Nearshore fish communities of the mid-Hudson River estuary, 1985-2005

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Participating Agencies:

Hudson Ri



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Abstract

In the 2005, 221 seine hauls were completed in the young-of-the-year (YOY) striped bass survey in the Hudson River. A total of 7,727 YOY striped bass were captured, resulting in a geometric mean catch per unit effort (CPUE) of 10.26 fish/haul. The Hudson River index of YOY striped bass abundance, based on the geometric mean CPUE of the 6-week survey, was 8.48 fish/haul. This catch rate was lower than the average historical geometric mean CPUE of 13.87 fish/haul. YOY striped bass grew at an estimated 0.59 mm/day between mid-July and the beginning of September. Catches of American eel, bluefish, winter flounder, and tomcod were the lowest recorded within the historical records, while catches of YOY white perch and American shad were equivalent to historical lows. Silversides were the most abundant fish, followed by blueback herring and striped bass. Air and water temperatures during the survey were near the historical average. Salinity was below normal from weeks 7-9.

Introduction

The striped bass (*Morone saxatilis*) is an anadromous species spawning in large river systems. Its native range extends from the St. Lawrence River, Nova Scotia, Canada to the St. Johns River, Florida (Scott and Scott 1988). Spawning occurs in the region above the salt wedge in the spring when river temperatures rise above 12 °C. The semi-buoyant eggs and larvae drift down into the low salinity regions of the estuary. During the first summer of life, Hudson River striped bass reside in nearshore regions throughout the estuary and in coastal marine embayments (Boreman et al. 1988; McKown and Gelardi 2000). In the autumn, striped bass migrate to higher salinities in the lower estuary, the only known concentration area for overwintering YOY fish (Dovel 1992). Striped bass were introduced to the Pacific coast in the late 1800's, where several sustaining populations have become established. Striped bass have also been introduced as a sport fish into reservoirs throughout the southern United States (Smith 1985).

Historically, this species has supported important commercial and recreational fisheries along the east coast of North America (Merriman 1941; Boreman and Austin 1985). Catches in the coast-wide commercial fishery reached a peak in 1973 at 5.98 metric tons (mt), declining rapidly thereafter to below 2 mt/year by the late 1970's (NMFS 1999). The Atlantic States Marine Fisheries Commission implemented a management strategy aimed at protecting the last successful year class (1982) in the Chesapeake Bay from harvest. Moratoria on commercial harvest of striped bass were issued for Maryland and Delaware waters. Following a strong recruitment event into the Chesapeake Bay population in 1989, a limited fishery was reestablished. Continued improvement in recruitment to the Chesapeake Bay population has allowed increases in harvest levels in recent years (Richards and Rago 1999). The commercial fishery in the Hudson River was closed, and recreational harvest restricted in 1976 due to concerns over high levels of poly-chlorinated biphenols (PCBs) in fish flesh. The commercial fishery within the Hudson River, remains closed (NMFS 1999). Since the late 1970's improvements in water quality in the Delaware River have allowed the increased production of striped bass in that system (Weisberg et al. 1996). Recent estimates indicate that Chesapeake Bay populations contribute 75% of the coast-wide stock, with the Hudson River and Delaware

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Bay contributing 15 and 10% respectively (K. McKown, NYS DEC, personal communication).

Indices of the abundance of early life stages of striped bass, to monitor annual recruitment patterns, have been developed for several east coast populations, including the main tributaries to the Chesapeake Bay and the Hudson River (Goodyear 1985; McKown 1991; Heimbuch et al. 1992). The use of these indices as predictors of future population size is based on the assumption that recruitment level is determined prior to the life-stage surveyed (Bradford 1992). Goodyear (1985) validated the Maryland Department of Natural Resources YOY index based on its relationship to fishery harvests when those year-classes entered the fishery. Based on this result, a number of studies have been conducted to determine the factors regulating survival during the larval phase in the Chesapeake Bay population (Uphoff 1989; Secor and Houde 1995; McGovern and Olney 1996). The index of YOY abundance in the Hudson River population was correlated with the abundance of age-1 fish, indicating its utility in predicting recruitment (McKown 1991). A more recent analysis, which incorporates a longer time series, found that the abundance of age-1 fish was more closely related to the severity of winter than to the abundance of YOY fish in the previous summer (Hurst and Conover 1998). Mortality of over-wintering YOY striped bass in the Hudson River and Miramichi populations has been shown to be size-selective against smaller fish (Bradford and Chaput 1997; Hurst and Conover 1998). These analyses suggest that the first winter of life may play an important role in the recruitment dynamics of these northern populations.

Here we present the results of the 2005 young-of-the-year survey for the Hudson River population of striped bass and compare the results to previous years. We also include catch data on all species captured during the survey, and detailed catch data, including size-distributions, for a number of resource species.

