Appendix F

Length Frequency Distribution

APPENDIX F

LIST OF TABLES

APPENDIX F

LIST OF TABLES (CONTINUED)

Table F-1 Length Frequency Distribution of Larval and Young-of-Year Striped Bass in Hudson River Estuary Determined from Long River Survey, 2005

DATES	0.0-1.9	2.0-3.9	4.0-5.9	6.0-7.9	8.0-9.9	10.0-11.9	12.0-13.9	14.0-15.9	16.0-17.9	18.0-19.9	20.0-24.9	25.0-29.9	30.0-34.9	35.0-39.9	40.0-44.9	45.0-49.9	50.0-54.9	55.0-59.9	60.0-64.9
16MAR-18MAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23MAR-25MAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30MAR-01APR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05APR-08APR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12APR-15APR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19APR-22APR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25APR-29APR	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03MAY-05MAY	0	5	98	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09MAY-12MAY	0	24	359	226	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17MAY-19MAY	0	27	595	432	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23MAY-27MAY	0	95	1101	606	139	1	0	0	0	0	0	0	0	0	0	0	0	0	0
31MAY-03JUN	0	56	637	1622	113	11	0	0	0	0	0	0	0	0	0	0	0	0	0
06JUN-10JUN	0	20	475	1433	552	48	7	0	0	0	0	0	0	0	0	0	0	0	0
13JUN-17JUN	0	7	451	1093	578	331	88	20	10	3	4	0	0	0	0	0	0	0	0
20JUN-23JUN	0	0	54	458	707	535	358	159	59	46	26	0	0	0	0	0	0	0	0
27JUN-30JUN	0	0	89	134	269	391	417	222	114	69	45	44	15	15	1	0	0	0	0
13JUL-15JUL	0	0	0	3	30	30	10	8	15	17	18	6	11	8	4	2	1	0	0
27JUL-29JUL	0	0	0	0	0	0	1	5	2	2	17	12	6	12	15	18	18	10	5
10AUG-12AUG	0	0	0	0	0	0	0	0	0	1	8	6	4	3	0	3	5	2	2
23AUG-26AUG	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	3	2	8	6
07SEP-09SEP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
20SEP-22SEP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04OCT-06OCT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
	0	236	3859	6012	2390	1347	881	414	200	138	118	69	36	39	20	26	27	22	14

DATES	65.0-69.9	70.0-74.9	75.0-79.9	80.0-84.9	85.0-89.9	90.0-94.9	95.0-99.9	100.0-104.9	105.0-109.9	110.0-114.9	115.0-119.9	120.0-124.9+	N	MEAN	MIN	MED	MAX	SD
16MAR-18MAR	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
23MAR-25MAR	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
30MAR-01APR	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
05APR-08APR	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
12APR-15APR	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
19APR-22APR	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
25APR-29APR	0	0	0	0	0	0	0	0	0	0	0	0	2	3.8	3.7	3.8	3.9	0.1
03MAY-05MAY	0	0	0	0	0	0	0	0	0	0	0	0	108	4.9	3.3	4.9	6.3	0.6
09MAY-12MAY	0	0	0	0	0	0	0	0	0	0	0	0	609	5.6	3.2	5.7	7.2	0.8
17MAY-19MAY	0	0	0	0	0	0	0	0	0	0	0	0	1056	5.6	3.0	5.7	8.4	0.9
23MAY-27MAY	0	0	0	0	0	0	0	0	0	0	0	0	1942	5.8	3.0	5.5	10.7	1.3
31MAY-03JUN	0	0	0	0	0	0	0	0	0	0	0	0	2439	6.2	3.0	6.3	11.2	1.1
06JUN-10JUN	0	0	0	0	0	0	0	0	0	0	0	0	2535	7.0	3.1	7.0	12.8	1.3
13JUN-17JUN	0	0	0	0	0	0	0	0	0	0	0	0	2585	7.9	2.8	7.4	22.2	2.3
20JUN-23JUN	0	0	0	0	0	0	0	0	0	0	0	0	2402	10.5	4.5	9.9	24.2	3.1
27JUN-30JUN	0	0	0	0	0	0	0	0	0	0	0	0	1825	12.8	4.4	12.1	40.0	5.1
13JUL-15JUL	0	0	0	0	0	0	0	0	0	0	0	0	163	18.2	6.8	16.0	51.0	9.8
27JUL-29JUL	3	0	0	1	0	0	0	0	0	0	0	0	128	40.2	13.1	42.5	83.0	14.7
10AUG-12AUG	3	3	1	0	0	0	0	0	0	0	0	0	41	41.8	18.0	38.0	75.0	17.8
23AUG-26AUG	8	8	1	2	1	0	0	0	0	0	0	0	43	62.4	28.0	64.0	86.0	11.0
07SEP-09SEP	0	1	0	0	0	1	0	0	0	0	0	0	4	70.8	58.0	67.5	90.0	14.3
20SEP-22SEP	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
04OCT-06OCT	1	1	4	11	1	1	1	0	0	0	0	0	22	79.0	53.0	81.5	96.0	9.5
	15	13	6	14	2	2	1	0	0	0	0	0	15904					

NOTE: Lengths are total lengths in mm, N = Number of lengths, MEAN = Mean length, MIN = Minimum length, MED = Median length, MAX = Maximum length, SD = Standard deviation

Table F-2 Length Frequency Distribution of Young-of-Year Striped Bass in Hudson River Estuary Determined from Fall Juvenile Survey, 2005

DATES	10.0-14.9	15.0-19.9	20.0-24.9	25.0-29.9	30.0-34.9	35.0-39.9	40.0-44.9	45.0-49.9	50.0-54.9	55.0-59.9	60.0-64.9	65.0-69.9	70.0-74.9	75.0-79.9	80.0-84.9	85.0-89.9	90.0-94.9
05JUL-09JUL	5	14	18	28	36	34	15	3	1	0	0	0	0	0	0	0	0
18JUL-24JUL	0	5	15	6	12	28	34	19	20	15	5	1	0	0	0	0	0
01AUG-05AUG	0	0	0	7	4	17	13	25	19	20	12	10	6	2	0	0	0
15AUG-18AUG	0	0	0	0	0	5	2	7	6	19	17	20	17	12	3	2	3
29AUG-01SEP	0	0	0	0	0	1	0	2	6	12	11	13	17	12	3	8	7
12SEP-15SEP	0	0	0	0	0	0	0	0	3	2	5	16	18	25	14	8	7
26SEP-29SEP	0	0	0	0	0	0	0	0	0	2	5	8	17	27	18	9	10
10OCT-13OCT	0	0	0	0	0	0	0	0	1	2	4	7	13	25	18	20	18
24OCT-27OCT	0	0	0	0	0	0	0	0	1	0	0	3	5	14	17	10	22
07NOV-11NOV	0	0	0	0	0	0	0	0	0	1	2	0	3	7	11	16	18
28NOV-02DEC	0	0	0	0	0	0	0	0	0	1	0	0	2	3	9	3	6
	5	19	33	41	52	85	64	56	57	74	61	78	98	127	93	76	91

DATES	95.0-99.9	100.0-104.9	105.0-109.9	110.0-114.9	115.0-119.9	120.0-124.9	125.0-129.9	130.0-134.9	135.0-139.9	140.0-144.9	145.0-149.9+	N	MEAN	MIN	MED	MAX	SD
05JUL-09JUL	0	0	0	0	0	0	0	0	0	0	0	154	30.5	12.0	32.0	52.0	8.2
18JUL-24JUL	0	0	0	0	0	0	0	0	0	0	0	161	41.2	18.0	41.0	69.0	11.5
01AUG-05AUG	0	0	0	0	0	0	0	0	0	0	0	140	50.7	26.0	50.0	79.0	11.7
15AUG-18AUG	0	0	0	0	0	0	0	0	0	0	0	116	63.7	36.0	64.0	93.0	11.7
29AUG-01SEP	3	0	0	0	0	0	0	0	0	0	0	99	70.2	37.0	70.0	98.0	13.0
12SEP-15SEP	3	1	1	0	0	0	0	0	0	0	0	107	75.6	51.0	75.0	106.0	10.8
26SEP-29SEP	6	3	0	1	0	0	0	0	0	0	0	106	79.6	56.0	78.0	110.0	10.2
10OCT-13OCT	11	5	3	3	1	2	3	0	0	0	0	136	85.4	53.0	84.0	129.0	14.4
24OCT-27OCT	17	12	3	4	3	4	1	1	1	1	0	119	92.5	54.0	92.0	141.0	14.9
07NOV-11NOV	9	5	6	2	1	0	0	0	0	0	0	81	89.2	59.0	90.0	119.0	11.0
28NOV-02DEC	7	8	1	0	0	1	1	0	0	0	0	42	91.0	59.0	91.0	127.0	12.9
	56	34	14	10	5	7	5	1	1	1	0	1261					

NOTE: Lengths are total lengths in mm, N = Number of lengths, MEAN = Mean length, MIN = Minimum length, MED = Median length, MAX = Maximum length, SD = Standard deviation

Table F-3 Length Frequency Distribution of Young-of-Year Striped Bass in Hudson River Estuary Determined from Beach Seine Survey, 2005

DATES	10.0-14.9	15.0-19.9	20.0-24.9	25.0-29.9	30.0-34.9	35.0-39.9	40.0-44.9	45.0-49.9	50.0-54.9	55.0-59.9	60.0-64.9	65.0-69.9	70.0-74.9	75.0-79.9	80.0-84.9	85.0-89.9
14JUN-16JUN	0	3	5	1	0	0	0	0	0	0	0	0	0	0	0	0
28JUN-30JUN	1	6	33	42	35	17	8	2	0	0	0	0	0	0	0	0
12JUL-14JUL	0	0	3	24	27	32	21	24	17	8	4	0	0	0	0	0
25JUL-28JUL	0	0	0	2	13	12	28	31	31	16	13	10	7	2	1	0
09AUG-12AUG	0	0	0	0	2	3	7	9	30	45	30	21	9	3	6	1
22AUG-25AUG	0	0	0	0	0	1	2	3	11	33	38	29	28	15	8	2
06SEP-09SEP	0	0	0	0	0	0	0	2	6	9	11	32	30	16	18	7
20SEP-23SEP	0	0	0	0	0	0	0	0	0	2	6	23	29	29	21	16
03OCT-06OCT	0	0	0	0	0	0	0	0	0	0	2	15	15	27	30	20
17OCT-20OCT	0	0	0	0	0	0	0	0	1	0	3	11	11	19	30	20
	1	9	41	69	77	65	66	71	96	113	107	141	129	111	114	66

