOSE STURGEON YEARLING

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	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	3	7	5	6	3	14
22AUG83	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	0.00	0.00
	NO. TOWS	7	5	2	14	N	5	3	8	5	5	3	13
05SEP83	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	0.00	0.00
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13
19SEP83	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	5	3	8	6	5	2	13
03OCT83	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	2	6	5	6	4	15
17OCT83	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	0.00	0.00
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-187 (CONTINUED).

SHORTNOSE STURGEON YEARLING

WEEK BEGINNING MONDAY		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).

SHORTNOSE STURGEON YEARLING

WEEK BEGINNING MONDAY		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	0.00	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	0.23	0.00	0.08	N	0.00	0.00	0.00
	S.E.	N	0.23	0.00	0.08	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-187 (CONTINUED).

WEEK BEGINNING MONDAY		SHORTNOSE STURGEON				YEARLING			
		ALBANY				COMBINED			
		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	66	85	49	200
22AUG83	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	87	49	200
05SEP83	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	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	0.03	0.00	0.01
	S.E.	N	0.00	N	0.00	0.00	0.03	0.00	0.01
	NO. TOWS	N	8	N	8	65	85	50	200
17OCT83	DENSITY	N	0.31	N	0.31	0.00	0.04	0.00	0.01
	S.E.	N	0.31	N	0.31	0.00	0.04	0.00	0.01
	NO. TOWS	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.

SHORTNOSE STURGEON OLDER

WEEK BEGINNING MONDAY		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
	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	3	N	3	6	3	4	3	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
	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	3	N	3	6	3	4	3	10	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
	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	3	N	3	6	3	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	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	3	N	3	6	3	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	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	3	N	3	6	3	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
	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	3	N	3	6	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	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	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	1	N	8	9	3	5	6	14	4	6	6	16

N -- STRATUM NOT SAMPLED

TABLE B-188 (CONTINUED).

SHORTNOSE 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	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	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	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	0.00	0.00
	NO. TOWS	4	8	24	36	N	4	30	34	5	13	5	23
16MAY83	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	0.00	0.00
	NO. TOWS	4	7	25	36	N	7	30	37	5	10	5	20
23MAY83	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	0.00	0.00
	NO. TOWS	3	6	13	22	N	7	23	30	5	9	6	20
30MAY83	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	0.00	0.00
	NO. TOWS	3	6	15	24	N	6	23	29	5	9	6	20
06JUN83	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	0.00	0.00
	NO. TOWS	4	6	14	24	N	7	23	30	5	9	5	19
13JUN83	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	0.00	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	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	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	0.00
	NO. TOWS	5	5	17	27	N	8	25	33	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	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	0.00
	NO. TOWS	5	6	16	27	N	8	25	33	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	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	0.00
	NO. TOWS	5	5	16	26	N	8	25	33	3	12	13	28

N -- STRATUM NOT SAMPLED

TABLE B-188 (CONTINUED).

SHORTNOSE STURGEON OLDER

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	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	0.81	0.00	0.17	N	0.00	0.00	0.00
	S.E.	N	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	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	0.00	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	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-188 (CONTINUED).

SHORTNOSE STURGEON OLDER

WEEK BEGINNING MONDAY		SAUGERTIES				CATSKILL			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	3	3	6	N	3	3	6
09MAY83	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	3	3	6	N	3	3	6
16MAY83	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	4	3	7	N	3	3	6
23MAY83	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	5	3	8	N	3	3	6
30MAY83	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	5	3	8	N	3	3	6
06JUN83	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	5	3	8	N	3	3	6
13JUN83	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	4	2	6	N	3	3	6
20JUN83	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	3	2	5	N	3	3	6
27JUN83	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	4	2	6	N	3	3	6
04JUL83	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	4	2	6	N	3	3	6

N -- STRATUM NOT SAMPLED

TABLE B-188 (CONTINUED).

WEEK BEGINNING MONDAY		SHORTNOSE STURGEON OLDER							
		ALBANY				COMBINED			
		SHOAL	BOTTOM	CHANNEL	REGION	SHOAL	BOTTOM	CHANNEL	REGION
02MAY83	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	5	N	5	21	66	107	194
09MAY83	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	5	N	5	21	69	104	194
16MAY83	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	5	N	5	21	67	106	194
23MAY83	DENSITY	N	0.00	N	0.00	0.00	0.05	0.00	0.01
	S.E.	N	0.00	N	0.00	0.00	0.05	0.00	0.01
	NO. TOWS	N	3	N	3	19	68	99	186
30MAY83	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	19	68	99	186
06JUN83	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	19	68	99	186
13JUN83	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	63	108	187
20JUN83	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	63	108	187
27JUN83	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
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-189
DENSITY (NUMBER PER 1000 CUBIC METERS) BY WEEK, REGION AND STRATUM,
FALL SHOALS SURVEY, HUDSON RIVER ESTUARY, 1983.

