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Email Number: 5494

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Subject: [External_Sender] Email 2 for 2014 YCR
Sent Date: 4/21/2016 10:14:25 AM
Received Date: 4/21/2016 10:15:03 AM
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Tracking Status: None

Post Office: BLUPR0201MB1425.namprd02.prod.outlook.com

Files	Size	Date & Time
MESSAGE	181	4/21/2016 10:15:03 AM
2014-Appendix C.pdf	1821063	

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Appendix C

**Numbers of Fish Collected in the
Long River (1988-2014),
Fall Juvenile (1985-2014), and
Beach Seine (1985-2014) Surveys**

APPENDIX C
LIST OF TABLES

<u>Number</u>	<u>Title</u>
C-1	Total number of fish collected in the Long River Survey, 1988-2014
C-2	Total number of fish collected in the Fall Juvenile Survey, 1985-2014
C-3	Total number of fish collected in the Beach Seine Survey, 1985-2014

Table C-1 Total Number of Fish Collected in the Long River Survey, 1988-2014

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Anadromous																		
Alewife	8,200	624	60	2,727	555	1,275	1,679	293	1,787	171	235	10,231	320	5,284	183	537	641	5,479
Alosa spp.	258,802	423,742	714,369	250,755	465,613	191,558	206,819	122,644	460,957	58,794	128,111	124,710	391,708	180,190	145,643	141,877	126,035	103,618
American shad	51,162	62,755	49,242	25,128	30,345	15,867	31,213	12,120	23,378	6,744	8,887	12,185	11,567	14,048	6,732	15,676	4,711	7,126
Atlantic sturgeon	11	2	5	26	4		7	1	1	3	2			1	10	3	4	
Atlantic tomcod	25,414	37,397	38,431	40,804	10,558	21,343	20,724	64,680	17,375	71,070	91,679	13,625	10,337	57,412	7,556	20,724	92,099	55,146
Blueback herring	4,992	2,568	1,230	28,397	30,496	3,290	9,315	1,412	18,354	2,358	246	4,367	1,907	1,100	578	8,760	801	1,977
Hickory shad								1	4	5								
Rainbow smelt	24,693	767	6,838	2,494	23,035	12,002	59,829	2,354			4		1	1				
Sea lamprey										1	4							
Striped bass	61,072	225,498	264,907	359,994	462,382	459,384	674,881	383,781	962,335	272,329	443,766	790,358	1,376,173	1,192,084	151,199	732,410	416,917	387,265
Catadromous																		
American eel	789	917	848	1,372	827	1,505	921	1,388	1,230	527	519	294	468	708	262	476	365	513
Estuarine																		
Atlantic silverside	152	11	67	49	27	19	144	323	52	4	12	29	98	35	35	54	188	50
Banded killifish	5	2,274	1		5	3	4	24	2		2			1				13
Fat sleeper												1						
Fourspine stickleback	6	1	1	2	1	7	5		7	1		1					1	1
Hogchoker	301,192	589,469	13,591	908,378	44,337	87,673	159,013	130,281	51,986	22,814	36,279	23,050	24,894	13,417	28,225	17,313	36,061	24,267
Inland silverside	98	101		58	42	209	857	149	166	40	9	69	12	57	97	51	338	169
Lined sea horse	11		1	9				2		1	3		1					
Mummichog	1						2	6				1	2		20	4	2	1
Northern pipefish	1,135	153	102	2,059	137	416	186	277	291	170	120	427	82	186	226	64	130	238
Shortnose sturgeon	3		2	3	3	14	8	7	38	2	5	1	4	13	1	4	4	1
Threespine stickleback	2		1			2		2	3			1						
White catfish	77	100	87	76	52	25	214	196	205	96	70	172	70	80	56	78	38	79
White perch	138,753	198,953	157,348	147,232	265,656	221,021	172,995	115,842	287,690	69,844	130,785	136,518	267,801	134,744	142,260	140,645	138,513	107,406
Freshwater																		
Black bullhead																3		
Black crappie									1								1	
Bluegill				5			1	1					3			1		
Brindled madtom																		
Brown bullhead	1	12	33	30	4	7	18	25	31	11	8	3	8	22	1	48	36	10
Brown trout			1		1													
Carp	730	651		340	731	136	121	147	1,199	867	161	211	533	22	130	597	455	647
Catostomidae				1	1									4				
Central mudminnow																		
Centrarchidae	30	66	46	40	132	40	125	11	152	26	100	16	137	552	155	50	136	67
Chain pickerel									2	1		1			1			
Channel catfish				1	1			5	5	4		11	8	23	24	118	91	101
Common shiner			12															
Creek chub																		
Cyprinidae	470	1,736	6,839	1,764	2,576	2,276	2,044	910	2,709	696	1,358	2,705	3,482	3,101	2,623	1,150	1,073	786
Emerald shiner											19	2		1				
Fall fish																		
Fathead minnow			1															
Freshwater drum					1	1		8	124	1	10	27	8	15	90	55	255	640
Gizzard shad		85	5	3	535	123	440	1,065	688	708	885	1,281	2,383	161	9,060	1,292	360	80
Golden shiner		1	7			1	2	11	1		1		2	1				2

Table C-1 (Continued)

Freshwater (cont.)																		
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Goldfish	113	217	.	97	22	7	18	.	5	2	.	.	.	.	.	.	.	.
Largemouth bass	.	1	.	2	.	1	1	.	.	.	1	.	.	.	.	.	2	.
Logperch	48	20	.	.	179	.	.	.	.	.	3	.	.	.	.	3	4	.
Northern hog sucker	19	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Percidae	2	15	.	18	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Pumpkinseed	132	1	.	2	.	4	1	.	.	1	.	1	.	.	.	2	.	.
Rock bass	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Satinfin shiner	.	.	.	.	1	.	.	.	1	.	.	.	.	.	.	.	.	.
Silvery minnow	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
Slimy sculpin	.	.	.	.	.	.	.	.	1	.	.	.	.	.	1	.	.	.
Smallmouth bass	.	3	1	.	23	.	1	.	.	.	2	.	1	3	.	.	.	2
Spottail shiner	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Spottail shiner	60	98	55	83	45	33	62	94	156	89	53	45	62	87	9	42	23	29
Tessellated darter	2,898	2,805	2,290	1,566	2,836	1,936	1,714	2,205	1,550	1,493	2,834	2,726	2,822	1,884	1,455	1,990	2,642	718
Walleye	.	26	.	1	2	12	32	.	23	22	29	.	80	5	5	132	31	279
White crappie	.	.	.	.	.	.	4	1	.	5	.	.	.	3	3	2	3	2
White sucker	.	10	44	.	1	.	.	1	13	.	24	6	11	3	.	.	.	.
Yellow bullhead	.	.	.	.	.	.	.	2	.	.	.	.	.	.	.	.	.	.
Yellow perch	152	325	610	157	369	225	333	69	764	141	307	127	1,062	228	476	1,096	1,145	801
Marine																		
American sand lance	48	8	2	4	4	.	1	42	6	.	7	2	11	119	2	49	47	20
Atlantic cod	68	.	.	.	.	.	5	409	3	.	.	.	6,512	1,371	2,574	1,260	11,094	544
Atlantic croaker	.	.	.	.	157	1	.	.	.	.	3,405	3,781	.	.	.	887	325	279
Atlantic herring	522	178	76	1,177	842	1,151	37	3,986	5,485	2,614	3,809	4,585	27	1,984	18	603	4	.
Atlantic mackerel	4	.	.	1	2	.	.	.	1,968	1,076	9	141	6	1	.	32	.	.
Atlantic menhaden	6	12	671	1,301	404	268	13,009	2,678	3,036	35,979	18,041	68,998	4,887	29,431	9,644	10,873	7,420	78,741
Atlantic needlefish	.	.	3	.	.	1	.	1	.	.	.	.	.	.	.	.	.	20
Atlantic seasnail	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
Bay anchovy	2,852,331	444,854	900,354	3,831,982	1,341,076	1,849,143	3,051,491	1,271,339	1,337,747	795,707	698,247	339,031	215,316	146,897	671,428	363,737	1,749,221	790,847
Black drum	.	.	.	.	.	.	4	.	.	1	3	6	.	.	.	.	.	.
Black sea bass	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Blackcheek tonguefish	.	.	.	.	10	.	.	.	.	.	.	.	.	.	.	.	.	.
Blenniidae	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Bluefish	85	54	165	151	147	78	73	61	43	35	21	71	46	62	15	26	28	34
Bothidae	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Butterfish	143	18	18	27	46	38	108	11	12	29	22	273	6	120	7	13	240	24
Conger eel	132	72	54	29	124	195	175	45	117	14	10	1	71	22	29	42	3	13
Cottidae	128	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Crevalle jack	1	4	.	1	.	.	.	.	1	.	2	1	.	.	.	.	.	.
Cunner	11,129	1,429	.	1,955	4,221	996	2,176	3,790	4,932	3,106	1,884	4,733	1,739	6,210	3,658	3,325	5,293	6,416
Cusk	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
Feather blenny	.	.	.	.	.	.	.	.	.	.	1	23	3	3	5	.	.	.
Fourbeard rockling	.	209	2	404	691	4	4,157	6,487	571	7,586	3,116	391	184	2,319	2,205	389	1,360	5,072
Fourspot flounder	.	1	.	.	.	.	.	.	.	.	.	2	.	.	.	.	.	2
Gadidae	6	.	.	.	.	10	.	1	.	.	.	.	.	.	.	.	.	.
Gobiidae	9,007	5,593	22,569	78,349	26,599	3,794	3,411	2,683	1,108	936	3,411	28,420	16,276	15,046	22,722	7,756	20,143	23,597
Goosefish	.	.	.	8	12	.	.	.	1	.	.	.	.	.	.	.	.	.
Grubby	605	387	167	521	248	66	99	2,516	317	1,768	1,525	575	161	898	702	122	1,207	904
Gulf stream flounder	.	.	.	.	.	.	.	.	.	3	1	1	.	.	2	.	1	.
Harvestfish	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
Inshore lizardfish	8	8	.	3	14	1	2	1	.	4	36	2	2	8	.	.	.	.
King mackerel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Labridae	.	.	.	1	.	.	.	.	1	.	.	.	.	.	.	1	.	.
Longhorn sculpin	.	2	.	48	.	2	.	.	.	.	.	.	.	.	.	.	.	.