DATES	90.0-94.9	95.0-99.9	100.0-104.9	105.0-109.9	110.0-114.9	115.0-119.9	120.0-124.9	125.0-129.9	130.0-134.9+	N	MEAN	MIN	MED	MAX	SD
14JUN-16JUN	0	0	0	0	0	0	0	0	0	9	20.3	17.0	20.0	28.0	3.2
28JUN-30JUN	0	0	0	0	0	0	0	0	0	144	28.7	14.0	28.0	45.0	6.4
12JUL-14JUL	0	0	0	0	0	0	0	0	0	160	39.7	23.0	38.0	63.0	9.5
25JUL-28JUL	0	0	0	0	0	0	0	0	0	167	50.0	28.0	49.0	80.0	11.2
09AUG-12AUG	0	0	0	0	0	0	0	0	0	171	58.6	34.0	58.0	88.0	9.5
22AUG-25AUG	2	1	0	0	0	0	0	0	0	182	65.0	39.0	64.0	96.0	9.5
06SEP-09SEP	6	3	0	1	0	0	0	0	0	145	71.5	46.0	71.0	105.0	10.8
20SEP-23SEP	21	5	2	0	1	0	0	0	0	157	78.1	56.0	76.0	111.0	10.2
03OCT-06OCT	16	11	7	3	2	0	0	1	0	149	83.1	61.0	82.0	129.0	11.4
17OCT-20OCT	18	10	12	6	4	3	2	0	0	150	86.0	51.0	84.5	124.0	13.4
	63	30	21	10	7	3	2	1	0	1434					

NOTE: Lengths are total lengths in mm, N = Number of lengths, MEAN = Mean length, MIN = Minimum length, MED = Median length, MAX = Maximum length, SD = Standard deviation

Table F-4 Length Frequency Distribution of Larval and Young-of-Year White Perch in Hudson River Estuary Determined from Long River Survey, 2005

DATES	0.0-1.9	2.0-3.9	4.0-5.9	6.0-7.9	8.0-9.9	10.0-11.9	12.0-13.9	14.0-15.9	16.0-17.9	18.0-19.9	20.0-24.9	25.0-29.9	30.0-34.9	35.0-39.9	40.0-44.9	45.0-49.9	50.0-54.9
16MAR-18MAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23MAR-25MAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30MAR-01APR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05APR-08APR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12APR-15APR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19APR-22APR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25APR-29APR	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03MAY-05MAY	0	764	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09MAY-12MAY	0	1188	286	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17MAY-19MAY	0	923	1052	4	0	0	0	0	0	0	0	0	0	0	0	0	0
23MAY-27MAY	0	415	1055	32	0	0	0	0	0	0	0	0	0	0	0	0	0
31MAY-03JUN	0	422	1030	215	12	0	0	0	0	0	0	0	0	0	0	0	0
06JUN-10JUN	0	362	560	452	113	8	1	0	0	0	0	0	0	0	0	0	0
13JUN-17JUN	0	255	707	689	299	30	0	0	0	0	0	0	0	0	0	0	0
20JUN-23JUN	0	95	432	625	540	230	64	6	6	3	1	0	0	0	0	0	0
27JUN-30JUN	0	10	208	509	361	187	80	38	11	2	3	6	1	0	0	0	0
13JUL-15JUL	0	0	0	1	2	3	12	6	6	2	1	0	0	1	0	0	0
27JUL-29JUL	0	0	0	0	0	0	0	5	5	4	5	4	0	0	1	2	3
10AUG-12AUG	0	0	0	0	0	0	0	0	1	1	2	1	4	1	1	1	0
23AUG-26AUG	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	1	1
07SEP-09SEP	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
20SEP-22SEP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04OCT-06OCT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	4449	5374	2527	1327	458	157	55	29	12	12	11	6	5	2	4	4

DATES	55.0-59.9	60.0-64.9	65.0-69.9	70.0-74.9	75.0-79.9	80.0-84.9	85.0-89.9	90.0-94.9	95.0-99.9	100.0-104.9+	N	MEAN	MIN	MED	MAX	SD
16MAR-18MAR	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
23MAR-25MAR	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
30MAR-01APR	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
05APR-08APR	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
12APR-15APR	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
19APR-22APR	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
25APR-29APR	0	0	0	0	0	0	0	0	0	0	15	3.2	2.7	3.1	3.9	0.4
03MAY-05MAY	0	0	0	0	0	0	0	0	0	0	808	3.4	2.0	3.4	4.5	0.4
09MAY-12MAY	0	0	0	0	0	0	0	0	0	0	1474	3.6	2.5	3.6	4.7	0.4
17MAY-19MAY	0	0	0	0	0	0	0	0	0	0	1979	3.9	2.3	4.0	6.8	0.4
23MAY-27MAY	0	0	0	0	0	0	0	0	0	0	1502	4.2	2.4	4.2	7.9	0.6
31MAY-03JUN	0	0	0	0	0	0	0	0	0	0	1679	4.7	2.4	4.5	9.6	1.1
06JUN-10JUN	0	0	0	0	0	0	0	0	0	0	1496	5.4	2.0	5.3	12.5	1.7
13JUN-17JUN	0	0	0	0	0	0	0	0	0	0	1980	6.1	2.7	6.0	11.7	1.7
20JUN-23JUN	0	0	0	0	0	0	0	0	0	0	2002	7.6	2.9	7.4	21.1	2.4
27JUN-30JUN	0	0	0	0	0	0	0	0	0	0	1416	8.4	2.9	7.9	30.0	2.9
13JUL-15JUL	0	0	0	0	0	0	0	0	0	0	34	14.6	7.4	13.7	36.0	4.8
27JUL-29JUL	0	0	0	0	0	0	0	0	0	0	29	25.8	14.9	20.7	54.0	12.9
10AUG-12AUG	0	1	0	2	0	0	0	0	0	0	16	39.0	16.4	33.5	73.0	18.3
23AUG-26AUG	0	2	3	2	4	5	0	0	0	0	21	66.0	34.0	70.0	84.0	15.8
07SEP-09SEP	0	0	0	0	0	0	0	0	0	0	1	39.0	39.0	39.0	39.0	.
20SEP-22SEP	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
04OCT-06OCT	0	1	0	1	0	2	2	1	0	0	7	80.0	61.0	83.0	91.0	10.6
	0	4	3	5	4	7	2	1	0	0	14459					

NOTE: Lengths are total lengths in mm, N = Number of lengths, MEAN = Mean length, MIN = Minimum length, MED = Median length, MAX = Maximum length, SD = Standard deviation

Table F-5 Length Frequency Distribution of Young-of-Year White Perch in Hudson River Estuary Determined from Fall Juvenile Survey, 2005

DATES	10.0-14.9	15.0-19.9	20.0-24.9	25.0-29.9	30.0-34.9	35.0-39.9	40.0-44.9	45.0-49.9	50.0-54.9	55.0-59.9	60.0-64.9	65.0-69.9	70.0-74.9
05JUL-09JUL	0	11	10	16	20	1	0	0	0	0	0	0	0
18JUL-24JUL	4	5	21	23	1	0	1	12	6	0	1	0	0
01AUG-05AUG	0	3	6	13	6	2	2	8	9	8	4	4	0
15AUG-18AUG	0	0	0	7	8	13	9	3	1	0	0	9	4
29AUG-01SEP	0	0	0	0	1	5	8	2	4	0	0	4	5
12SEP-15SEP	0	0	0	0	0	1	0	5	4	1	2	0	3
26SEP-29SEP	0	0	0	0	0	0	0	0	1	1	2	1	3
10OCT-13OCT	0	0	0	0	0	0	0	0	0	0	3	3	7
24OCT-27OCT	0	0	0	0	0	0	0	0	1	1	2	1	8
07NOV-11NOV	0	0	0	0	0	0	0	0	1	1	2	6	7
28NOV-02DEC	0	0	0	0	0	0	0	0	0	2	0	7	9
	4	19	37	59	36	22	20	30	27	14	16	35	46

DATES	75.0-79.9	80.0-84.9	85.0-89.9	90.0-94.9	95.0-99.9	100.0-104.9+	N	MEAN	MIN	MED	MAX	SD
05JUL-09JUL	0	0	0	0	0	0	58	25.9	17.0	27.0	35.0	5.5
18JUL-24JUL	0	0	0	0	0	0	74	30.2	13.0	26.0	61.0	12.2
01AUG-05AUG	0	0	0	0	0	0	65	41.4	16.0	45.0	67.0	14.9
15AUG-18AUG	2	1	0	0	0	0	57	45.7	25.0	40.0	82.0	16.5
29AUG-01SEP	9	5	1	0	0	0	44	60.6	34.0	67.5	85.0	17.4
12SEP-15SEP	7	11	14	1	0	0	50	73.8	39.0	80.5	90.0	14.8
26SEP-29SEP	22	14	23	9	0	0	76	81.2	52.0	81.0	94.0	7.9
10OCT-13OCT	12	24	13	20	2	0	84	82.5	63.0	82.0	95.0	8.1
24OCT-27OCT	13	23	43	48	20	2	162	86.6	54.0	88.0	100.0	8.1
07NOV-11NOV	11	22	39	44	23	2	158	86.4	52.0	88.0	100.0	8.8
28NOV-02DEC	18	31	36	45	19	4	171	85.7	59.0	88.0	100.0	8.4
	94	131	169	167	64	8	999					

NOTE: Lengths are total lengths in mm, N = Number of lengths, MEAN = Mean length, MIN = Minimum length, MED = Median length, MAX = Maximum length, SD = Standard deviation

Table F-6 Length Frequency Distribution of Young-of-Year White Perch in Hudson River Estuary Determined from Beach Seine Survey, 2005