SHORTNOSE STURGEON OLDER

WEEK BEGINNING MONDAY		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	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	30	8	8	46	16	7	3	26

N -- STRATUM NOT SAMPLED

TABLE B-189 (CONTINUED).

SHORTNOSE STURGEON OLDER

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	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	3	7	5	6	3	14
22AUG83	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	0.00	0.00
	NO. TOWS	7	5	2	14	N	5	3	8	5	5	3	13
05SEP83	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	0.00	0.00
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13
19SEP83	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	5	3	8	6	5	2	13
03OCT83	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	0.00	0.00
	NO. TOWS	6	5	3	14	N	4	2	6	5	6	4	15
17OCT83	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	0.00	0.00
	NO. TOWS	6	6	3	15	N	5	3	8	5	5	3	13

N -- STRATUM NOT SAMPLED

TABLE B-189 (CONTINUED).

SHORTNOSE STURGEON OLDER

WEEK BEGINNING MONDAY		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-189 (CONTINUED).

SHORTNOSE STURGEON OLDER

WEEK BEGINNING MONDAY		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	0.00	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-189 (CONTINUED).

SHORTNOSE STURGEON OLDER

WEEK BEGINNING MONDAY		ALBANY				COMBINED			
		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	66	85	49	200
22AUG83	DENSITY	N	0.35	N	0.35	0.00	0.05	0.00	0.01
	S.E.	N	0.35	N	0.35	0.00	0.05	0.00	0.01
	NO. TOWS	N	8	N	8	64	87	49	200
05SEP83	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	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