Table C-1 (Continued)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Marine (cont.)																		
Lookdown	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
Moonfish	.	.	.	.	.	.	1	.	.	.	.	.	.	2	.	.	.	.
Myoxocephalus spp.	279	44	1,619	8	73	9	1	3	6	1	5	369	107	6	169	72	8	19
Naked goby	.	118	.	10	10	1	39	1	.	.	2	16	.	.	1	.	.	.
Northern kingfish	1	5	32	279	10	2	.	4	14	2	.	11	1	3	.	.	4	2
Northern puffer	40	2	17	19	1	4	27	5	48	1	14	37	.	23	1	4	.	1
Northern searobin	129	.	.	.	.	.	53	.	.	.	1	4	.	2	1	.	.	.
Northern stargazer	.	1	.	.	.	.	.	.	.	.	1	1	1	.	.	1	.	7
Oyster toadfish	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	35
Phycidae	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.
Pinfish	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Pink wormfish	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Pleuronectidae	.	.	.	144	.	.	.	.	.	16	2	3	.	.	.	.	.	.
Pleuronectiformes	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
Pollack	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
Radiated shanny	3	1	1	.	1	1	.	.	9	13	19	15	2	1	.	.	.	1
Red hake	9	2	1	5	6	.	.	35	32	54	28	17	13	49	7	44	72	71
Rock gunnel	110	19	.	41	44	30	447	218	37	33	4	26	66	12	22	7	4	50
Rough silverside	.	3	.	.	.	2	65	.	.	.	.	.	.	.	.	.	.	1
Sciaenidae	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	1	.	.
Scup	.	.	.	4	19	1	.	1	.	.	.	.	.	10	234	116	2	19
Seaboard goby	1	.	.	26	.	16	.	.	.	19	4	14	77	4	65	70	33	697
Searobin	8	.	312	.	.	.	.	.	.	8	1	399	.	.	.	.	.	.
Sharptail goby	.	.	.	.	.	.	.	.	.	.	.	2	.	.	.	.	.	.
Silver anchovy	1	3	1	.	.	.	.	.	.	.	.	1	.	2	.	.	1	.
Silver hake	.	.	.	.	.	.	.	.	2	.	.	.	.	.	.	.	.	.
Silver perch	.	.	.	.	.	.	2	1	.	.	.	.	.	.	.	.	.	.
Skillfish	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Smallmouth flounder	38	.	1	91	71	32	175	22	7	18	40	37	47	6	6	20	61	4
Spanish mackerel	.	.	.	20	.	2	1	.	1	.	.	.	1	.	2	.	.	.
Speckled worm eel	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Spot	62	1	2	.	40	20	9	146	8	.	.	.	11	90	35	193	111	40
Spotted hake	.	.	1	19	.	13	6	5	186	76	49	52	38	.	.	.	65	.
Striped anchovy	.	.	.	.	.	.	.	.	35	6	3	5	.	.	.	.	.	.
Striped burfish	.	.	.	4	3	1	.	1	3	18	8	9	19	8	.	3	3	4
Striped cuskeel	2	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Striped killifish	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
Striped searobin	43	4	.	234	5	41	671	3	4	112	45	85	15	1	39	21	27	5
Summer flounder	1,205	24	1	39	18	.	7	23	11	5	8	8	26	26	10	8	22	4
Tautog	.	3,432	.	969	488	241	439	3,171	3,396	3,009	490	2,908	2,028	6,129	4,192	4,483	8,668	9,966
Tetraodontidae	.	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Weakfish	1,586	2,602	122,082	6,821	1,206	1,621	2,804	623	59,707	13,345	145,785	224,618	50,800	83,380	51,266	57,429	94,647	108,943
Windownpane	8,866	5,162	49	1,500	14,953	166,221	6,917	17,602	7,074	13,902	1,635	3,210	1,816	13,095	1,563	4,134	2,192	2,557
Winter flounder	900	178	64	340	794	188	362	4,754	774	4,109	2,325	3,996	9,831	1,905	4,353	10,306	9,580	1,921
Witch flounder	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
Wrymouth	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Yellowtail flounder	.	.	.	.	2	.	1	162	2	6	13	7	1	5	2	.	.	6
Unidentified																		
Acipenseridae	4	6	18	9	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Atherinidae	.	1	.	259	.	16	45	19	26	44	1	4	1	.	.	1	.	.
Cyprinodontidae	.	8	.	.	.	5	.	.	.	5	.	.	.	.	1	.	.	.
Fundulus spp.	.	2	4	3	1	111	4	3	2	.	1	62	.	1	.	1	1	1
Gasterosteidae	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Menidia spp.	12	7	193	.	2	.	1	1	.	52	11	1	.	.	1	.	.	.