DATES	10.0-14.9	15.0-19.9	20.0-24.9	25.0-29.9	30.0-34.9	35.0-39.9	40.0-44.9	45.0-49.9	50.0-54.9	55.0-59.9	60.0-64.9	65.0-69.9	70.0-74.9
14JUN-16JUN	1	0	0	0	0	0	0	0	0	0	0	0	0
28JUN-30JUN	0	5	42	34	5	3	0	0	0	0	0	0	0
12JUL-14JUL	0	0	2	31	35	34	19	8	4	0	0	0	0
25JUL-28JUL	0	0	0	0	4	16	27	37	30	16	5	0	0
09AUG-12AUG	0	0	0	0	0	0	6	10	27	33	31	29	4
22AUG-25AUG	0	0	0	0	0	0	0	0	3	10	32	45	30
06SEP-09SEP	0	0	0	0	0	0	1	0	4	9	16	31	32
20SEP-23SEP	0	0	0	0	0	0	0	0	0	1	1	12	24
03OCT-06OCT	0	0	0	0	0	0	0	0	0	0	7	9	14
17OCT-20OCT	0	0	0	0	0	0	0	0	0	2	1	4	2
	1	5	44	65	44	53	53	55	68	71	93	130	106

DATES	75.0-79.9	80.0-84.9	85.0-89.9	90.0-94.9	95.0-99.9	100.0-104.9+	N	MEAN	MIN	MED	MAX	SD
14JUN-16JUN	0	0	0	0	0	0	1	12.0	12.0	12.0	12.0	.
28JUN-30JUN	0	0	0	0	0	0	89	24.3	16.0	24.0	38.0	4.0
12JUL-14JUL	0	0	0	0	0	0	133	34.7	24.0	34.0	54.0	6.6
25JUL-28JUL	0	0	0	0	0	0	138	47.3	30.0	47.0	64.0	7.3
09AUG-12AUG	0	0	0	0	0	0	150	58.4	41.0	59.0	74.0	7.1
22AUG-25AUG	14	1	1	0	0	0	143	66.8	53.0	67.0	86.0	6.1
06SEP-09SEP	35	12	5	0	0	0	146	70.5	43.0	71.0	86.0	8.2
20SEP-23SEP	35	35	19	14	0	0	143	78.5	55.0	79.0	93.0	7.8
03OCT-06OCT	16	25	25	12	0	0	108	79.4	62.0	81.0	93.0	8.3
17OCT-20OCT	13	9	21	16	3	0	72	83.0	55.0	85.5	99.0	9.6
	113	82	71	42	3	0	1123					

NOTE: Lengths are total lengths in mm, N = Number of lengths, MEAN = Mean length, MIN = Minimum length, MED = Median length, MAX = Maximum length, SD = Standard deviation

Table F-7 Length Frequency Distribution of Larval and Young-of-Year Atlantic Tomcod in Hudson River Estuary Determined from Long River Survey, 2005

DATES	0.0-1.9	2.0-3.9	4.0-5.9	6.0-7.9	8.0-9.9	10.0-11.9	12.0-13.9	14.0-15.9	16.0-17.9	18.0-19.9	20.0-24.9	25.0-29.9	30.0-34.9	35.0-39.9	40.0-44.9	45.0-49.9	50.0-54.9	55.0-59.9
16MAR-18MAR	0	0	1	978	186	0	0	0	0	0	0	0	0	0	0	0	0	0
23MAR-25MAR	0	0	0	519	524	83	2	0	0	0	0	0	0	0	0	0	0	0
30MAR-01APR	0	0	0	213	338	122	9	0	0	0	0	0	0	0	0	0	0	0
05APR-08APR	0	0	0	22	69	63	16	0	0	0	0	0	0	0	0	0	0	0
12APR-15APR	0	0	0	1	6	31	106	111	107	43	8	0	0	0	0	0	0	0
19APR-22APR	0	0	0	0	3	12	67	172	234	213	191	0	0	0	0	0	0	0
25APR-29APR	0	0	0	0	2	1	4	22	81	192	478	365	67	0	0	0	0	0
03MAY-05MAY	0	0	0	0	0	0	1	6	9	26	206	409	382	43	1	0	0	0
09MAY-12MAY	0	0	0	0	0	0	1	0	0	1	4	122	279	242	88	11	0	0
17MAY-19MAY	0	0	0	0	0	0	0	0	0	0	1	6	76	139	103	34	5	0
23MAY-27MAY	0	0	0	0	0	0	0	0	1	0	0	3	18	98	283	256	142	37
31MAY-03JUN	0	0	0	0	0	0	0	0	0	0	0	0	2	19	110	252	199	127
06JUN-10JUN	0	0	0	0	0	0	0	0	0	0	0	0	2	5	56	212	189	106
13JUN-17JUN	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	21	70	88
20JUN-23JUN	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	9	99	163
27JUN-30JUN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	11	42
13JUL-15JUL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	36
27JUL-29JUL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10AUG-12AUG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23AUG-26AUG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07SEP-09SEP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20SEP-22SEP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04OCT-06OCT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	1	1733	1128	312	206	311	432	475	889	905	828	547	644	799	717	599

DATES	60.0-64.9	65.0-69.9	70.0-74.9	75.0-79.9	80.0-84.9	85.0-89.9	90.0-94.9	95.0-99.9	100.0-104.9	105.0-109.9	110.0-114.9	115.0-119.9+	N	MEAN	MIN	MED	MAX	SD
16MAR-18MAR	0	0	0	0	0	0	0	0	0	0	0	0	1165	7.4	5.9	7.4	9.7	0.6
23MAR-25MAR	0	0	0	0	0	0	0	0	0	0	0	0	1128	8.3	6.3	8.1	12.3	1.0
30MAR-01APR	0	0	0	0	0	0	0	0	0	0	0	0	682	8.7	6.0	8.6	13.1	1.3
05APR-08APR	0	0	0	0	0	0	0	0	0	0	0	0	170	9.8	6.7	9.8	13.4	1.5
12APR-15APR	0	0	0	0	0	0	0	0	0	0	0	0	413	15.1	6.5	15.2	21.8	2.5
19APR-22APR	0	0	0	0	0	0	0	0	0	0	0	0	892	17.6	8.7	17.6	24.9	2.7
25APR-29APR	0	0	0	0	0	0	0	0	0	0	0	0	1212	23.0	9.1	22.2	34.0	4.1
03MAY-05MAY	0	0	0	0	0	0	0	0	0	0	0	0	1083	27.9	13.5	28.0	40.0	4.3
09MAY-12MAY	0	0	0	0	0	0	0	0	0	0	0	0	748	34.0	12.1	34.0	48.0	4.8
17MAY-19MAY	0	0	0	0	0	0	0	0	0	0	0	0	364	38.2	24.0	38.0	51.0	4.9
23MAY-27MAY	8	1	0	0	0	0	0	0	0	0	0	0	851	45.1	17.6	45.0	66.0	5.9
31MAY-03JUN	33	18	11	0	1	0	0	0	0	0	0	0	791	50.6	31.0	50.0	81.0	6.8
06JUN-10JUN	40	23	18	5	3	0	0	0	0	0	0	0	672	52.3	32.0	51.0	84.0	7.5
13JUN-17JUN	54	54	34	20	5	1	1	0	0	0	0	0	372	60.6	32.0	60.0	90.0	8.6
20JUN-23JUN	85	56	29	21	12	5	1	0	0	0	0	0	511	60.5	22.0	59.0	93.0	8.3
27JUN-30JUN	29	36	26	21	13	4	3	1	0	0	0	0	202	66.1	47.0	65.0	99.0	9.7
13JUL-15JUL	22	18	15	5	2	0	1	0	0	0	0	0	114	63.3	53.0	61.0	90.0	6.8
27JUL-29JUL	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
10AUG-12AUG	0	0	0	0	0	0	0	0	0	0	1	0	1	112.0	112.0	112.0	112.0	.
23AUG-26AUG	0	0	0	0	0	0	0	1	0	0	0	0	1	98.0	98.0	98.0	98.0	.
07SEP-09SEP	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
20SEP-22SEP	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
04OCT-06OCT	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
	271	206	133	72	36	10	6	2	0	0	1	0	11372					

NOTE: Lengths are total lengths in mm, N = Number of lengths, MEAN = Mean length, MIN = Minimum length, MED = Median length, MAX = Maximum length, SD = Standard deviation

Table F-8 Length Frequency Distribution of Young-of-Year Atlantic Tomcod in Hudson River Estuary Determined from Fall Juvenile Survey, 2005

DATES	10.0-14.9	15.0-19.9	20.0-24.9	25.0-29.9	30.0-34.9	35.0-39.9	40.0-44.9	45.0-49.9	50.0-54.9	55.0-59.9	60.0-64.9	65.0-69.9	70.0-74.9	75.0-79.9	80.0-84.9
05JUL-09JUL	0	0	0	0	0	0	0	1	11	21	26	36	22	15	9
18JUL-24JUL	0	0	0	0	0	0	0	0	2	13	21	29	19	16	4
01AUG-05AUG	0	0	0	0	0	0	0	0	0	1	1	1	3	4	3
15AUG-18AUG	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
29AUG-01SEP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12SEP-15SEP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26SEP-29SEP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10OCT-13OCT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24OCT-27OCT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07NOV-11NOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28NOV-02DEC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	1	13	35	48	66	44	36	17

DATES	85.0-89.9	90.0-94.9	95.0-99.9	100.0-104.9	105.0-109.9	110.0-114.9	115.0-119.9	120.0-124.9	125.0-129.9+	N	MEAN	MIN	MED	MAX	SD
05JUL-09JUL	4	2	5	0	0	0	0	0	0	159	67.4	45.0	65.0	98.0	10.3
18JUL-24JUL	8	1	1	0	0	0	0	0	0	120	68.7	50.0	68.0	95.0	8.8
01AUG-05AUG	2	9	3	2	1	0	0	0	0	30	84.9	56.0	88.5	107.0	12.0
15AUG-18AUG	0	0	0	0	0	2	0	0	0	3	99.7	79.0	110.0	110.0	17.9
29AUG-01SEP	1	0	1	0	0	0	0	0	0	3	89.3	84.0	88.0	96.0	6.1
12SEP-15SEP	0	0	1	0	0	0	0	0	0	1	95.0	95.0	95.0	95.0	.
26SEP-29SEP	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
10OCT-13OCT	0	0	0	0	0	2	0	0	0	2	110.0	110.0	110.0	110.0	0.0
24OCT-27OCT	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
07NOV-11NOV	0	0	0	0	0	0	0	1	0	1	122.0	122.0	122.0	122.0	.
28NOV-02DEC	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
	15	12	11	2	1	4	0	1	0	319					