APPENDIX C

WATER QUALITY DATA

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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		
		YSL	PYSL	YOY	YSL	PYSL	YOY	YSL	PYSL	YOY
09MAY83	MEAN	4.2			4.7					
	S.E.	0.1			0.1					
	N	6			28					
16MAY83	MEAN	5.3			5.2					
	S.E.	0.0			0.1					
	N	197			251					
23MAY83	MEAN	5.9	6.8		5.2	6.8		4.6		
	S.E.	0.0	0.0		0.0	0.1				
	N	366	52		457	9		1		
30MAY83	MEAN	5.6	6.8		5.1	6.5		5.4		
	S.E.	0.0	0.0		0.0	0.1		0.0		
	N	260	91		1329	49		263		
06JUN83	MEAN	5.1	6.5		5.0	6.4		4.4	5.2	
	S.E.	0.1	0.1		0.0	0.0		0.1		
	N	132	154		1528	450		49	1	
13JUN83	MEAN	5.5	7.0		5.3	6.4		4.9	6.8	
	S.E.	0.0	0.1		0.0	0.0		0.0	0.4	
	N	267	448		1334	1442		397	24	
20JUN83	MEAN	6.0	8.8		5.0	6.4		5.2	6.0	
	S.E.		0.1		0.0	0.0		0.1	0.0	
	N	1	661		626	2542		117	396	
27JUN83	MEAN		8.8	22.4	5.1	7.4	20.5	4.6	8.6	
	S.E.		0.1	0.7	0.0	0.0		0.3	0.2	
	N		405	5	139	2485	1	7	78	
04JUL83	MEAN		12.5	31.0	5.0	10.9	30.1		11.6	22.0
	S.E.		0.3	1.5		0.1	0.5		0.3	
	N		76	23	1	1344	83		66	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		YK	TZ	CH	IP	WP	CW	PK	HP-AL	TOTAL
01AUG83	BS	MEAN	62.3	57.1	59.7	56.8	52.4	58.7	42.1	53.0	55.4
		S.E.	1.6	3.0	1.9	1.4	2.3	2.3	2.5	1.9	0.9
		N	20	20	20	20	17	20	19	20	156
08AUG83	FS	MEAN		68.9	58.3	60.1	46.0	41.9	44.2	49.7	55.3
		S.E.		2.3	2.1	3.3	4.0	1.4	2.3	1.4	1.3
		N		20	20	17	2	15	6	22	102
15AUG83	BS	MEAN	67.5	62.3	63.2	68.1	60.9	51.2		59.9	61.3
		S.E.	1.4	2.4	4.8	2.9	2.5	2.0		3.9	1.2
		N	20	20	5	12	9	20		20	106
22AUG83	FS	MEAN		75.6	68.0			39.0		62.9	69.5
		S.E.		2.8				2.0		1.8	2.6
		N		19	1			2		8	30
29AUG83	BS	MEAN	83.9	67.3	73.1	65.9	61.3	60.3	59.9	65.9	67.7
		S.E.	2.7	2.2	2.3	2.3	3.0	1.5	3.7	2.5	1.2
		N	15	20	10	13	10	20	11	8	110
05SEP83	FS	MEAN		80.4	80.1			68.0		72.5	78.1
		S.E.		3.9	2.8			7.0		2.2	1.9
		N		16	23			2		11	52
12SEP83	BS	MEAN	106.0	80.6	70.0	83.2	67.0	69.5	100.0	64.2	75.6
		S.E.	7.0	1.8	2.0	2.8	2.3	1.9		3.3	1.2
		N	2	20	16	19	20	20	1	5	114
19SEP83	FS	MEAN		104.0	82.3			75.0	70.0	77.3	81.4
		S.E.		11.4	5.0					1.5	2.7
		N		3	4			1	1	13	22
26SEP83	BS	MEAN		87.9	79.0	78.1	75.0	69.0	78.2	71.0	77.7
		S.E.		3.0	1.8	1.8		1.7	10.4	2.0	1.3
		N		16	19	20	1	20	6	4	86
03OCT83	FS	MEAN		99.8	95.1	75.7	81.0	83.0		84.6	90.7
		S.E.		3.0	2.4	2.6		18.0		2.7	1.8
		N		12	22	9	1	2		8	54
10OCT83	BS	MEAN		89.2	87.2	78.7		74.8	89.5		82.1
		S.E.		4.5	2.0	2.8		1.6	4.5		1.3
		N		6	24	9		20	2		61
17OCT83	FS	MEAN		120.0	102.0	98.0		80.8	78.8	91.8	87.0
		S.E.						3.0	4.5	8.1	3.3
		N		1	1	1		8	4	5	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	3.4	7.7	20.0
	S.E.		0.4			0.0	0.6	0.2	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		YK	TZ	CH	IP	WP	CW	PK	HP-AL	TOTAL
01AUG83	BS	MEAN			43.1	41.6	39.0	47.4	40.1	46.9	43.5
		S.E.			2.2	1.9	2.8	1.3	4.5	1.1	1.0
		N			7	16	8	14	9	14	68
08AUG83	FS	MEAN								49.2	49.2
		S.E.								1.1	1.1
		N								19	19
15AUG83	BS	MEAN	47.3	52.9	52.4	49.7	46.4	53.4	46.0	51.5	50.1
		S.E.	4.7	1.5	2.2	0.8	1.8	1.2	1.0	1.3	0.6
		N	3	20	5	12	20	20	19	20	119
22AUG83	FS	MEAN						63.0	53.6	59.2	57.5
		S.E.							3.6	1.7	1.7
		N						1	7	13	21
29AUG83	BS	MEAN		61.5	56.7		55.0	58.5	61.7	57.6	58.3
		S.E.		1.5	2.3		1.5	1.0	6.3	2.2	0.7
		N		20	10		18	19	3	10	80
05SEP83	FS	MEAN		62.4	66.2			70.0	62.7	66.3	65.1
		S.E.		2.1	2.2			3.0	2.6	1.5	1.0
		N		5	5			2	9	17	38
12SEP83	BS	MEAN	63.5	60.8	58.9	63.8	57.7	67.0	64.0	66.3	62.2
		S.E.	2.5	1.6	1.5	2.4	1.5	1.4	2.0	3.4	0.8
		N	2	20	15	10	19	20	2	12	101
19SEP83	FS	MEAN						69.3	66.2	71.8	69.6
		S.E.						4.6	2.4	1.3	1.2
		N						3	13	20	36
26SEP83	BS	MEAN		65.7	62.6	66.4	60.5	71.6	72.1	69.0	67.1
		S.E.		2.2	1.3	1.6	1.5	1.9	1.7	1.8	0.8
		N		12	10	9	20	16	20	12	99
03OCT83	FS	MEAN		79.7	67.0		77.0	76.5	75.0	71.5	73.0
		S.E.		3.9	2.0			2.5	0.9	1.5	1.1
		N		3	2		1	2	5	20	33
10OCT83	BS	MEAN		70.9	70.4	69.5		77.1		74.0	71.7
		S.E.		2.2	1.4	2.0		1.5		3.0	1.0
		N		9	11	15		9		3	47
17OCT83	FS	MEAN						71.8	71.2	81.8	76.9
		S.E.						1.9	1.4	1.7	1.3
		N						5	15	23	43