Methods

The survey is conducted between mid-July and early November in the Haverstraw-Tappan Zee region of the Hudson River (river miles 23-42; Figure 1). Within this stretch of river, 25 sites are sampled bi-weekly, 9 times. The 25 sites sampled during each bi-weekly survey, are chosen from 36 potential fixed stations based on prevailing conditions (wind direction, speed and tide stage). Prior to 1985, stations were sampled 6 times between late August and early November. A subset of data from 1985 to 2005, covering the same period, is used to compare with data from 1980 to 1984.

Fish collections are made with a 200 foot x 10 foot (12 foot depth in the bag) beach seine with 1/4 inch square mesh in the wings and 3/16 inch square mesh in the bag (61 m x 3 m with 6 mm wing mesh and 5 mm bag mesh), set by boat. The performance of the sampling gear and representation of the catch was rated for each set of the gear. Following each collection, measurements of air temperature, water temperature, dissolved oxygen, and salinity were made in the immediate vicinity of the gear set, using a YSI Model 85 probe. Environmental parameters such as wind direction and speed, tidal stage, wave height, cloud cover, and precipitation were recorded. The types of any aquatic vegetation in the vicinity of the sampling site were generally sampled at a particular tidal stage or time of day, due to accessibility, others were sampled at all tidal stages and times of day.

All fish captured were sorted by species (where feasible young-of-the-year fish were counted separately from older fish) counted and returned to the water. In the case of extremely high catch rates, a volumetric sub-sampling procedure was used to estimate catches of individual species. Young-of-the-year and older blue crabs were the only invertebrates counted. The occurrence of shrimp and gelatinous zooplankton captured in each set of the net was noted, with a visual estimate of abundance. Up to 50 YOY striped bass, and all older striped bass, were measured from each haul. In addition, up to 30 individuals each of bluefish, crevalle jack, weakfish, summer flounder, winter flounder, Atlantic tomcod, American eel, American shad, alewife, blueback herring, and Atlantic menhaden were measured (mm TL) from each collection. Atlantic silversides and YOY white perch were measured periodically throughout sampling. All measurements were made in the field and fish were returned to the water at the site of capture.

Scales were removed from above the lateral line between the first and second dorsal fins, from all striped bass larger than 110 mm TL. These scales were pressed into acetate at 180 °C and 2000 lbs./foot². The age of all fish larger than 110 mm was determined by visual analysis of the acetate impression of multiple scales, under magnification.

All captured striped bass larger than 170 mm TL were tagged as part of the United States Fish and Wildlife Service coast-wide tagging program. Tags were individually numbered floy type tags with 6.5 x 19.25 mm oval anchor and 91 mm streamer. A few scales were removed from the fish, half way between the pectoral and anal fin, an incision was made through the body wall, and the tag anchor was inserted into the body cavity.

Results and Discussion

During the 2005 sampling season, 9 sampling trips were conducted between July 11th and November 9th. During this sampling, a total of 50,250 fish were collected. This was about 17,000 more fish than the previous year, and 14,000 more fish than 2003. Also, we caught 314 compared to 220 blue crabs in 2004. Of the 50,250 fish caught 7,727 were young-of-the-year striped bass and only 22 were older striped bass. In total, 221 beach seine samples were collected in 2005.

Environmental conditions

Weekly average water temperatures increased in the first three weeks of the sampling season, with a high of 28.59 °C on August 8 (Table 1; Figure 2). Water temperatures after the third week declined throughout the sampling season with a low of 11.33 °C on November 9(Table 1; Figure 2). Air temperatures also generally decreased during the sampling season, ranging from 30.29 to 9.29°C. Both air and water temperatures followed the historical averages (Table 1; Figure 2). Salinity in the Lower Hudson River started out on July 11th near the historic average of 5.4 ppt, with an average of 3.5 ppt. Salinity subsequently remained near the historic average for the first 6 weeks of sampling where it declined suddenly in week 7, where the lowest salinity of 0.8 ppt was recorded after a significant rainfall event. Salinity remained lower than historical averages through weeks 8 and week 9 (Table 1; Figure 2). The significant rainfall event also caused us to reschedule a sampling trip the week of October 3. Weekly average of dissolved oxygen levels ranged between 6.20 and 8.22 mg/L throughout the sampling season, and did not show any distinct seasonal pattern. Air temperatures in week one were not recorded

due to a broken thermometer. Also in week 8, a malfunctioning YSI meter allowed only a few measurements of water temperature and salinity before becoming inoperable. No dissolved oxygen readings were taken in week 8.