NOTE: Lengths are total lengths in mm, N = Number of lengths, MEAN = Mean length, MIN = Minimum length, MED = Median length, MAX = Maximum length, SD = Standard deviation

Table F-9 Length Frequency Distribution of Young-of-Year Atlantic Tomcod in Hudson River Estuary Determined from Beach Seine Survey, 2005

DATES	10.0-14.9	15.0-19.9	20.0-24.9	25.0-29.9	30.0-34.9	35.0-39.9	40.0-44.9	45.0-49.9	50.0-54.9	55.0-59.9
14JUN-16JUN	0	0	0	0	0	0	0	0	0	0
28JUN-30JUN	0	0	0	0	0	0	0	0	0	0
12JUL-14JUL	0	0	0	0	0	0	0	0	0	0
25JUL-28JUL	0	0	0	0	0	0	0	0	0	0
09AUG-12AUG	0	0	0	0	0	0	0	0	0	0
22AUG-25AUG	0	0	0	0	0	0	0	0	0	0
06SEP-09SEP	0	0	0	0	0	0	0	0	0	0
20SEP-23SEP	0	0	0	0	0	0	0	0	0	0
03OCT-06OCT	0	0	0	0	0	0	0	0	0	0
17OCT-20OCT	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0

DATES	60.0-64.9	65.0-69.9	70.0-74.9	75.0-79.9+	N	MEAN	MIN	MED	MAX	SD
14JUN-16JUN	1	0	1	0	3	64.7	60.0	61.0	73.0	7.2
28JUN-30JUN	0	1	0	0	1	68.0	68.0	68.0	68.0	.
12JUL-14JUL	0	1	0	0	1	68.0	68.0	68.0	68.0	.
25JUL-28JUL	0	0	0	0	0	.	.	.	.	.
09AUG-12AUG	0	0	0	0	0	.	.	.	.	.
22AUG-25AUG	0	0	0	0	0	.	.	.	.	.
06SEP-09SEP	0	0	0	0	0	.	.	.	.	.
20SEP-23SEP	0	0	0	0	0	.	.	.	.	.
03OCT-06OCT	0	0	0	0	0	.	.	.	.	.
17OCT-20OCT	0	0	0	0	0	.	.	.	.	.
	1	2	1	0	5					

NOTE: Lengths are total lengths in mm, N = Number of lengths, MEAN = Mean length, MIN = Minimum length, MED = Median length, MAX = Maximum length, SD = Standard deviation

Table F-10 Length Frequency Distribution of Larval and Young-of-Year Bay Anchovy in Hudson River Estuary Determined from Long River Survey, 2005

DATES	0.0-1.9	2.0-3.9	4.0-5.9	6.0-7.9	8.0-9.9	10.0-11.9	12.0-13.9	14.0-15.9	16.0-17.9	18.0-19.9	20.0-24.9	25.0-29.9	30.0-34.9	35.0-39.9
16MAR-18MAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23MAR-25MAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30MAR-01APR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05APR-08APR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12APR-15APR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19APR-22APR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25APR-29APR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03MAY-05MAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09MAY-12MAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17MAY-19MAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23MAY-27MAY	0	0	0	1	0	0	0	0	0	0	0	0	0	0
31MAY-03JUN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06JUN-10JUN	0	2	7	0	0	0	0	0	0	0	0	0	0	0
13JUN-17JUN	0	244	601	481	182	21	1	0	0	0	0	0	0	0
20JUN-23JUN	0	61	353	420	263	177	87	19	6	0	0	0	0	0
27JUN-30JUN	0	3	85	241	347	281	212	167	152	75	24	0	0	0
13JUL-15JUL	0	3	6	8	18	108	154	176	280	363	654	103	8	0
27JUL-29JUL	0	0	9	56	128	123	115	145	184	179	278	358	300	202
10AUG-12AUG	0	0	4	19	45	72	94	111	95	99	263	349	192	172
23AUG-26AUG	0	0	0	4	8	8	19	19	30	29	301	359	293	150
07SEP-09SEP	0	0	0	7	8	24	16	26	36	23	229	513	305	133
20SEP-22SEP	0	0	0	0	0	3	3	49	56	30	95	346	355	282
04OCT-06OCT	0	0	0	0	3	20	30	26	21	14	68	160	205	313
	0	313	1065	1237	1002	837	731	738	860	812	1912	2188	1658	1252

DATES	40.0-44.9	45.0-49.9	50.0-54.9	55.0-59.9	60.0-64.9	65.0-69.9	70.0-74.9+	N	MEAN	MIN	MED	MAX	SD
16MAR-18MAR	0	0	0	0	0	0	0	0	.	.	.	.	.
23MAR-25MAR	0	0	0	0	0	0	0	0	.	.	.	.	.
30MAR-01APR	0	0	0	0	0	0	0	0	.	.	.	.	.
05APR-08APR	0	0	0	0	0	0	0	0	.	.	.	.	.
12APR-15APR	0	0	0	0	0	0	0	0	.	.	.	.	.
19APR-22APR	0	0	0	0	0	0	0	0	.	.	.	.	.
25APR-29APR	0	0	0	0	0	0	0	0	.	.	.	.	.
03MAY-05MAY	0	0	0	0	0	0	0	0	.	.	.	.	.
09MAY-12MAY	0	0	0	0	0	0	0	0	.	.	.	.	.
17MAY-19MAY	0	0	0	0	0	0	0	0	.	.	.	.	.
23MAY-27MAY	0	0	0	0	0	0	0	1	7.3	7.3	7.3	7.3	.
31MAY-03JUN	0	0	0	0	0	0	0	0	.	.	.	.	.
06JUN-10JUN	0	0	0	0	0	0	0	9	4.5	2.8	4.7	5.4	0.9
13JUN-17JUN	0	0	0	0	0	0	0	1530	5.8	2.2	5.7	12.0	1.8
20JUN-23JUN	0	0	0	0	0	0	0	1386	7.7	2.9	7.1	17.1	2.7
27JUN-30JUN	0	0	0	0	0	0	0	1587	11.4	3.7	10.7	22.4	3.8
13JUL-15JUL	0	0	0	0	0	0	0	1881	18.5	3.1	18.6	31.0	4.3
27JUL-29JUL	34	0	0	0	0	0	0	2111	22.5	4.1	21.7	43.0	9.0
10AUG-12AUG	170	55	4	1	0	0	0	1745	26.2	4.4	26.1	55.0	10.2
23AUG-26AUG	64	38	24	13	0	0	0	1359	29.1	7.4	28.3	59.0	8.4
07SEP-09SEP	62	33	33	13	0	0	0	1465	29.1	6.4	27.9	60.0	8.5
20SEP-22SEP	163	131	66	55	27	10	0	1684	34.7	10.5	33.0	69.0	10.8
04OCT-06OCT	350	187	92	55	38	28	2	1624	38.3	8.7	39.0	70.0	11.5
	843	444	219	137	65	38	2	16382					

NOTE: Lengths are total lengths in mm, N = Number of lengths, MEAN = Mean length, MIN = Minimum length, MED = Median length, MAX = Maximum length, SD = Standard deviation

Table F-11 Length Frequency Distribution of Young-of-Year Bay Anchovy in Hudson River Estuary Determined from Fall Juvenile Survey, 2005

DATES	10.0-14.9	15.0-19.9	20.0-24.9	25.0-29.9	30.0-34.9	35.0-39.9	40.0-44.9	45.0-49.9	50.0-54.9	55.0-59.9	60.0-64.9	65.0-69.9	70.0-74.9+	N	MEAN	MIN	MED	MAX	SD
05JUL-09JUL	0	12	68	16	0	0	0	0	0	0	0	0	0	96	22.2	16.0	22.0	29.0	2.5
18JUL-24JUL	0	13	61	43	19	5	1	0	0	0	0	0	0	142	25.1	15.0	24.0	41.0	5.0
01AUG-05AUG	0	3	18	30	66	46	11	0	0	0	0	0	0	174	31.5	19.0	32.0	43.0	5.5
15AUG-18AUG	0	1	10	38	41	36	37	12	6	0	0	0	0	181	34.9	19.0	35.0	53.0	7.4
29AUG-01SEP	0	2	19	40	42	31	8	8	9	2	0	0	0	162	32.9	19.0	31.0	60.0	8.8
12SEP-15SEP	0	1	3	24	44	15	22	26	24	21	8	0	0	189	41.3	19.0	41.0	63.0	11.2
26SEP-29SEP	0	0	5	13	32	51	28	18	15	21	9	4	0	200	42.1	22.0	39.0	66.0	10.7
10OCT-13OCT	0	0	0	2	21	44	57	28	13	2	0	0	0	167	41.1	28.0	41.0	59.0	5.8
24OCT-27OCT	0	0	0	0	2	5	14	19	17	17	4	6	0	85	50.3	30.0	50.0	69.0	8.6
07NOV-11NOV	0	0	0	0	0	1	2	2	5	5	5	7	0	28	57.1	38.0	58.5	69.0	8.3
28NOV-02DEC	0	0	0	0	0	1	3	3	5	7	2	1	0	22	51.9	35.0	52.5	65.0	7.8
	0	32	184	206	267	235	183	116	94	75	28	18	0	1446					

NOTE: Lengths are total lengths in mm, N = Number of lengths, MEAN = Mean length, MIN = Minimum length, MED = Median length, MAX = Maximum length, SD = Standard deviation

Table F-12 Length Frequency Distribution of Young-of-Year Bay Anchovy in Hudson River Estuary Determined from Beach Seine Survey, 2005