Table C-1 (Continued)

Unidentified (cont.)	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Morone unidentifed	2,180	13,473	955	17,620	7,246	12,406	8,350	5,416	29,225	3,094	31,732	54,420	58,042	37,644	5,768	16,709	9,721	2,233	
Petromyzontidae																			
Unidentifiable	49,244	7,031	36,103	113,576	18,496	9,938	32,546	1,131	7,378	480	1,125	1,240	1,146	2,979	448	1,914	4,528	1,320	
Anadromous																			
Alewife	153	2,474	5,054	183	3,108	964	104	119	1,466										
Alosa spp.	75,365	155,009	73,937	77,940	84,981	269,239	137,122	124,664	402,988										
American shad	800	995	1,115	987	593	9,867	1,057	1,334	3,074										
Atlantic sturgeon	1	4	3	3	3	4	2	12	7										
Atlantic tomcod	9,049	9,176	27,107	23,395	32,819	13,352	7,765	3,647	18,984										
Blueback herring	177	2,366	2,881	195	4,471	4,393	206	250	15,924										
Hickory shad							160												
Rainbow smelt	1	3		1				1											
Sea lamprey	1	1	2			2													
Striped bass	109,061	532,870	176,428	511,009	497,462	247,276	133,205	327,005	1,303,781										
Catadromous																			
American eel	276	449	301	533	480	517	174	692	707										
Estuarine																			
Atlantic silverside	157	454	239	292	228	75	739	17	42										
Banded killifish	.	.	2	7	6	1	.	178	1										
Fat sleeper																			
Fourspine stickleback																			
Hogchoker	44,711	96,691	86,813	19,204	62,847	261,778	111,724	45,749	142,215										
Inland silverside	162	195	168	171	218	203	532	97	115										
Lined sea horse			2		1	1		1	1										
Mummichog	1		3	2	3		3	1	1										
Northern pipefish	36	246	135	130	194	405	718	54	108										
Shortnose sturgeon	5	11	2		2	8	2		4										
Threespine stickleback																			
White catfish	147	72	43	98	92	56	21	143	90										
White perch	95,979	92,203	95,325	88,826	124,046	150,844	71,432	106,139	88,472										
Freshwater																			
Black bullhead	.	.	.	.	2	7	9	50	4										
Black crapple	.	.	3	.	.	.	1	1											
Bluegill	.	.		.	.	.	.	.	1										
Brindled madtom	.	.		.	.	.	.	.	1										
Brown bullhead	32	4	28	36	42	52	7	75	19										
Brown trout																			
Carp	1,219	735	629	359	847	429	1,443	1,044	1,674										
Catostomidae																			
Central mudminnow	.	.	.	.	.	.	.	.	.	
Centrarchidae	151	40	183	56	93	62	79	140	25										
Chain pickerel	.	.	.	.	.	.	.	.	.	
Channel catfish	137	.	148	185	184	219	37	601	232										
Common shiner	.	.	.	.	.	.	.	.	.	
Creek chub	.	.	.	.	.	.	.	.	.	
Cyprinidae	1,622	979	1,644	1,102	1,431	2,112	497	745	750										

Table C-1 (Continued)

Freshwater (cont.)													
	2006	2007	2008	2009	2010	2011	2012	2013	2014				
Emerald shiner	.	.	.	.	.	.	.	.	.	.	.	.	.
Fall fish	.	.	.	.	.	.	.	.	.	.	.	.	.
Fathead minnow	590	675	760	362	1,878	1,720	3,625	29,876	6,083	.	.	.	.
Freshwater drum	1,230	417	138	307	175	81	588	1,934	564	.	.	.	.
Gizzard shad	7	.	1	.	.	.	.	.	.	.	.	.	.
Golden shiner	.	.	.	.	.	.	.	.	.	.	.	.	.
Goldfish	.	.	.	.	.	.	.	.	.	.	.	.	.
Largemouth bass	.	16	1	.	1	.	.	.	.	.	.	.	.
Logperch	1	1	.	.	.	.	3	1	.	.	.	.	.
Northern hog sucker	.	.	.	.	.	.	.	.	.	.	.	.	.
Percidae	.	.	.	.	.	.	.	.	.	.	.	.	.
Pumpkinseed	1	1	.	1	1	1	.	.	.	.	.	.	.
Rock bass	.	.	.	.	.	.	.	.	.	.	.	.	1
Satinfin shiner	.	.	.	.	.	.	.	.	.	.	.	.	.
Silverfin minnow	.	.	.	.	.	.	.	.	.	.	.	.	.
Slimy sculpin	.	.	.	.	.	.	.	.	.	.	.	.	.
Smallmouth bass	3	.	.	2	.	.	.	.	.	.	.	.	1
Spotfin shiner	7	.	.	.	.	.	.	.	.	.	.	.	.
Spottail shiner	33	89	58	62	34	49	9	20	51	.	.	.	.
Tessellated darter	1,484	1,109	1,730	3,029	842	1,117	580	663	603	.	.	.	.
Walleye	105	54	12	5	20	95	3	12	13	.	.	.	.
White crappie	.	.	.	.	.	.	.	.	.	.	.	.	.
White sucker	12	2	3	6	2	23	4	4	40	.	.	.	.
Yellow bullhead	.	.	.	.	.	.	.	.	.	.	.	.	.
Yellow perch	538	243	487	218	484	1,307	153	60	254	.	.	.	.
Marine													
American sand lance	8	12	8	2	68	39	2	6	24	.	.	.	.
Atlantic cod	.	.	1	10	.	18	.	13	1	.	.	.	.
Atlantic croaker	2,000	378	273	1,075	556	12	1,601	791	5,263	.	.	.	.
Atlantic herring	48	2	148	88	706	869	19	491	2	.	.	.	.
Atlantic mackerel	.	21	.	464	.	50	.	12	.	.	.	.	.
Atlantic menhaden	10,562	22,125	13,606	13,108	15,631	6,534	4,178	9,131	3,888	.	.	.	.
Atlantic needlefish	.	.	2	1	.	1	2	1	2	.	.	.	.
Atlantic seahorse	.	.	.	.	.	3	.	.	.	.	.	.	.
Bay anchovy	374,336	1,036,876	1,955,290	856,886	1,148,252	1,248,518	936,169	294,125	387,519	.	.	.	.
Black drum	.	.	.	.	.	.	.	.	.	.	.	.	.
Black sea bass	.	.	.	.	.	.	32	.	1	.	.	.	.
Blackcheek tonguefish	.	.	.	.	.	.	.	.	.	.	.	.	.
Blenniidae	.	.	.	1	.	.	.	.	.	.	.	.	.
Bluefish	18	28	23	18	22	29	8	20	46	.	.	.	.
Bothidae	.	.	.	.	.	.	.	.	.	.	.	.	.
Butterfish	37	20	165	133	10	12	20	46	104	.	.	.	.
Conger eel	13	55	36	15	27	8	38	28	7	.	.	.	.
Cottidae	.	.	.	.	.	.	.	.	.	.	.	.	.
Crevalle jack	.	1	1	.	.	.	.	.	.	.	.	.	.
Cunner	1,363	8,882	14,716	7,173	5,601	37,730	6,693	3,238	6,563	.	.	.	.
Cusk	.	1	.	.	.	.	.	.	.	.	.	.	.
Feather blenny	.	.	17	.	.	9	48	13	2	.	.	.	.
Fourbeard rockling	2,189	2,222	2,191	2,063	867	1,831	277	393	44	.	.	.	.
Fourspot flounder	.	.	2	.	.	28	16	3	.	.	.	.	.
Gadidae	.	.	.	.	.	.	.	.	.	.	.	.	.
Gobiidae	14,995	32,595	10,882	22,108	21,434	21,559	55,036	15,912	39,631	.	.	.	.
Goosefish	.	.	.	.	.	.	.	.	.	.	.	.	.
Grubby	620	638	788	3,647	520	1,188	141	19	55	.	.	.	.