TABLE D-5
WEEKLY MEAN LENGTHS (MM,TL) BY ESTUARY SEGMENT OF
AMERICAN SHAD 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
09MAY83	MEAN							7.0		
	S.E.									
	N							1		
16MAY83	MEAN				9.9			9.7		
	S.E.				0.3			0.1		
	N				8			148		
23MAY83	MEAN				11.1	11.4		10.6	11.6	
	S.E.				0.1	0.1		0.0	0.1	
	N				96	65		530	104	
30MAY83	MEAN				10.7	12.1		10.6	12.3	
	S.E.				0.1	0.0		0.0	0.0	
	N				121	681		427	727	
06JUN83	MEAN				9.9	12.9		10.2	12.9	
	S.E.				0.2	0.1		0.0	0.0	
	N				26	392		406	706	
13JUN83	MEAN		15.7			16.3		9.9	15.0	
	S.E.		0.4			0.1		0.1	0.1	
	N		8			222		185	523	
20JUN83	MEAN		19.7			20.5		10.7	20.1	
	S.E.		1.1			0.1			0.1	
	N		2			366		1	510	
27JUN83	MEAN					24.1	29.5		24.4	30.0
	S.E.					0.1	0.1		0.1	0.1
	N					399	161		413	179
04JUL83	MEAN			36.5		27.0	35.8		24.5	33.2
	S.E.			7.5		0.2	0.2		0.2	0.2
	N			2		57	674		171	252