DATES	10.0-14.9	15.0-19.9	20.0-24.9	25.0-29.9	30.0-34.9	35.0-39.9	40.0-44.9	45.0-49.9	50.0-54.9	55.0-59.9	60.0-64.9	65.0-69.9	70.0-74.9+	N	MEAN	MIN	MED	MAX	SD
14JUN-16JUN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
28JUN-30JUN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
12JUL-14JUL	0	0	4	1	0	0	0	0	0	0	0	0	0	5	23.6	22.0	23.0	26.0	1.5
25JUL-28JUL	0	0	0	3	12	24	0	0	0	0	0	0	0	39	34.7	25.0	36.0	39.0	3.4
09AUG-12AUG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
22AUG-25AUG	0	0	0	0	1	4	5	0	0	0	0	0	0	10	38.6	32.0	39.5	43.0	3.1
06SEP-09SEP	0	0	0	0	0	1	4	2	4	0	0	0	0	11	46.8	37.0	47.0	54.0	6.4
20SEP-23SEP	0	0	0	0	1	14	22	5	1	3	0	0	0	46	41.8	30.0	40.0	58.0	5.3
03OCT-06OCT	0	0	0	2	14	30	26	9	6	1	0	1	0	90	39.9	26.0	39.0	67.0	6.9
17OCT-20OCT	0	0	0	0	1	6	9	14	11	1	2	0	0	47	47.1	30.0	46.0	63.0	7.3
	0	0	4	6	29	79	66	30	22	5	2	1	0	248					

NOTE: Lengths are total lengths in mm, N = Number of lengths, MEAN = Mean length, MIN = Minimum length, MED = Median length, MAX = Maximum length, SD = Standard deviation

Table F-13 Length Frequency Distribution of Larval and Young-of-Year American Shad in Hudson River Estuary Determined from Long River Survey, 2005

DATES	0.0-1.9	2.0-3.9	4.0-5.9	6.0-7.9	8.0-9.9	10.0-11.9	12.0-13.9	14.0-15.9	16.0-17.9	18.0-19.9	20.0-24.9	25.0-29.9	30.0-34.9	35.0-39.9	40.0-44.9	45.0-49.9	50.0-54.9	55.0-59.9	60.0-64.9
16MAR-18MAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23MAR-25MAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30MAR-01APR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05APR-08APR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12APR-15APR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19APR-22APR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25APR-29APR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03MAY-05MAY	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0
09MAY-12MAY	0	0	0	0	4	6	0	0	0	0	0	0	0	0	0	0	0	0	0
17MAY-19MAY	0	0	0	1	9	32	4	0	0	0	0	0	0	0	0	0	0	0	0
23MAY-27MAY	0	0	0	1	5	36	9	0	0	0	0	0	0	0	0	0	0	0	0
31MAY-03JUN	0	0	0	0	14	36	45	16	13	3	0	0	0	0	0	0	0	0	0
06JUN-10JUN	0	0	0	0	3	16	19	10	11	12	4	0	0	0	0	0	0	0	0
13JUN-17JUN	0	0	0	0	2	0	2	3	3	5	8	3	0	0	0	0	0	0	0
20JUN-23JUN	0	0	0	0	0	0	1	3	2	5	26	8	10	6	0	0	0	0	0
27JUN-30JUN	0	0	0	0	0	0	0	0	0	1	7	4	8	7	5	6	3	0	1
13JUL-15JUL	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0
27JUL-29JUL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
10AUG-12AUG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23AUG-26AUG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07SEP-09SEP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20SEP-22SEP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04OCT-06OCT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	2	39	128	80	32	29	26	45	15	18	14	5	6	4	1	3

DATES	65.0-69.9	70.0-74.9	75.0-79.9	80.0-84.9	85.0-89.9	90.0-94.9	95.0-99.9	100.0-104.9	105.0-109.9	110.0-114.9	115.0-119.9	120.0-124.9	125.0-129.9+	N	MEAN	MIN	MED	MAX	SD
16MAR-18MAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
23MAR-25MAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
30MAR-01APR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
05APR-08APR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
12APR-15APR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
19APR-22APR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
25APR-29APR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
03MAY-05MAY	0	0	0	0	0	0	0	0	0	0	0	0	0	4	9.6	8.3	9.9	10.3	0.9
09MAY-12MAY	0	0	0	0	0	0	0	0	0	0	0	0	0	10	10.1	9.0	10.2	10.9	0.6
17MAY-19MAY	0	0	0	0	0	0	0	0	0	0	0	0	0	46	10.8	7.7	11.2	12.9	1.2
23MAY-27MAY	0	0	0	0	0	0	0	0	0	0	0	0	0	51	11.0	7.9	11.0	13.7	1.1
31MAY-03JUN	0	0	0	0	0	0	0	0	0	0	0	0	0	127	12.7	8.5	12.6	18.4	2.3
06JUN-10JUN	0	0	0	0	0	0	0	0	0	0	0	0	0	75	14.5	9.4	13.9	20.7	3.2
13JUN-17JUN	0	0	0	0	0	0	0	0	0	0	0	0	0	26	19.3	9.2	19.4	29.5	5.3
20JUN-23JUN	0	0	0	0	0	0	0	0	0	0	0	0	0	61	24.8	12.7	23.2	38.0	6.2
27JUN-30JUN	0	0	0	0	0	0	0	0	0	0	0	0	0	42	36.0	19.1	35.5	61.0	10.4
13JUL-15JUL	0	0	0	0	0	0	0	0	0	0	0	0	0	3	48.0	35.0	52.0	57.0	11.5
27JUL-29JUL	1	1	0	0	0	0	0	0	0	0	0	0	0	4	65.3	62.0	63.5	72.0	4.7
10AUG-12AUG	0	1	0	0	0	0	0	0	0	0	0	0	0	1	70.0	70.0	70.0	70.0	.
23AUG-26AUG	1	0	0	0	0	0	0	0	0	0	0	0	0	1	66.0	66.0	66.0	66.0	.
07SEP-09SEP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
20SEP-22SEP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
04OCT-06OCT	0	0	0	0	0	0	0	0	1	1	0	2	0	4	113.8	105.0	115.0	120.0	7.5
	2	2	0	0	0	0	0	0	1	1	0	2	0	455					

NOTE: Lengths are total lengths in mm, N = Number of lengths, MEAN = Mean length, MIN = Minimum length, MED = Median length, MAX = Maximum length, SD = Standard deviation

Table F-14 Length Frequency Distribution of Young-of-Year American Shad in Hudson River Estuary Determined from Fall Juvenile Survey, 2005

DATES	10.0-14.9	15.0-19.9	20.0-24.9	25.0-29.9	30.0-34.9	35.0-39.9	40.0-44.9	45.0-49.9	50.0-54.9	55.0-59.9	60.0-64.9	65.0-69.9	70.0-74.9	75.0-79.9	80.0-84.9	85.0-89.9	90.0-94.9	95.0-99.9
05JUL-09JUL	0	0	0	1	5	6	6	5	10	6	2	0	0	0	0	0	0	0
18JUL-24JUL	0	0	0	0	1	3	8	3	4	2	5	0	1	1	0	0	0	0
01AUG-05AUG	0	0	0	0	0	0	0	0	2	5	10	2	5	0	0	0	0	0
15AUG-18AUG	0	0	0	0	0	0	0	0	0	0	0	8	9	3	3	0	0	1
29AUG-01SEP	0	0	0	0	0	0	0	0	0	0	0	1	7	3	1	0	0	1
12SEP-15SEP	0	0	0	0	0	0	0	0	0	0	0	0	0	7	4	2	2	3
26SEP-29SEP	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	7	5	3
10OCT-13OCT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4	3	0
24OCT-27OCT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3
07NOV-11NOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28NOV-02DEC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	1	6	9	14	8	16	13	17	11	22	17	12	13	12	11

DATES	100.0-104.9	105.0-109.9	110.0-114.9	115.0-119.9	120.0-124.9	125.0-129.9	130.0-134.9	135.0-139.9	140.0-144.9	145.0-149.9	150.0-154.9	155.0-159.9+	N	MEAN	MIN	MED	MAX	SD
05JUL-09JUL	0	0	0	0	0	0	0	0	0	0	0	0	41	46.0	29.0	46.0	63.0	9.1
18JUL-24JUL	0	0	0	0	0	0	0	0	0	0	0	0	29	50.4	31.0	49.0	76.0	11.2
01AUG-05AUG	0	0	0	0	0	0	0	0	0	0	0	0	26	62.9	52.0	62.0	74.0	5.7
15AUG-18AUG	0	0	0	0	0	0	0	0	0	0	0	0	24	73.0	65.0	72.0	95.0	6.7
29AUG-01SEP	0	0	0	0	0	0	0	0	0	0	0	0	13	75.2	66.0	74.0	95.0	6.8
12SEP-15SEP	0	1	0	0	0	0	0	0	0	0	0	0	19	84.9	75.0	83.0	106.0	8.9
26SEP-29SEP	1	1	1	2	0	0	0	0	0	0	0	0	24	92.6	75.0	91.0	118.0	11.4
10OCT-13OCT	0	1	2	0	0	0	0	0	0	0	0	0	13	92.0	82.0	89.0	110.0	9.9
24OCT-27OCT	1	1	1	3	2	1	0	0	0	0	1	0	15	111.1	90.0	113.0	152.0	16.1
07NOV-11NOV	0	0	0	1	0	0	0	0	0	0	0	0	1	118.0	118.0	118.0	118.0	.
28NOV-02DEC	1	0	0	0	0	0	0	0	0	0	0	0	1	100.0	100.0	100.0	100.0	.
	3	4	4	6	2	1	0	0	0	0	1	0	206					

NOTE: Lengths are total lengths in mm, N = Number of lengths, MEAN = Mean length, MIN = Minimum length, MED = Median length, MAX = Maximum length, SD = Standard deviation

Table F-15 Length Frequency Distribution of Young-of-Year American Shad in Hudson River Estuary Determined from Beach Seine Survey, 2005