Table C-1 (Continued)

Marine (cont.)	2006	2007	2008	2009	2010	2011	2012	2013	2014
Gulf stream flounder	.	.	.	.	.	.	.	.	.
Harvestfish	.	.	1	.	.	.	.	.	.
Inshore lizardfish	.	.	1	.	2	.	.	.	17
King mackerel	.	.	.	.	.	.	.	.	.
Labridae	.	192	2	.	.	.	.	.	.
Longhorn sculpin	.	.	.	.	.	20	.	2	.
Lookdown	.	.	.	.	.	.	.	.	.
Moontfish	.	.	1	1	.	.	.	1	1
Myoxocephalus spp.	.	.	.	.	.	.	.	.	.
Naked goby	94	41	5	34	99	50	17	27	65
Northern kingfish	.	.	16	32	.	8	.	.	8
Northern puffer	.	4	16	2	.	13	269	.	21
Northern searobin	1	33	5	1	.	.	.	3	5
Northern stargazer	1	.	.	.	.	.	.	.	1
Oyster toadfish	.	.	3	3	.	11	.	1	1
Phycidae	2	.	16	1	.	.	.	.	.
Pinfish	.	.	.	.	.	.	.	.	5
Pink wormfish	.	.	.	.	.	.	.	.	.
Pleuronectidae	.	.	.	.	.	.	.	1	.
Pleuronectiformes	.	.	.	.	.	.	1	.	.
Pollack	.	.	.	.	.	1	.	1	.
Radiated shanny	.	.	.	.	.	.	.	.	.
Red hake	1	.	.	1	.	.	.	.	.
Rock gunnel	19	40	37	181	26	117	4	6	20
Rough silverside	55	144	14	123	72	34	97	31	17
Sciaenidae	.	.	.	.	.	.	.	.	.
Scup	.	.	35	27	45	16	220	218	2
Seaboard goby	235	68	971	280	17,988	119	2,529	.	7
Searobin	20	1,028	.	.	.	.	.	.	2,365
Sharptail goby	.	.	.	.	.	.	.	.	.
Silver anchovy	.	.	.	1	.	.	.	.	.
Silver hake	.	.	.	.	.	.	.	.	.
Silver perch	.	.	.	1	.	.	37	.	.
Skillefish	.	.	.	.	.	1	184	40	11
Smallmouth flounder	29	3	13	16	1	10	15	14	39
Spanish mackerel	.	.	.	.	.	.	.	.	.
Speckled worm eel	.	.	.	.	.	.	3	.	.
Spot	5	.	3	.	.	1	67	24	.
Spotted hake	144	18	63	99	185	139	63	234	144
Striped anchovy	.	4	12	.	19	57	7	5	.
Striped burrfish	1	.	.	.	.	2	.	.	2
Striped cuskeel	.	3	1	1	6	.	.	1	.
Striped killifish	.	.	.	.	.	.	.	.	.
Striped searobin	16	9	24	72	2	4	97	7	30
Summer flounder	18	12	30	154	39	52	26	88	116
Tautog	1,177	5,281	10,313	12,889	5,560	56,700	5,455	6,047	22,551
Tetraodontidae	.	.	.	.	.	.	.	.	.
Weakfish	17,960	52,305	59,310	33,795	23,342	27,058	19,653	36,773	10,533
Windowpane	978	2,825	2,389	2,883	1,625	1,997	709	679	1,203
Winter flounder	1,312	4,015	1,155	4,744	406	3,689	643	1,673	1,342
Witch flounder	.	.	.	1	.	1	.	1	.
Wrymouth	.	.	.	.	.	.	.	.	1
Yellowtail flounder	.	.	2	1	5	9	.	2	.

Table C-1 (Continued)

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Unidentified									
Acipenseridae	.	.	.	.	.	.	.	1	.
Atherinidae	.	1	9	3	.	6	.	.	.
Cyprinodontidae	.	.	6	1	.	.	.	.	.
Fundulus spp.	.	.	.	.	.	.	.	.	.
Gasterosteidae	.	2	2	1	.	.	.	.	.
Menidia spp.	3	3,299	1,671	1,461	5,450	11,398	6,737	4,189	8,694
Morone unidentified	3,677								
Petromyzontidae	1	.	1	.	.	.	.	3	.
Unidentifiable	101	550	381	34	1,013	2,010	804	1,150	1,224

Table C-1 (Continued)

Sampling Statistics for Long River Survey, 1988-2014

Start Date	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
End Date	18-Apr	17-Apr	19-Apr	15-Apr	13-Apr	12-Apr	11-Apr	6-Mar	12-Mar	11-Mar
Volume Sampled (m3)	25-Aug	23-Aug	16-Aug	17-Oct	14-Oct	5-Oct	5-Oct	12-Oct	9-Oct	9-Oct
Sample Size	524,777	519,252	419,294	537,825	632,978	596,043	579,959	649,908	675,698	671,661
	1,663	1,641	1,561	1,991	1,986	1,987	1,986	2,431	2,362	2,365
Start Date	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
End Date	2-Mar	23-Mar	7-Mar	15-Mar	4-Mar	19-Mar	2-Mar	16-Mar	8-Mar	14-Mar
Volume Sampled (m3)	7-Oct	6-Oct	5-Oct	9-Oct	9-Oct	9-Oct	7-Oct	6-Oct	5-Oct	3-Oct
Sample Size	810,440	774,435	857,373	711,723	716,977	704,211	706,106	654,297	689,180	691,098
	2,435	2,329	2,435	2,300	2,438	2,433	2,439	2,433	2,436	2,437
Start Date	2008	2009	2010	2011	2012	2013	2014			
End Date	4-Mar	16-Mar	16-Mar	14-Mar	27-Feb	13-Mar	31-Mar			
Volume Sampled (m3)	9-Oct	7-Oct	7-Oct	5-Oct	3-Oct	4-Oct	1-Oct			
Sample Size	645,337	628,594	626,562	635,472	497,795	637,842	660,344			
	2,439	2,442	2,440	2,442	1,865	2,435	2,210			

Table C-2 Total Number of Fish Collected in the Fall Juvenile Survey, 1985-2014

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Anadromous																					
Alewife	1,142	554	702	379	327	459	994	790	730	719	519	830	868	97	3,925	746	2,118	379	1,077	307	1,980
Alosa spp.	3,341	282	2,591	4,193	4,331	3,543	1,276	10,650	1,905	1,725	2,895	18,007	6,547	82	7,681	2,688	2,562	2,356	4,262	1,688	3,500
American shad	1,717	2,166	776	1,483	3,646	1,323	1,291	3,406	961	2,095	831	2,964	1,105	310	1,407	808	1,369	598	433	400	294
Atlantic sturgeon	96	184	149	117	63	6	10	11	7	15	15	8	40	30	18	5	23	37	39	22	12
Atlantic tomcod	5,083	10,046	7,908	8,210	14,060	1,105	4,914	7,299	3,664	1,679	3,649	4,632	10,645	1,928	1,798	6,528	5,910	581	1,456	4,802	2,536
Blueback herring	41,919	6,525	18,596	37,957	22,112	15,982	55,299	38,090	22,442	18,790	14,006	20,863	13,999	566	20,315	6,412	13,731	6,205	10,727	3,223	15,677
Hickory shad	3	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	1
Rainbow smelt	126	389	429	576	34	216	256	2,549	757	363	136	.	.	1	.	.	.	.	.	.	.
Sea lamprey	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Striped bass	888	2,348	11,633	18,679	8,472	3,624	4,672	3,773	8,333	8,719	10,327	6,293	4,461	1,367	8,989	3,683	3,654	2,516	8,553	1,893	5,107
Catadromous																					
American eel	1,872	2,906	2,254	2,076	1,444	342	984	1,392	1,406	1,647	1,627	1,434	722	763	738	792	566	244	310	360	376
Estuarine																					
Atlantic silverside	.	2	.	3	1	2	18	2	29	25	33	42	19	20	19	82	13	33	10	62	22
Banded killifish	78	12	3	3	3	.	2	.	6	21	24	.	.	1	1	.	1	2	.	.	3
Fat sleeper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	50	.	.	.	.	.	.
Forsyphine	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
stickleback	1	9	.	1	1	.	.	.	2	.	1	1	.	1	.	.	.	.	2	1	.
Hogchoker	89,948	108,036	89,042	74,672	73,613	22,760	42,916	62,358	43,064	15,581	23,823	18,422	4,861	3,964	5,696	7,452	7,243	11,320	19,446	20,370	16,413
Inland silverside	.	.	.	1	.	2	.	.	2	.	4	.	1	.	1	.	.	.	.	.	.
Lined sea horse	.	.	.	.	.	.	.	.	.	.	1	.	1	.	.	.	.	.	.	.	.
Mummichog	.	.	.	.	.	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Northern pipefish	40	13	22	25	12	4	16	14	65	15	24	3	27	10	9	9	12	15	3	17	17
Shorthose sturgeon	16	8	11	20	12	2	18	76	82	50	36	48	26	30	52	50	47	27	29	29	30
White catfish	721	677	775	806	740	352	547	172	939	1,363	1,077	967	235	840	494	337	371	155	228	147	522
White mullet	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
White perch	19,721	31,771	27,008	25,760	20,106	5,381	11,019	13,832	8,341	9,007	10,272	8,569	3,655	3,474	8,955	6,225	5,775	4,715	11,131	5,426	8,631
Freshwater																					
Black bullhead	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Black crappie	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
Bluegill	.	.	1	.	1	.	1	3	2	.	1	1	2	.	.	.	.	1	.	.	.
Brook trout	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Brown bullhead	37	127	109	171	172	17	125	177	92	278	211	251	97	167	524	549	460	501	600	476	611
Carp	4	13	5	4	10	1	6	7	7	3	6	2	5	.	11	2	6	5	2	1	6
Central mudminnow	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Centrarchidae	1	4	1	5	3	.	.	.	.	4	.	.	4	2	1	1	.	8	7	2	2
Channel catfish	.	5	10	9	12	1	4	7	38	187	95	127	66	149	331	378	507	674	1,497	995	2,974
Cyprinidae	48	.	.	.	.	.	.	.	.	.	.	1	.	11	2	1	.	.	.	.	.
Emerald shiner	.	.	.	.	1	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
Fall fish	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Fathead minnow	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Freshwater drum	.	.	.	.	3	.	.	1	2	1	3	1	.	2	1	5	3	4	25	.	37