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		YK	TZ	CH	IP	WP	CW	PK	HP-AL	TOTAL
01AUG83	BS	MEAN	54.0	56.9	54.3	57.8	62.0	55.6	55.1	57.3	56.7
		S.E.		0.7	0.8	0.9	2.2	1.3	0.6	1.1	0.4
		N	1	20	12	20	10	20	25	15	123
08AUG83	FS	MEAN	56.9	56.8	61.4	59.9	63.0	61.3	40.0	60.7	59.2
		S.E.	1.2	1.2	0.7	1.2		0.9	5.0	2.0	0.6
		N	17	20	20	11	1	16	2	22	109
15AUG83	BS	MEAN		58.6		59.8	59.9	57.6	59.2	62.0	59.6
		S.E.		0.7		1.7	0.7	1.0	0.8	0.3	0.4
		N		7		6	16	20	20	20	89
22AUG83	FS	MEAN		65.5	62.7	68.0		62.9	66.3	72.6	68.1
		S.E.		1.0	1.3	2.0		1.9	4.9	1.0	0.8
		N		20	6	2		7	3	28	66
29AUG83	BS	MEAN	60.3	64.3	66.8	65.6	69.8	67.6	69.3	70.1	67.7
		S.E.	1.8	1.1	1.3	0.7	1.1	1.0	1.0	0.8	0.4
		N	3	13	10	14	12	15	21	20	108
05SEP83	FS	MEAN	68.0	69.0	69.8	63.0		75.0	77.0	75.0	72.9
		S.E.		2.1	2.0				5.0	0.8	0.8
		N	1	4	8	1		1	2	21	38
12SEP83	BS	MEAN	72.7	71.0	66.9	70.1	71.2	73.8	73.8	76.1	72.4
		S.E.	6.2	1.1	0.8	0.8	1.5	0.6	0.8	0.9	0.4
		N	3	21	9	15	15	20	21	20	124
19SEP83	FS	MEAN	75.0	74.8	71.7			74.0	83.7	81.6	79.3
		S.E.		1.8	3.2			3.0	1.5	1.6	1.2
		N	1	5	3			2	3	21	35
26SEP83	BS	MEAN		71.7	79.0	70.2	75.0	72.5	73.6	76.9	73.8
		S.E.		1.3		1.1	1.6	1.4	0.9	0.7	0.5
		N		11	1	9	14	20	18	20	93
03OCT83	FS	MEAN	74.0	90.8	81.1	75.1	76.0	80.8	85.7	84.5	81.8
		S.E.		2.8	1.2	1.0		2.4	9.4	1.6	1.0
		N	1	4	8	10	1	13	3	20	60
10OCT83	BS	MEAN		81.0	83.7	77.0	78.0	80.5	80.0	82.2	81.2
		S.E.		0.8	1.5			0.7	0.8	0.8	0.4
		N		5	3	1	1	19	11	27	67
17OCT83	FS	MEAN	94.9	87.3	93.3	80.8	77.0	83.9	87.5	83.6	86.8
		S.E.	2.2	1.4	3.5	5.8		1.7	2.4	2.1	1.0
		N	15	14	6	4	1	21	6	25	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		YK	TZ	CH	IP	WP	CW	PK	HP-AL	TOTAL
01AUG83	BS	MEAN		95.0	86.0						88.3
		S.E.			8.7						6.6
		N		1	3						4
08AUG83	FS	MEAN	77.0	77.8	78.5	72.8	69.6	70.4			72.1
		S.E.		4.8	2.5	3.9	1.5	1.6			1.3
		N	1	4	2	9	14	7			37
15AUG83	BS	MEAN		72.5							72.5
		S.E.		3.5							3.5
		N		2							2
22AUG83	FS	MEAN		78.8	76.0			61.0	68.0	27.0	75.4
		S.E.		3.2	9.0						3.4
		N		20	2			1	1	1	25
29AUG83	BS	MEAN		72.3	84.2						78.9
		S.E.		5.7	6.1						4.5
		N		4	5						9
05SEP83	FS	MEAN	79.3	80.2	85.0	79.7	88.0	76.0	85.0		81.3
		S.E.	2.2	5.7		5.1	5.3	10.0			1.9
		N	13	6	1	6	7	2	1		36
12SEP83	BS	MEAN		107.3							107.3
		S.E.		4.6							4.6
		N		4							4
19SEP83	FS	MEAN	86.7	80.8	112.0		79.5	90.7	78.0	99.5	85.0
		S.E.	4.8	2.3			2.5	0.9	4.1	11.5	2.3
		N	7	6	1		2	3	7	2	28
26SEP83	BS	MEAN		91.7							91.7
		S.E.		10.7							10.7
		N		3							3
03OCT83	FS	MEAN	68.0		85.0	86.8	87.3	89.1	90.5	84.5	88.0
		S.E.				2.5	4.3	2.0	4.5	4.5	1.4
		N	1		1	5	3	20	6	2	38
17OCT83	FS	MEAN	124.7	99.0			93.0	96.7	82.4		95.3
		S.E.	4.8				8.6	3.9	1.9		3.0
		N	3	1			6	17	8		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		YK	TZ	CH	IP	WP	CW	PK	HP-AL	TOTAL
01AUG83	BS	MEAN	35.6	40.0							37.5
		S.E.	1.4	0.6							0.8
		N	5	3							13
08AUG83	FS	MEAN	41.3	31.9	33.2	32.6	32.0	28.3	37.0	25.8	33.1
		S.E.	1.2	2.2	1.1	1.6	1.2	1.4	3.0	0.7	0.6
		N	36	20	25	20	20	20	2	21	164
15AUG83	BS	MEAN		36.5							36.5
		S.E.		2.8							2.8
		N		4							4
22AUG83	FS	MEAN		37.3	33.9	30.5		39.1	42.6	38.1	36.5
		S.E.		2.1	1.5	3.2		1.3	1.5	1.8	0.9
		N		20	20	15		15	10	16	96
29AUG83	BS	MEAN	41.0	44.9							44.7
		S.E.		1.6							1.5
		N	1	15							16
05SEP83	FS	MEAN	41.1	39.7	37.4	38.7	46.4	43.5	44.5	41.8	41.6
		S.E.	1.4	1.3	2.0	2.4	1.3	1.4	1.6	1.7	0.6
		N	20	20	20	11	9	30	21	20	151
12SEP83	BS	MEAN		40.9							40.9
		S.E.		1.6							1.6
		N		18							18
19SEP83	FS	MEAN	42.7	41.9	39.9	42.8	44.9	41.3	40.0	44.4	42.0
		S.E.	1.0	1.8	1.7	2.8	2.5	1.5	1.9	2.2	0.7
		N	20	15	21	15	10	20	25	20	146
26SEP83	BS	MEAN		40.0							40.0
		S.E.									
		N		1							1
03OCT83	FS	MEAN	43.3	45.0	41.3	42.4	45.1	44.4	51.1	53.2	45.9
		S.E.	0.9	1.3	1.3	1.6	1.7	2.1	1.7	1.8	0.7
		N	20	20	20	25	10	20	20	25	160
10OCT83	BS	MEAN			49.0			58.0			52.4
		S.E.			1.0			1.5			1.8
		N			5			3			8
17OCT83	FS	MEAN	44.6	49.8	46.3	46.8	48.5	45.1	47.2	48.9	47.2
		S.E.	1.9	1.8	1.6	1.9	2.5	2.5	1.8	2.2	0.7
		N	20	20	20	20	20	15	20	21	156