DATES	10.0-14.9	15.0-19.9	20.0-24.9	25.0-29.9	30.0-34.9	35.0-39.9	40.0-44.9	45.0-49.9	50.0-54.9	55.0-59.9	60.0-64.9	65.0-69.9	70.0-74.9
14JUN-16JUN	0	0	5	11	4	0	0	0	0	0	0	0	0
28JUN-30JUN	0	0	0	2	29	51	27	22	11	7	0	0	0
12JUL-14JUL	0	0	0	1	3	19	38	47	30	16	3	3	0
25JUL-28JUL	0	0	0	0	0	0	2	5	26	59	33	13	5
09AUG-12AUG	0	0	0	0	0	0	0	0	1	10	43	38	10
22AUG-25AUG	0	0	0	0	0	0	0	0	3	0	8	27	25
06SEP-09SEP	0	0	0	0	0	0	0	0	0	0	1	11	58
20SEP-23SEP	0	0	0	0	0	0	0	0	0	0	0	0	4
03OCT-06OCT	0	0	0	0	0	0	0	0	0	0	0	0	2
17OCT-20OCT	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	5	14	36	70	67	74	71	92	88	92	104

DATES	75.0-79.9	80.0-84.9	85.0-89.9	90.0-94.9	95.0-99.9	100.0-104.9+	N	MEAN	MIN	MED	MAX	SD
14JUN-16JUN	0	0	0	0	0	0	20	26.8	20.0	27.0	34.0	3.3
28JUN-30JUN	0	0	0	0	0	0	150	40.4	29.0	38.0	60.0	7.2
12JUL-14JUL	0	0	0	0	0	0	162	46.9	27.0	46.0	67.0	7.1
25JUL-28JUL	0	0	0	0	0	0	155	58.4	43.0	58.0	73.0	5.3
09AUG-12AUG	1	1	1	0	0	0	107	64.6	53.0	64.0	86.0	4.8
22AUG-25AUG	12	2	0	0	0	0	77	69.4	52.0	70.0	81.0	5.3
06SEP-09SEP	29	3	0	0	0	0	102	72.7	62.0	72.0	82.0	3.3
20SEP-23SEP	13	30	14	9	0	0	70	82.2	72.0	82.0	93.0	5.0
03OCT-06OCT	7	14	17	17	2	0	59	85.6	73.0	86.0	98.0	5.8
17OCT-20OCT	3	19	14	8	5	0	49	85.8	79.0	85.0	99.0	5.7
	65	69	46	34	7	0	951					

NOTE: Lengths are total lengths in mm, N = Number of lengths, MEAN = Mean length, MIN = Minimum length, MED = Median length, MAX = Maximum length, SD = Standard deviation

Table F-16 Length Frequency Distribution of Young-of-Year Alewife in Hudson River Estuary Determined from Fall Juvenile Survey, 2005

DATES	10.0-14.9	15.0-19.9	20.0-24.9	25.0-29.9	30.0-34.9	35.0-39.9	40.0-44.9	45.0-49.9	50.0-54.9	55.0-59.9	60.0-64.9	65.0-69.9	70.0-74.9	75.0-79.9	80.0-84.9
05JUL-09JUL	0	0	0	0	0	0	30	26	17	5	5	0	0	0	0
18JUL-24JUL	0	0	0	0	0	0	17	34	51	17	6	3	1	0	0
01AUG-05AUG	0	0	0	0	0	0	3	14	22	22	2	1	0	1	0
15AUG-18AUG	0	0	0	0	0	0	0	1	10	15	11	9	6	1	0
29AUG-01SEP	0	0	0	0	0	0	0	0	3	11	8	6	12	6	0
12SEP-15SEP	0	0	0	0	0	0	0	0	0	1	14	7	5	8	8
26SEP-29SEP	0	0	0	0	0	0	0	0	0	1	1	4	8	10	11
10OCT-13OCT	0	0	0	0	0	0	0	0	0	0	4	5	22	23	25
24OCT-27OCT	0	0	0	0	0	0	0	0	0	0	3	3	6	6	9
07NOV-11NOV	0	0	0	0	0	0	0	0	0	0	1	2	6	11	20
28NOV-02DEC	0	0	0	0	0	0	0	0	0	0	0	0	5	5	5
	0	0	0	0	0	0	50	75	103	72	55	40	71	71	78

DATES	85.0-89.9	90.0-94.9	95.0-99.9	100.0-104.9	105.0-109.9	110.0-114.9	115.0-119.9	120.0-124.9	125.0-129.9+	N	MEAN	MIN	MED	MAX	SD
05JUL-09JUL	0	0	0	0	0	0	0	0	0	83	47.9	41.0	47.0	64.0	5.6
18JUL-24JUL	0	0	0	0	0	0	0	0	0	130	51.1	41.0	51.0	72.0	6.1
01AUG-05AUG	1	0	0	0	0	0	0	0	0	69	53.9	40.0	54.0	87.0	6.9
15AUG-18AUG	0	0	0	0	0	0	0	0	0	55	60.4	48.0	60.0	78.0	6.6
29AUG-01SEP	0	0	0	1	0	0	0	0	0	49	65.8	53.0	65.0	102.0	9.0
12SEP-15SEP	2	0	0	0	0	0	0	0	0	46	70.9	58.0	69.0	89.0	8.7
26SEP-29SEP	5	2	0	0	0	0	0	0	0	42	77.1	57.0	76.5	93.0	7.8
10OCT-13OCT	12	3	0	1	3	0	0	1	0	99	79.3	62.0	79.0	122.0	9.7
24OCT-27OCT	4	2	5	2	0	0	0	0	0	40	81.0	62.0	80.0	104.0	11.1
07NOV-11NOV	6	6	1	0	0	0	1	0	0	54	81.4	64.0	81.0	119.0	8.8
28NOV-02DEC	2	0	0	0	0	0	0	0	0	17	78.6	72.0	79.0	86.0	4.7
	32	13	6	4	3	0	1	1	0	684					

NOTE: Lengths are total lengths in mm, N = Number of lengths, MEAN = Mean length, MIN = Minimum length, MED = Median length, MAX = Maximum length, SD = Standard deviation

Table F-17 Length Frequency Distribution of Young-of-Year Alewife in Hudson River Estuary Determined from Beach Seine Survey, 2005

DATES	10.0-14.9	15.0-19.9	20.0-24.9	25.0-29.9	30.0-34.9	35.0-39.9	40.0-44.9	45.0-49.9	50.0-54.9	55.0-59.9	60.0-64.9	65.0-69.9
14JUN-16JUN	0	0	0	0	0	0	0	0	0	0	0	0
28JUN-30JUN	0	0	0	0	0	0	40	16	4	0	1	0
12JUL-14JUL	0	0	0	0	0	0	89	36	10	1	0	0
25JUL-28JUL	0	0	0	0	0	0	7	55	45	17	4	2
09AUG-12AUG	0	0	0	0	0	0	1	9	35	50	20	9
22AUG-25AUG	0	0	0	0	0	0	0	0	4	32	23	18
06SEP-09SEP	0	0	0	0	0	0	0	0	2	17	31	31
20SEP-23SEP	0	0	0	0	0	0	0	0	0	1	17	35
03OCT-06OCT	0	0	0	0	0	0	0	0	0	0	3	14
17OCT-20OCT	0	0	0	0	0	0	0	0	0	0	4	15
	0	0	0	0	0	0	137	116	100	118	103	124

DATES	70.0-74.9	75.0-79.9	80.0-84.9	85.0-89.9	90.0-94.9+	N	MEAN	MIN	MED	MAX	SD
14JUN-16JUN	0	0	0	0	0	0	.	.	.	.	.
28JUN-30JUN	1	0	0	0	0	63	44.8	41.0	43.0	70.0	5.2
12JUL-14JUL	0	0	0	0	0	136	44.1	41.0	43.0	56.0	3.2
25JUL-28JUL	0	1	0	1	0	134	50.9	41.0	50.0	87.0	6.1
09AUG-12AUG	3	0	1	0	0	141	57.1	41.0	57.0	80.0	5.7
22AUG-25AUG	5	1	0	0	0	91	61.3	53.0	61.0	75.0	4.9
06SEP-09SEP	14	1	0	0	0	101	63.8	53.0	64.0	78.0	5.0
20SEP-23SEP	22	12	12	0	0	103	69.6	59.0	68.0	83.0	6.3
03OCT-06OCT	10	10	5	3	0	46	72.4	60.0	71.5	88.0	6.7
17OCT-20OCT	13	12	3	0	1	48	71.6	62.0	71.0	90.0	6.0
	68	37	21	4	1	863					

NOTE: Lengths are total lengths in mm, N = Number of lengths, MEAN = Mean length, MIN = Minimum length, MED = Median length, MAX = Maximum length, SD = Standard deviation

Table F-18 Length Frequency Distribution of Young-of-Year Blueback Herring in Hudson River Estuary Determined from Fall Juvenile Survey, 2005

DATES	10.0-14.9	15.0-19.9	20.0-24.9	25.0-29.9	30.0-34.9	35.0-39.9	40.0-44.9	45.0-49.9	50.0-54.9	55.0-59.9	60.0-64.9	65.0-69.9	70.0-74.9
05JUL-09JUL	0	0	0	0	0	0	25	19	3	0	0	0	0
18JUL-24JUL	0	0	0	0	0	0	47	39	43	27	6	1	0
01AUG-05AUG	0	0	0	0	0	0	10	35	26	30	2	0	0
15AUG-18AUG	0	0	0	0	0	0	6	18	30	4	5	2	0
29AUG-01SEP	0	0	0	0	0	0	0	11	25	14	2	3	2
12SEP-15SEP	0	0	0	0	0	0	1	0	1	25	11	3	2
26SEP-29SEP	0	0	0	0	0	0	0	0	0	11	18	12	1
10OCT-13OCT	0	0	0	0	0	0	0	0	0	3	19	42	14
24OCT-27OCT	0	0	0	0	0	0	0	0	0	1	5	28	30
07NOV-11NOV	0	0	0	0	0	0	0	0	0	1	2	12	4
28NOV-02DEC	0	0	0	0	0	0	0	0	0	0	2	2	1
	0	0	0	0	0	0	89	122	128	116	72	105	54