Table C-2 (Continued)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Freshwater																					
(cont.)																					
Gizzard shad	4	6	8	2	8	1	.	.	3	1	5	.	15	3	25	4	35	33	4	26	11
Golden shiner	.	1	.	.	.	.	.	29	.	.	.	2	3	.	.	4	.	5	1	1	.
Goldfish	.	.	.	.	1	.	.	1	.	1	.	1	.	.	1	1	3	2	1	1	11
Largemouth bass	.	.	.	.	.	.	.	.	4	.	.	1	.	.	.	.	.	.	1	.	1
Logperch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	18	.	.
Margined madtom	.	1	1	.	.	.	1	.	.	1	.	.	.	.	.	.	.	.	.	.	.
Pumpkinseed	57	2	13	5	1	6	12	2	16	12	49	20	9	1	10	2	1	5	4	7	6
Redbreast sunfish	1	.	.	1	2	.	.	.	.	1	3	.	.	.	.	43	.	.	.	.	.
Rock bass	.	1	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
Satinfin shiner	.	.	.	.	.	1	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
Silvery minnow	.	1	.	.	.	.	.	.	.	.	.	56	.	.	.	.	.	.	.	.	.
Smallmouth bass	.	.	.	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Spottail shiner	244	685	333	369	102	43	404	259	351	248	204	382	83	105	175	110	114	48	85	382	156
Tessellated darter	89	747	197	370	120	10	187	225	306	684	228	148	100	96	131	25	26	20	153	81	41
Trout perch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.
Walleye	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4	1	9	2
White sucker	1	8	4	2	1	.	.	.	.	1	.	1	2	1	6	1	.	.	.	.	.
Yellow bullhead	.	.	.	.	30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Yellow perch	.	.	1	1	.	.	.	.	.	1	.	.	.	.	.	.	.	8	2	.	6
Marine																					
Atlantic croaker	1	4	7	.	1	4	.	4	18	97	336	10	183	5,028	4,015	2,280	3,894	1,479	20	8,838	8,697
Atlantic cutlassfish	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.
Atlantic herring	.	.	.	.	.	.	.	.	3	.	.	.	.	.	.	.	.	.	.	.	.
Atlantic mackerel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Atlantic menhaden	51	139	67	9	38	129	478	122	13	78	26	260	19	101	12,685	2,535	337	746	445	566	139
Atlantic needlefish	.	.	.	1	.	1	1	.	53,437	54,615	93,826	26,168	71,630	51,368	58,298	15,533	27,794	47,096	37,511	43,166	38,534
Bay anchovy	27,902	20,988	39,348	59,244	41,475	16,465	44,815	37,264	37,264	2	3	.	.	9	.	.	.	.	.	.	.
Black sea bass	1	.	.	1	.	.	.	.	.	2	.	.	.	.	.	.	.	.	.	.	.
Bluefish	60	51	107	116	62	82	58	82	53	37	42	39	55	27	165	53	60	56	30	31	18
Butterfish	61	106	48	110	81	43	35	141	121	109	21	18	90	177	74	9	25	26	16	106	66
Cobia	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
Conger eel	.	.	.	14	.	.	.	.	.	.	2	2	.	1	1	1	.	.	.	.	.
Crevalle jack	2	1	1	10	8	7	3	1	10	1	4	1	.	9	.	.	2	.	1	1	1
Cunner	.	.	.	.	.	1	.	1	.	.	.	.	.	1	.	.	.	.	.	.	1
Feather blenny	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
Fourspot flounder	2	2	.	1	.	1	.	.	.	25	.	.	4	1	.	.	1	.	.	.	.
Gobiidae	.	.	.	4	.	.	.	38	.	2	.	.	3	4	12	2	2	8	4	3	1
Goosefish	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
Gray snapper	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
Grubby	.	.	.	2	.	.	.	.	1	.	.	.	.	.	.	.	1	.	.	.	.
Inshore lizardfish	1	.	.	1	4	.	1	4	8	1	.	.	.	.	.	71	1	.	.	.	.
Longhorn sculpin	.	.	.	.	.	.	.	.	3	.	.	.	.	.	.	.	.	.	.	.	.
Lookdown	1	.	1	1	1	.	.	.	.	1	.	.	1	1	3	2	.	.	1	.	1
Moontfish	.	1	2	.	5	.	.	1	.	.	.	.	.	4	1	3	9	5	3	9	.
Naked goby	3	6	47	9	21	1	7	30	3	1	26	.	8	4	7	7	33	5	46	8	26
Northern kingfish	9	6	.	20	3	3	10	2	4	16	7	.	2	.	3	.	.	.	.	1	1
Northern puffer	9	1	5	3	2	.	36	3	1	.	3	.	.	1	.	.	.	3	.	2	2