DATES	75.0-79.9	80.0-84.9	85.0-89.9	90.0-94.9	95.0-99.9	100.0-104.9+	N	MEAN	MIN	MED	MAX	SD
05JUL-09JUL	0	0	0	0	0	0	47	44.7	41.0	44.0	52.0	3.2
18JUL-24JUL	0	0	0	0	0	0	165	49.3	41.0	49.0	65.0	6.0
01AUG-05AUG	0	0	0	0	0	0	108	51.3	42.0	50.5	62.0	5.2
15AUG-18AUG	0	0	0	0	0	0	66	51.4	42.0	51.0	66.0	5.4
29AUG-01SEP	0	0	0	0	0	0	57	54.1	46.0	52.0	74.0	5.8
12SEP-15SEP	0	0	0	0	0	0	49	59.5	42.0	59.0	72.0	4.6
26SEP-29SEP	1	0	0	0	0	0	48	62.8	56.0	63.0	79.0	4.2
10OCT-13OCT	5	0	0	0	0	0	87	66.7	56.0	66.0	79.0	4.4
24OCT-27OCT	6	5	0	0	1	0	77	70.6	57.0	70.0	99.0	5.9
07NOV-11NOV	2	1	0	0	0	0	23	68.7	57.0	68.0	81.0	5.4
28NOV-02DEC	0	0	0	0	0	0	5	66.6	62.0	68.0	70.0	3.4
	14	6	0	0	1	0	732					

NOTE: Lengths are total lengths in mm, N = Number of lengths, MEAN = Mean length, MIN = Minimum length, MED = Median length, MAX = Maximum length, SD = Standard deviation

Table F-19 Length Frequency Distribution of Young-of-Year Blueback Herring in Hudson River Estuary Determined from Beach Seine Survey, 2005

DATES	10.0-14.9	15.0-19.9	20.0-24.9	25.0-29.9	30.0-34.9	35.0-39.9	40.0-44.9	45.0-49.9	50.0-54.9	55.0-59.9	60.0-64.9	65.0-69.9
14JUN-16JUN	0	0	0	0	0	0	0	0	0	0	0	0
28JUN-30JUN	0	0	0	0	0	0	14	1	0	0	1	0
12JUL-14JUL	0	0	0	0	0	0	93	30	7	1	0	0
25JUL-28JUL	0	0	0	0	0	0	34	51	16	5	0	0
09AUG-12AUG	0	0	0	0	0	0	20	36	19	15	6	1
22AUG-25AUG	0	0	0	0	0	0	6	18	30	17	4	0
06SEP-09SEP	0	0	0	0	0	0	0	3	20	22	4	1
20SEP-23SEP	0	0	0	0	0	0	1	2	5	21	26	7
03OCT-06OCT	0	0	0	0	0	0	0	0	1	8	16	23
17OCT-20OCT	0	0	0	0	0	0	0	0	3	12	28	64
	0	0	0	0	0	0	168	141	101	101	85	96

DATES	70.0-74.9	75.0-79.9	80.0-84.9	85.0-89.9	90.0-94.9+	N	MEAN	MIN	MED	MAX	SD
14JUN-16JUN	0	0	0	0	0	0	.	.	.	.	.
28JUN-30JUN	0	0	0	0	0	16	43.9	41.0	43.0	63.0	5.3
12JUL-14JUL	0	0	0	0	0	131	43.6	41.0	42.0	55.0	2.9
25JUL-28JUL	0	0	0	0	0	106	46.5	41.0	46.0	57.0	3.9
09AUG-12AUG	0	0	0	0	0	100	50.0	41.0	48.0	67.0	6.2
22AUG-25AUG	0	0	0	0	0	81	52.2	41.0	52.0	63.0	5.3
06SEP-09SEP	0	0	0	0	0	53	55.2	48.0	55.0	66.0	3.9
20SEP-23SEP	0	1	1	0	0	76	60.2	44.0	60.0	80.0	5.4
03OCT-06OCT	6	0	1	2	0	65	64.6	53.0	64.0	88.0	6.3
17OCT-20OCT	44	5	1	0	0	163	66.3	51.0	66.0	81.0	5.0
	50	6	3	2	0	791					

NOTE: Lengths are total lengths in mm, N = Number of lengths, MEAN = Mean length, MIN = Minimum length, MED = Median length, MAX = Maximum length, SD = Standard deviation

Table F-20 Length Frequency Distribution of Young-of-Year Spottail Shiner in Hudson River Estuary Determined from Fall Juvenile Survey, 2005

DATES	10.0-14.9	15.0-19.9	20.0-24.9	25.0-29.9	30.0-34.9	35.0-39.9	40.0-44.9	45.0-49.9	50.0-54.9	55.0-59.9	60.0-64.9	65.0-69.9
05JUL-09JUL	0	0	0	4	5	1	0	0	0	0	0	0
18JUL-24JUL	0	0	0	1	2	3	2	3	0	0	0	0
01AUG-05AUG	0	0	0	0	0	0	1	0	1	1	0	0
15AUG-18AUG	0	0	0	0	0	0	0	0	0	1	0	1
29AUG-01SEP	0	0	0	0	0	0	0	0	0	0	0	1
12SEP-15SEP	0	0	0	0	0	0	0	0	0	0	0	0
26SEP-29SEP	0	0	0	0	0	0	0	0	0	0	0	0
10OCT-13OCT	0	0	0	0	0	0	0	0	0	0	0	3
24OCT-27OCT	0	0	0	0	0	0	0	0	0	0	0	0
07NOV-11NOV	0	0	0	0	0	0	0	0	0	0	0	0
28NOV-02DEC	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	5	7	4	3	3	1	2	0	5

DATES	70.0-74.9	75.0-79.9	80.0-84.9	85.0-89.9	90.0-94.9+	N	MEAN	MIN	MED	MAX	SD
05JUL-09JUL	0	0	0	0	0	10	30.2	25.0	31.0	36.0	3.3
18JUL-24JUL	0	0	0	0	0	11	39.2	29.0	39.0	47.0	6.3
01AUG-05AUG	0	0	0	0	0	3	50.3	42.0	52.0	57.0	7.6
15AUG-18AUG	0	0	0	0	0	2	61.0	57.0	61.0	65.0	5.7
29AUG-01SEP	1	0	0	0	0	2	69.5	69.0	69.5	70.0	0.7
12SEP-15SEP	1	0	0	0	0	1	70.0	70.0	70.0	70.0	.
26SEP-29SEP	0	0	0	0	0	0	.	.	.	.	.
10OCT-13OCT	4	6	5	0	0	18	74.8	65.0	75.0	81.0	4.9
24OCT-27OCT	0	3	0	0	0	3	77.7	76.0	78.0	79.0	1.5
07NOV-11NOV	0	0	0	1	0	1	86.0	86.0	86.0	86.0	.
28NOV-02DEC	0	0	0	0	0	0	.	.	.	.	.
	6	9	5	1	0	51					

NOTE: Lengths are total lengths in mm, N = Number of lengths, MEAN = Mean length, MIN = Minimum length, MED = Median length, MAX = Maximum length, SD = Standard deviation

Table F-21 Length Frequency Distribution of Young-of-Year Spottail Shiner in Hudson River Estuary Determined from Beach Seine Survey, 2005

DATES	10.0-14.9	15.0-19.9	20.0-24.9	25.0-29.9	30.0-34.9	35.0-39.9	40.0-44.9	45.0-49.9	50.0-54.9	55.0-59.9	60.0-64.9
14JUN-16JUN	0	0	0	0	0	0	0	0	0	0	0
28JUN-30JUN	0	0	14	36	12	0	0	0	0	0	0
12JUL-14JUL	0	0	0	3	19	63	42	3	0	0	0
25JUL-28JUL	0	0	0	0	3	14	15	19	10	0	0
09AUG-12AUG	0	0	0	0	0	0	8	7	18	18	13
22AUG-25AUG	0	0	0	0	0	0	0	2	3	11	17
06SEP-09SEP	0	0	0	0	0	0	0	1	5	11	8
20SEP-23SEP	0	0	0	0	0	0	0	0	1	6	9
03OCT-06OCT	0	0	0	0	0	0	0	0	1	1	3
17OCT-20OCT	0	0	0	0	0	0	0	0	0	1	4
	0	0	14	39	34	77	65	32	38	48	54

DATES	65.0-69.9	70.0-74.9	75.0-79.9	80.0-84.9	85.0-89.9+	N	MEAN	MIN	MED	MAX	SD
14JUN-16JUN	0	0	0	0	0	0	.	.	.	.	.
28JUN-30JUN	0	0	0	0	0	62	26.9	20.0	27.0	32.0	3.0
12JUL-14JUL	0	0	0	0	0	130	37.9	28.0	38.0	47.0	3.9
25JUL-28JUL	0	0	0	0	0	62	43.5	32.0	44.0	60.0	5.8
09AUG-12AUG	2	0	0	0	0	67	54.2	40.0	55.0	66.0	6.6
22AUG-25AUG	19	9	0	0	0	66	62.6	45.0	62.5	71.0	5.7
06SEP-09SEP	21	15	2	0	0	69	63.9	46.0	65.0	75.0	6.6
20SEP-23SEP	13	19	13	8	0	70	69.8	51.0	70.0	81.0	7.4
03OCT-06OCT	10	4	9	13	0	43	72.7	53.0	75.0	84.0	8.4
17OCT-20OCT	9	15	10	6	0	45	71.6	58.0	72.0	82.0	5.8
	74	62	34	27	0	614					

NOTE: Lengths are total lengths in mm, N = Number of lengths, MEAN = Mean length, MIN = Minimum length, MED = Median length, MAX = Maximum length, SD = Standard deviation

Table F-22 Length Frequency Distribution of Young-of-Year White Catfish in Hudson River Estuary Determined from Fall Juvenile Survey, 2005

DATES	10.0-14.9	15.0-19.9	20.0-24.9	25.0-29.9	30.0-34.9	35.0-39.9	40.0-44.9	45.0-49.9	50.0-54.9	55.0-59.9	60.0-64.9	65.0-69.9	70.0-74.9	75.0-79.9	80.0-84.9	85.0-89.9
05JUL-09JUL	0	10	7	2	0	0	0	0	0	0	0	0	0	0	0	0
18JUL-24JUL	0	3	1	3	9	12	8	0	0	0	0	0	0	0	0	0
01AUG-05AUG	0	1	0	0	4	2	4	1	4	2	0	0	0	0	0	0
15AUG-18AUG	0	0	0	0	0	1	2	0	2	4	6	1	3	9	6	0
29AUG-01SEP	0	0	0	0	0	0	0	0	0	1	1	3	3	4	5	2
12SEP-15SEP	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2	4
26SEP-29SEP	0	0	0	0	0	0	0	0	0	0	0	1	1	3	2	5
10OCT-13OCT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
24OCT-27OCT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07NOV-11NOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
28NOV-02DEC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	14	8	5	13	15	15	1	6	8	7	5	7	16	16	12

DATES	90.0-94.9	95.0-99.9	100.0-104.9	105.0-109.9	110.0-114.9	115.0-119.9	120.0-124.9	125.0-129.9	130.0-134.9+	N	MEAN	MIN	MED	MAX	SD
05JUL-09JUL	0	0	0	0	0	0	0	0	0	19	19.9	16.0	19.0	26.0	3.1
18JUL-24JUL	0	0	0	0	0	0	0	0	0	36	34.0	15.0	35.0	44.0	7.2
01AUG-05AUG	0	0	0	0	0	0	0	0	0	19	42.9	17.0	43.0	60.0	11.0
15AUG-18AUG	0	0	0	0	0	0	0	0	0	34	67.1	37.0	72.0	80.0	12.6
29AUG-01SEP	3	8	0	0	0	0	0	0	0	30	82.6	59.0	83.5	99.0	11.6
12SEP-15SEP	5	1	0	0	0	0	0	0	0	14	83.5	44.0	88.0	97.0	14.9
26SEP-29SEP	2	2	0	0	0	0	0	0	0	16	83.9	65.0	85.0	96.0	8.6
10OCT-13OCT	2	0	1	1	1	1	1	0	0	8	103.3	82.0	104.5	122.0	13.8
24OCT-27OCT	3	2	4	3	1	6	3	2	0	24	109.5	90.0	109.5	125.0	10.9
07NOV-11NOV	0	0	1	2	3	1	0	1	0	9	109.0	89.0	110.0	126.0	9.9
28NOV-02DEC	0	1	2	2	1	1	1	0	1	9	109.9	97.0	106.0	130.0	10.9
	15	14	8	8	6	9	5	3	1	218					

NOTE: Lengths are total lengths in mm, N = Number of lengths, MEAN = Mean length, MIN = Minimum length, MED = Median length, MAX = Maximum length, SD = Standard deviation

Table F-23 Length Frequency Distribution of Young-of-Year White Catfish in Hudson River Estuary Determined from Beach Seine Survey, 2005

DATES	10.0-14.9	15.0-19.9	20.0-24.9	25.0-29.9	30.0-34.9	35.0-39.9	40.0-44.9	45.0-49.9	50.0-54.9	55.0-59.9	60.0-64.9+	N	MEAN	MIN	MED	MAX	SD
14JUN-16JUN	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
28JUN-30JUN	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
12JUL-14JUL	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
25JUL-28JUL	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
09AUG-12AUG	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
22AUG-25AUG	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
06SEP-09SEP	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
20SEP-23SEP	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
03OCT-06OCT	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
17OCT-20OCT	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
	======	======	======	======	======	======	======	======	======	======	======	======					
	0	0	0	0	0	0	0	0	0	0	0	0					

NOTE: Lengths are total lengths in mm, N = Number of lengths, MEAN = Mean length, MIN = Minimum length, MED = Median length, MAX = Maximum length, SD = Standard deviation

Table F-24 Length Frequency Distribution of Young-of-Year Weakfish in Hudson River Estuary Determined from Fall Juvenile Survey, 2005

DATES	10.0-14.9	15.0-19.9	20.0-24.9	25.0-29.9	30.0-34.9	35.0-39.9	40.0-44.9	45.0-49.9	50.0-54.9	55.0-59.9	60.0-64.9	65.0-69.9	70.0-74.9	75.0-79.9
05JUL-09JUL	1	12	39	16	17	4	6	4	1	0	0	0	0	0
18JUL-24JUL	0	2	1	11	4	20	18	13	11	5	4	0	0	1
01AUG-05AUG	0	0	0	0	0	0	1	4	5	8	14	27	28	14
15AUG-18AUG	0	0	0	0	0	0	0	0	0	1	5	5	19	16
29AUG-01SEP	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12SEP-15SEP	0	0	0	0	0	0	0	0	0	1	0	0	0	0
26SEP-29SEP	0	0	0	0	0	0	0	0	1	1	0	0	0	0
10OCT-13OCT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24OCT-27OCT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07NOV-11NOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28NOV-02DEC	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	14	40	27	21	24	25	21	18	16	23	32	47	33

DATES	80.0-84.9	85.0-89.9	90.0-94.9	95.0-99.9	100.0-104.9	105.0-109.9	110.0-114.9	115.0-119.9	120.0-124.9	125.0-129.9	130.0-134.9	135.0-139.9	140.0-144.9	145.0-149.9
05JUL-09JUL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18JUL-24JUL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01AUG-05AUG	5	5	0	1	2	0	0	0	0	0	0	0	0	0
15AUG-18AUG	19	14	8	2	5	3	0	1	0	0	0	0	0	0
29AUG-01SEP	2	10	14	5	3	6	3	0	1	0	0	0	0	0
12SEP-15SEP	1	3	6	8	26	16	7	8	5	2	4	2	2	0
26SEP-29SEP	0	0	0	0	1	1	1	2	5	3	3	2	4	5
10OCT-13OCT	0	0	0	0	0	0	0	1	1	2	4	5	5	0
24OCT-27OCT	0	0	0	0	2	0	0	1	1	2	0	1	4	2
07NOV-11NOV	0	0	0	0	0	0	0	0	0	0	3	0	0	3
28NOV-02DEC	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	27	32	28	16	39	26	11	13	13	9	14	11	15	10

DATES	150.0-154.9	155.0-159.9	160.0-164.9	165.0-169.9	170.0-174.9	175.0-179.9	180.0-184.9	185.0-189.9+	N	MEAN	MIN	MED	MAX	SD
05JUL-09JUL	0	0	0	0	0	0	0	0	100	26.9	14.0	24.0	50.0	8.0
18JUL-24JUL	0	0	0	0	0	0	0	0	90	42.0	17.0	42.0	76.0	10.9
01AUG-05AUG	0	0	0	0	0	0	0	0	119	68.4	43.0	68.0	100.0	10.4
15AUG-18AUG	0	0	0	0	0	0	0	0	98	80.8	57.0	80.0	115.0	11.1
29AUG-01SEP	1	0	0	0	0	0	0	0	47	96.0	76.0	92.0	151.0	13.0
12SEP-15SEP	0	0	0	0	0	0	0	0	91	107.2	58.0	105.0	144.0	13.7
26SEP-29SEP	0	1	0	0	0	0	1	0	31	127.5	50.0	130.0	181.0	25.5
10OCT-13OCT	2	1	1	0	0	0	0	0	22	137.7	116.0	138.5	160.0	10.6
24OCT-27OCT	2	1	0	1	1	0	0	0	18	139.1	102.0	143.0	170.0	19.7
07NOV-11NOV	2	2	4	0	0	0	0	0	14	150.1	130.0	152.0	160.0	10.8
28NOV-02DEC	1	0	0	0	0	0	0	0	2	144.0	138.0	144.0	150.0	8.5
	8	5	5	1	1	0	1	0	632					

NOTE: Lengths are total lengths in mm, N = Number of lengths, MEAN = Mean length, MIN = Minimum length, MED = Median length, MAX = Maximum length, SD = Standard deviation

Table F-25 Length Frequency Distribution of Young-of-Year Weakfish in Hudson River Estuary Determined from Beach Seine Survey, 2005

DATES	10.0-14.9	15.0-19.9	20.0-24.9	25.0-29.9	30.0-34.9	35.0-39.9	40.0-44.9	45.0-49.9	50.0-54.9	55.0-59.9	60.0-64.9	65.0-69.9
14JUN-16JUN	0	0	0	0	0	0	0	0	0	0	0	0
28JUN-30JUN	0	0	0	0	0	0	0	0	0	0	0	0
12JUL-14JUL	0	0	0	0	1	0	0	0	0	1	0	0
25JUL-28JUL	0	0	0	0	0	0	0	0	0	0	0	0
09AUG-12AUG	0	0	0	0	0	0	0	0	0	0	0	0
22AUG-25AUG	0	0	0	0	0	0	0	0	0	0	0	0
06SEP-09SEP	0	0	0	0	0	0	0	0	0	0	0	0
20SEP-23SEP	0	0	0	0	0	0	0	0	0	0	0	0
03OCT-06OCT	0	0	0	0	0	0	0	0	0	0	0	0
17OCT-20OCT	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	1	0	0	0	0	1	0	0

DATES	70.0-74.9	75.0-79.9	80.0-84.9	85.0-89.9	90.0-94.9+	N	MEAN	MIN	MED	MAX	SD
14JUN-16JUN	0	0	0	0	0	0	.	.	.	.	.
28JUN-30JUN	0	0	0	0	0	0	.	.	.	.	.
12JUL-14JUL	0	0	0	0	0	2	45.0	32.0	45.0	58.0	18.4
25JUL-28JUL	0	0	0	1	0	1	85.0	85.0	85.0	85.0	.
09AUG-12AUG	0	0	0	0	0	0	.	.	.	.	.
22AUG-25AUG	0	0	0	0	0	0	.	.	.	.	.
06SEP-09SEP	0	0	0	0	0	0	.	.	.	.	.
20SEP-23SEP	0	0	0	0	0	0	.	.	.	.	.
03OCT-06OCT	0	0	0	0	0	0	.	.	.	.	.
17OCT-20OCT	0	0	0	0	0	0	.	.	.	.	.
	0	0	0	1	0	3					

NOTE: Lengths are total lengths in mm, N = Number of lengths, MEAN = Mean length, MIN = Minimum length, MED = Median length, MAX = Maximum length, SD = Standard deviation