Table C-2 (Continued)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Marine (cont.)																					
Northern searobin	.	2	7	21	3	16	7	12	53	305	6	5	16	.	.	.	6	.	.	1	24
Northern stargazer	1	.	.	20	.	4	3	10	2	7	.	.	6	.	2	1	3	5	1	1	2
Oyster toadfish	.	.	.	.	.	.	.	1	.	.	.	4	.	2	3	2	1	1	1	11	13
Red hake	1	.	.	.	.	1	.	.	.	.	.	.	2	.	.	1	.	.	.	.	38
Rock gunnel	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3
Rough silverside	1	.	3	1	.	.	.	3	2	.	4	.	4	1	1	2	.	.	.	.	1
Scup	1	.	.	12	.	.	3	.	.	.	8	.	.	.	.	2	5	1	8	2	2
Seaboard goby	.	.	.	.	.	.	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Searobin	.	.	.	.	.	.	.	.	.	.	.	.	339	.	69	8	2	.	12	7	.
Silver hake	.	3	.	.	.	1	1	.	.	.	.	.	5	.	1	3	.	1	.	1	1
Silver perch	.	.	.	13	.	.	1	.	7	11	36	1	1	.	.	.	.	.	.	.	1
Smallmouth flounder	.	.	.	8	.	.	.	1	1	9	3	.	.	1	1	.	.	2	.	.	.
Spanish mackerel	.	.	.	.	.	1	17	.	7	.	.	.	.	.	.	.	.	.	.	1	.
Spot	5	14	1	1,257	.	.	2	1.	4	.	.	30	.	.	.	1	1	.	.	.	.
Spottin butterflyfish	1	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
Spotted hake	2	1	.	.	.	.	3	32	7	3	3	224	54	9	7	15	106	12	34	20	9
Striped anchovy	.	.	.	.	.	.	.	1	.	.	2	.	.	.	.	.	.	1	1	.	.
Striped burrfish	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Striped cuskeel	3	.	.	1	.	.	1	1	.	.	.	.	.	1	.	1	.	.	.	.	12
Striped searobin	321	148	10	101	25	26	310	54	96	648	15	.	416	294	1,498	8	123	189	236	121	37
Summer flounder	232	447	58	7	42	35	102	56	39	32	108	41	4	2	23	4	6	2	3	9	8
Tautog	.	.	.	2	.	3	.	1	.	.	.	.	1	.	.	.	.	.	.	.	.
Tetraodontidae	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Weakfish	2,214	1,482	749	3,777	2,842	770	5,878	756	2,332	2,416	3,773	2,202	2,713	2,039	7,412	7,147	3,567	3,806	1,952	686	4,083
Windowpane	1	1	5	17	.	5	9	32	1	5	19	2	12	5	46	4	7	3	4	1	2
Winter flounder	226	196	92	39	23	13	28	36	51	21	62	32	56	12	10	8	3	2	4	3	20
Unidentified																					
Acipenseridae	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Atherinidae	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Morone	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
unidentified	1	.	.	.	3	2	.	.	.	.	18	.	2	3	.	1	.	.	35	.	.
Unidentifiable	.	.	.	.	.	.	.	.	6	.	.	1	68	.	1	.	.	.	.	.	.

Table C-2 (Continued)

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Anadromous									
Alewife	236	587	1,031	144	1,719	316	681	281	1,872
Alosa spp.	755	3,030	1,529	220	266	1,847	2,469	302	27,259
American shad	77	44	69	70	85	122	91	133	511
Atlantic sturgeon	14	35	24	30	19	22	62	70	77
Atlantic tomcod	1,007	1,121	1,290	2,495	430	577	74	1,063	4,871
Blueback herring	943	5,682	11,803	437	14,025	5,614	7,173	171	32,074
Hickory shad	.	.	1	.	.	2	.	.	1
Rainbow smelt	.	.	.	.	.	.	.	.	.
Sea lamprey	.	.	.	.	.	.	.	.	.
Striped bass	1,795	2,001	1,456	1,068	3,272	1,623	2,257	1,291	10,806
Catadromous									
American eel	448	163	241	350	716	168	648	824	506
Estuarine									
Atlantic silverside	29	50	14	3	41	13	69	23	108
Banded killifish	12	1	1	.	2	3	.	.	.
Fat sleeper	.	.	.	.	.	.	.	.	.
Fourspine stickleback	.	.	.	1	1	.	.	.	.
Hogchoker	15,079	12,945	36,104	42,149	40,758	31,022	58,641	63,157	26,594
Inland silverside	.	.	.	.	.	.	.	.	.
Lined sea horse	.	.	.	.	.	.	1	.	.
Mummichog	.	.	.	.	2	.	.	.	.
Northern pipefish	16	19	17	59	19	5	86	8	8
Shorthorn sturgeon	28	20	17	12	30	14	14	43	20
White catfish	412	198	170	174	175	84	164	322	306
White mullet	5	.	.	.	.	.	.	.	.
White perch	7,151	3,904	8,551	9,631	15,039	7,409	6,048	4,557	6,220
Freshwater									
Black bullhead	.	.	.	.	.	.	.	.	.
Black crappie	.	.	.	.	.	.	.	.	.
Bluegill	1	.	2	.	4	3	1	.	.
Brook trout	.	.	.	.	.	.	.	.	.
Brown bullhead	505	191	278	742	835	769	1,079	225	312
Carp	2	2	3	6	7	10	19	9	6
Central mudminnow	.	.	.	.	.	.	.	.	.
Centrarchidae	.	.	2	2	.	17	1	1	.
Channel catfish	2,279	979	1,868	1,550	2,072	1,673	1,898	3,001	1,745
Cyprinidae	.	.	.	.	.	1	.	.	.
Emerald shiner	.	.	1	.	.	.	.	.	.
Fall fish	.	.	1	.	.	.	.	.	.
Fathead minnow	18	.	.	.	.	.	.	.	.
Freshwater drum	37	2	.	3	2	25	43	111	8
Gizzard shad	3	5	24	1	74	24	19	6	2
Golden shiner	2	.	.	.	1	15	6	.	1
Goldfish	.	1	.	3	.	.	5	.	3
Grass carp	.	.	.	1	.	.	.	.	.

Table C-2 (Continued)

[illegible]

Table C-2 (Continued)

Sampling Statistics for Fall Juvenile Survey, 1985-2014

Start Date	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
End Date	22-Jul	21-Jul	13-Jul	18-Jul	17-Jul	9-Jul	15-Jul	13-Jul	19-Jul	18-Jul	10-Jul	10-Jul
Volume Sampled (m ³)	1,886,745	2,298,278	2,035,357	1,826,628	1,590,047	1,252,910	1,707,237	1,865,365	2,010,162	2,018,414	1,782,105	1,824,729
Sample Size	1,802	2,098	1,958	1,680	1,679	1,680	1,678	1,680	1,680	1,681	1,680	1,669
Start Date	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
End Date	7-Jul	6-Jul	6-Jul	5-Jul	10-Jul	8-Jul	7-Jul	6-Jul	5-Jul	5-Jul	1-Jul	7-Jul
Volume Sampled (m ³)	1,995,403	2,214,609	2,159,879	2,174,794	2,097,800	2,105,181	1,891,049	2,106,764	2,063,565	2,014,940	1,968,928	2,073,021
Sample Size	2,015	2,130	2,085	2,113	2,084	2,128	2,131	2,128	2,128	2,129	2,130	2,130
Start Date	2009	2010	2011	2012	2013	2014						
End Date	6-Jul	6-Jul	5-Jul	2-Jul	30-Jun	30-Jun						
Volume Sampled (m ³)	1,928,891	2,027,924	1,878,662	1,300,240	1,829,970	2,179,402						
Sample Size	2,130	2,130	2,086	2,080	2,053	2,126						

Table C-3 (Continued)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Freshwater																					
(cont.)																					
Common shiner	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1
Creek chub	1	6	6	1	1	1	134	4	1	1	2	18	1	1	1	1	1	1	4	1	1
Cyprinidae	4	4	5	22	1	11	8	8	2	1	2	76	18	1,271	209	296	73	32	6	9	6
Emerald shiner	1	2	1	1	1	1	9	3	2	11	2	3	1	6	1	1	1	1	18	1	1
Fall fish	1	10	1	1	1	1	1	1	1	2	1	7	1	1	3	3	1	1	1	1	1
Fathead minnow	1	10	1	1	1	1	1	1	1	2	1	7	1	1	3	3	1	1	5	1	5
Freshwater drum	3	13	100	10	7	28	22	158	38	49	61	50	139	67	140	75	45	99	51	231	108
Gizzard shad	460	1,223	647	676	640	817	672	787	659	760	404	460	193	472	278	296	425	489	1,031	428	349
Golden shiner	14	25	16	97	1	3	33	1	29	3	16	3	1	1	4	1	3	4	9	4	2
Goldfish	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Grass carp	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Grass pickerel	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Green sunfish	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Largemouth bass	44	71	44	57	51	34	85	55	55	74	169	29	53	120	221	46	39	67	270	78	162
Logperch	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Longear sunfish	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Longnose dace	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mimic shiner	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Northern hog sucker	1	1	1	3	1	1	4	2	2	2	1	1	1	1	1	1	1	1	2	3	9
Northern pike	1	2	4	2	4	2	2	2	3	2	1	2	2	2	1	2	1	1	28	12	12
Pugnose shiner	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Pumpkinseed	740	496	609	1,070	633	724	1,195	602	774	1,535	1,648	284	619	555	771	281	647	1,084	2,039	1,271	1,576
Rainbow trout	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Redbreast sunfish	115	158	185	160	111	76	200	259	251	382	454	116	141	188	323	137	64	189	408	336	292
Redfin pickerel	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Rock bass	6	8	1	12	3	1	22	1	1	1	10	2	2	7	8	8	1	7	18	15	6
Rudd	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Satinfin shiner	1	2	1	1	1	2	1	1	1	1	6	5	12	10	10	1	1	40	36	4	1
Silvery minnow	3	13	23	119	2	9	387	68	568	1,027	8	2,131	31	40	428	18	48	6	145	64	31
Smallmouth bass	7	25	8	28	25	21	25	28	30	73	81	50	26	86	176	80	45	78	157	107	121
Spotfin shiner	5	8	17	5	1	1	1	1	12	8	8	49	4	27	127	15	34	4	49	40	46
Spottail shiner	5,316	5,177	4,452	5,407	5,129	5,500	12,385	7,727	7,169	12,452	7,529	3,887	7,189	4,996	16,512	3,927	11,969	9,313	19,830	9,296	10,147
Swallowtail shiner	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	10	1	1
Tessellated darter	1,198	1,372	820	1,697	415	479	2,385	929	1,251	1,669	700	663	1,767	1,359	3,858	760	2,140	948	4,657	2,969	1,087
Tiger muskellunge	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Trout perch	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Walleye	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	1	1	2	3	1
White crappie	1	4	1	3	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
White sucker	7	16	17	32	9	15	12	21	11	12	14	24	11	48	16	18	47	19	32	43	45
Yellow bullhead	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Yellow perch	22	67	44	49	34	12	27	23	22	29	16	53	20	49	65	60	78	40	160	194	115
Marine																					
Atlantic croaker	1	1	1	1	1	26	1	1	1	1	7	1	1	35	5	19	3	21	1	7	1
Atlantic herring	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Atlantic menhaden	118	834	30	99	159	1,063	678	415	16	1,637	56	1,526	117	331	50,419	16,025	130	2,481	3,586	8,465	1,128
Atlantic needlefish	92	77	54	48	41	96	476	9	11	12	22	28	50	21	181	12	6	8	28	33	28
Bay anchovy	4,081	4,155	3,746	3,989	9,507	4,134	4,669	8,729	8,106	10,447	17,615	3,544	16,980	11,333	6,862	2,617	3,275	13,862	6,431	2,330	4,830

Table C-3 (Continued)

Marine (cont.)	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Black drum	567	400	533	280	224	348	314	375	223	80	252	98	320	141	2,180	218	474	815	336	246	308
Bluefish	71	10	3	22	40	32	58	53	30	2	2	1	.	2	45	3	24	9	10	.	3
Butterfish	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
Crevalle jack	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cunner	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Fourbeard rockling	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.
Goosefish	7	1	3	.	.	.	1	.	.	.	.	.	.	.	.	.	1	.	.	.	1
Gray snapper	.	.	.	.	.	.	2	.	.	.	1	.	.	.	.	.	.	.	.	.	.
Grubby	.	.	.	.	.	.	14	8	11	5	1	.	3	4	7	.	.	3	.	.	.
Inshore lizardfish	.	.	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
King mackerel	18	1	.	.	10	1	.	.	.	.	.	.	2	.	.	2	.	.	.	.	.
Lookdown	.	.	.	.	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Moonfish	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Naked goby	20	9	11	4	4	7	14	22	2	.	9	.	8	5	15	2	12	20	13	24	12
Northern kingfish	20	8	.	9	1	4	42	2	17	13	8	1	15	31	21	1	13	35	.	45	6
Northern puffer	2	1	.	1	.	.	10	.	4	.	2	.	2	.	6	.	.	4	.	.	4
Northern searobin	.	2	.	.	.	.	8	.	.	1	.	.	.	.	.	.	2	.	.	.	3
Northern stargazer	1	.	.	.	.	.	1	.	1	1	1	1	8	.	1	.	1	9	.	1	2
Orangespotted filefish	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Oyster toadfish	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Permit	.	.	.	.	.	.	.	1	2	.	.	.	.	2	.	7	5	.	.	.	.
Pigfish	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Pinfish	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Red hake	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Rough silverside	35	4	23	258	9	4	.	2	.	1	1	.	36	.	.	.	.	.	26	.	.
Seaboard goby	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3	.
Searobin	.	.	.	.	.	.	5	.	.	.	.	.	1	.	.	.	3	.	3	.	.
Silver hake	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Silver perch	13	1	.	19	.	.	29	8	61	25	5	5	25	4	1	1	.	.	.	60	.
Smallmouth flounder	1	.	.	.	.	.	.	.	.	.	1	.	12	.	.	.	.	.	.	.	.
Spanish mackerel	.	.	.	.	.	.	12	.	4	1	.	.	.	.	.	.	.	.	.	.	.
Spot	35	106	4	32	.	1	8	2	39	24	.	59	.	3	6	15	.	11	1	.	2
Spotfin mojarra	.	.	.	.	.	.	.	.	17	2	.	.	.	1	.	.	.	.	.	.	.
Spotted goatfish	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Spotted hake	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Striped anchovy	1	.	.	.	.	.	.	.	1	15	25	6	4	.	.	1	.	57	8	2	.
Striped mullet	2	6	1	1	.	.	5	.	.	.	2	.	.	.	.	1	.	1	.	.	.
Striped searobin	5	16	.	3	.	.	34	1	11	.	.	.	35	21	8	1	4	7	1	14	1
Summer flounder	48	45	4	1	2	2	46	26	20	18	10	2	.	7	4	5	5	11	5	10	5
Tautog	2	5	2	20	.	6	31	1	.	1	.	.	22	1	.	.	5	2	.	1	2
Weakfish	72	5	.	2	.	27	111	1	4	4	1	25	27	4	30	18	2	33	8	5	3
Windowpane	.	.	3	.	.	.	1	.	.	.	.	1	.	.	.	.	.	.	.	.	1
Winter flounder	282	80	29	41	9	23	154	35	74	45	110	6	124	28	46	68	44	55	52	105	41

Table C-3 (Continued)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Unidentified																					
Morone unidentified	.	.	1	.	.	.	.	.	.	.	1	.	.	.	1	.	.	.	.	1	.
Unidentifiable	.	.	.	.	.	.	.	.	.	.	150	.	.	.	.	.	.	.	.	.	.
Anadromous	2006	2007	2008	2009	2010	2011	2012	2013	2014												
Alewife	601	3,579	4,127	1,315	8,090	2,351	506	1,514	763												
Alosa spp.	1,297	24,989	33,233	11,793	20,174	49,432	23,696	3,312	17,772												
American shad	697	2,681	781	2,135	1,869	1,911	1,123	3,965	6,802												
Atlantic sturgeon	.	.	.	.	.	.	.	.	.			
Atlantic tomcod	27	2	3	38	.	2	3	.	8												
Blueback herring	3,911	55,828	29,603	2,529	28,057	30,454	15,098	1,083	36,919												
Hickory shad	.	.	.	.	.	.	1	1	.												
Rainbow smelt	.	.	.	.	.	.	.	.	.			
Striped bass	4,348	12,882	5,459	4,052	11,324	4,763	7,626	3,202	11,853												
Catadromous																					
American eel	154	75	349	300	246	230	129	164	53												
Estuarine																					
Atlantic silverside	2,116	16,989	6,545	5,602	17,390	5,219	9,694	467	4,644												
Banded killifish	1,283	2,252	5,021	3,757	4,885	1,800	1,369	612	329												
Fat sleeper	.	.	.	.	.	.	.	.	.			
Fourspine stickleback	27	3	9	276	499	16	3	.	.												
Hogchoker	130	464	240	31	209	236	601	267	309												
Inland silverside	5	3	26	70	98	3	10	16	.												
Mummichog	25	93	278	95	334	85	80	41	11												
Northern pipefish	56	452	426	154	728	104	196	88	183												
Shorthose sturgeon	.	.	.	.	.	.	.	.	.			
Threespine stickleback	.	1	.	42	3	.	.	.	.								
White catfish	16	6	6	6	8	45	4	4	6												
White mullet	.	2	2	.	.	.	1	.	.												
White perch	7,707	4,596	7,400	6,446	9,025	6,165	5,240	4,155	4,553												
Freshwater																					
Black crappie	21	3	25	27	19	23	1	1	3												
Blacknose dace	.	.	.	1	.	.	.	.	.							
Bluegill	224	39	384	466	125	197	36	63	47												
Bluntnose minnow	.	2	.	3	.	2	1	.	.												
Bridle shiner	.	.	.	.	.	.	.	.	.			
Brook silverside	4	1	16	.	5	51	.	1	1												
Brook stickleback	.	35	276	206	89	217	69	60	50												
Brown bullhead	141	35	276	206	89	217	69	60	50												
Brown trout	.	.	.	.	.	.	1	1	.												
Carp	69	34	56	86	62	80	48	47	68												
Catostomidae	.	.	.	.	.	.	.	.	.			
Centrarchidae	213	31	1,163	556	509	539	18	29	7												

Table C-3 (Continued)

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Freshwater (cont.)									
Chain pickerel			1	1	1				2
Channel catfish	100	15	32	70	47	576	77	186	104
Comely shiner									
Common shiner				1	1		1	1	1
Creek chub									
Cutlips minnow			1						1
Cyprinidae			4	125	3	1	5	3	5
Emerald shiner	52	9	8	21	5	5	2	39	
Fall fish	2		9	1	1	4		1	
Fathead minnow	1			1	1	1		3	
Freshwater drum	14	7	9	5	10	20	8	9	23
Gizzard shad	58	116	230	113	142	597	150	112	46
Golden shiner	231	91	488	703	294	316	239	53	43
Goldfish	2	7	3	2	7	9	2	1	32
Grass carp									
Grass pickerel									
Green sunfish									
Largemouth bass	48	75	168	248	134	50	18	17	50
Logperch	3	7	3	4	3	2	1	1	5
Longear sunfish									
Longnose dace									
Mimic shiner						1			
Northern hog sucker		1	1					3	1
Northern pike	9	1	7			4		1	2
Pugnose shiner									
Pumpkinseed	569	439	3,113	1,274	1,897	782	336	130	140
Rainbow trout				1					
Redbreast sunfish	87	55	337	171	130	79	144	45	22
Redfin pickerel			5	2	1			1	
Rock bass	1		11	3	5	19			1
Rudd			7	4	10				
Satinfin shiner	3	164	46	23	11	19	2	4	11
Shield darter			1						
Silvery minnow	13	66	66	8		10	910	2	1
Smallmouth bass	81	97	57	52	107	104	52	44	44
Spotfin shiner	2	96	33	80	81	41	114	99	65
Spottail shiner	4,417	13,284	15,442	9,829	14,817	14,061	7,651	2,884	8,225
Swallowtail shiner									2
Tessellated darter	1,229	1,045	2,614	3,283	2,657	2,729	851	713	1,237
Tiger muskellunge									
Trout perch			23			25			
Walleye								2	
White crappie									
White sucker	36	81	43	27	34	49	41	35	40
Yellow bullhead						1			
Yellow perch	107	142	131	49	68	76	36	57	113

Table C-3 (Continued)

Marine	2006	2007	2008	2009	2010	2011	2012	2013	2014
Atlantic croaker	292	.	.	.	1	1	66	7	10
Atlantic herring	.	.	.	.	.	.	1	.	.
Atlantic menhaden	4,885	6,105	1,418	4,077	91	1,093	1,400	4,852	762
Atlantic needlefish	58	96	67	48	28	86	85	17	35
Bay anchovy	5,376	1,314	24,902	23,457	49,286	13,720	37,405	18,898	1,560
Black drum	.	.	.	.	.	1	1	.	.
Bluefish	169	719	414	244	434	253	339	408	380
Butterfish	.	.	.	.	.	.	.	1	1
Crevalle jack	21	.	6	6	2	1	.	.	2
Cunner	.	.	.	.	.	.	.	.	.
Fourbeard	.	.	.	.	.	.	.	.	.
rockling	.	.	.	.	.	.	.	.	.
Fourspot flounder	.	.	2	.	.	.	.	.	.
Goosefish	.	.	.	.	.	.	.	.	.
Gray snapper	.	1	.	.	.	.	.	.	.
Grubby	.	.	.	.	.	.	.	.	.
Inshore lizardfish	1	.	6	.	8	.	2	1	.
King mackerel	.	.	.	.	.	.	.	.	1
Lookdown	.	.	.	2	.	.	.	.	.
Moonfish	.	.	1	.	.	.	.	.	.
Naked goby	5	19	34	15	25	71	12	5	75
Northern kingfish	6	59	32	8	5	7	59	7	9
Northern puffer	.	1	1	.	.	.	10	.	1
Northern searobin	.	.	.	.	.	.	.	.	2
Northern stargazer	.	2	1	.	.	.	.	.	.
Orangespotted filefish	.	.	.	.	.	.	.	.	.
Oyster toadfish	.	.	.	.	.	1	1	.	.
Permit	.	1	.	.	.	.	.	.	.
Pigfish	.	.	.	.	.	1	.	.	.
Pinfish	.	.	.	.	.	.	.	3	.
Red hake	.	.	.	.	.	.	.	.	.
Rough silverside	9	.	19	.	.	.	.	.	.
Seaboard goby	.	.	.	1	.	.	.	.	.
Searobin	.	.	2	.	.	.	2	.	.
Silver hake	.	.	.	.	.	.	.	.	.
Silver perch	.	2	.	2	.	86	235	.	6
Smallmouth flounder	.	.	.	.	.	.	.	.	1
Spanish mackerel	.	.	.	.	.	.	.	.	.
Spot	22	.	.	1	.	1	158	22	.
Spotfin mojarra	.	.	.	.	.	.	.	.	.
Spotted goatfish	.	.	.	.	.	.	.	.	.
Spotted hake	2	.	.	.	.	.	.	.	.
Striped anchovy	4	1	3	.	4	1	157	82	4
Striped mullet	24	.	7	11	27	.	33	1	2
Striped searobin	1	12	11	.	.	.	11	.	.
Summer flounder	12	3	11	21	14	8	5	5	50
Tautog	.	11	.	.	.	.	.	.	.

Table C-3 (Continued)

[illegible]

Table C-3 (Continued)

Sampling Statistics for Beach Seine Survey, 1985-2014

Start Date	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
End Date	16-Jul	15-Jul	24-Jun	14-Jun	13-Jun	18-Jun	24-Jun	23-Jun	1-Jul	27-Jun	19-Jun	18-Jun
Sample Size	21-Nov 1,000	21-Nov 1,000	13-Nov 1,101	3-Nov 1,100	2-Nov 1,100	24-Oct 1,000	1-Nov 1,000	28-Oct 1,000	4-Nov 1,000	2-Nov 1,000	26-Oct 1,000	23-Oct 1,000
Start Date	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
End Date	16-Jun	15-Jun	14-Jun	13-Jun	19-Jun	18-Jun	17-Jun	15-Jun	14-Jun	12-Jun	11-Jun	17-Jun
Sample Size	23-Oct 1,000	21-Oct 1,000	22-Oct 994	18-Oct 1,000	25-Oct 952	23-Oct 1,000	22-Oct 1,000	21-Oct 1,000	20-Oct 1,000	19-Oct 1,000	18-Oct 1,000	24-Oct 1,000
Start Date	2009	2010	2011	2012	2013	2014						
End Date	15-Jun	15-Jun	14-Jun	11-Jun	10-Jun	9-Jun						
Sample Size	22-Oct 1,000	22-Oct 1,000	20-Oct 1,000	18-Oct 1,000	17-Oct 1,000	17-Oct 1,000						