Species composition

Thirty-seven different species of fish were captured in the Hudson River during the 2005 sampling season. Fish catches varied throughout the sampling period without a seasonal trend. Catches peaked in sampling week 3 (August 8) with 8,058 fish and week 5 (September 7) with 7,971 fish. The large catch from sampling week 3 was dominated by silversides and bay anchovies, while the catch from sampling week 5 was dominated by silversides and striped bass. The lowest catches were observed in sampling weeks 9 (November 9) and 1 (July 11) with 1,923 and 2,179 fish caught in those sampling weeks respectively. Silversides (23,397), blueback herring (9,671 fish), and striped bass (7,749 fish) were the most abundant species in 2005. Catch composition during the 2005 sampling season is compared to historical catch composition in Tables 3, 4, and 5. Detailed catch information on selected species is presented below.

Striped bass, Morone saxatilis

During the 2005 sampling season 7,727 YOY striped bass were captured in 221 hauls, with a mean CPUE of 34.96 and a geometric mean CPUE of 10.26 (Table 6). Between 1980 and 1985, catch data was collected in a period corresponding to the last 6 weeks of the 2005 sampling season. In order to compare 2005 catch data with results obtained previous to 1985, the statistics on the final 6 weeks of catch data for 2005 is presented in Table 6 together with historical records. In the final six weeks, 5,181 YOY striped bass were captured in 148 hauls, resulting in a mean CPUE of 35.01 and a geometric mean CPUE of 8.48 (Figure 3). The 6-week geometric mean CPUE, used as the young-of-the-year striped bass index of relative abundance, was low in 2005 compared to previous years. It was much lower than the historical average of 13.87. The 2005 9-sampling week geometric mean of 10.26 was also much lower than the historical average of 19.84 (Table 6).

Catch-per-unit-effort of YOY striped bass peaked during the fifth week of the survey at 86.4 fish/haul, where after the CPUE declined throughout the remaining sampling season. The

lowest catch rate of 4.44 fish/haul was reached during the final week of the survey. This year's catch rate peaked late in the sampling season (week 5). This is similar to 2001, 2002 and 2004, where catch rates peaked in week 4 and 5 respectively. In 2003 CPUE peaked as early as week 2. Catch patterns similar to that of 2001, 2002, 2004 and 2005 with peak catch rates in week 4 or 5 of the survey, were also observed in 1987, 1997, and 1999. The reason for the late peak in catch rate observed during some years is unknown. It has been hypothesized that YOY striped bass, recruiting to the western Long Island bays early in the summer migrate back to the Hudson River nursery area later in the year. However, when comparing catch records in the western Long Island bays and the Hudson River, this hypothesis is not supported by observations. Only after 2001 have YOY striped bass been observed in sufficient numbers from the Western Long Island Beach Seine Survey to potentially affect the abundance of striped bass in the Hudson River survey. Furthermore, years of high abundance recorded in western Long Island bays does not correspond to the years in the Hudson River with peak catch rates occurring late in the year (Brischler, 2004).

Catch-per-unit-effort of YOY striped bass varied considerably across sites in 2005 (Table 7). The sites with the highest CPUE (> 50 fish/haul) were on the most northerly station (7EW) and most southerly station (18E) on the East side of the river. Station 9W, had the lowest catch rates (5.2 fish/haul, Table 7). The distribution of catch among sites observed in 2005, was generally consistent with previous years. Annual catch-per-unit-effort data for the full 9-week survey and the 6-week subset, are shown in Tables 8 and 9.

Total length measurements were made on 3,963 YOY striped bass during the 9-week survey. Striped bass ranged in size from 22 to 163 mm. The bi-weekly size-frequency distributions of YOY striped bass are shown in Table 10. Mean bi-weekly lengths of YOY striped bass, captured during the 2005 sampling season are compared to previous years in Table 11. Mean lengths of measured fish increased through the first five sampling weeks, and were relatively stable thereafter (Figure 4). The apparent cessation of growth in YOY striped bass, based on observed fish lengths has been observed in most years of the study, and may in part be due to a size-dependent emigration from the nursery area to the lower estuarine wintering grounds. The alternative explanation is that growth ceases because of limited availability of food. Growth rate of YOY striped bass in the 2005 cohort, estimated from the regression of mean

total length against date, was 0.58 mm/day through the first 5 weeks of the survey. This is in the lower range of the mean growth rates observed. Annual cohort growth rates ranged from 0.45 mm/day in 1990 to 0.72 mm/day in 1995. In an analysis of historical data, Hurst (2000) found that body sizes of YOY striped bass in August and October were negatively related to density in the nursery area suggesting density dependent growth.

The age composition of striped bass captured between 1985 and 2005 is shown in Table 12. During the 9-week survey, 22 striped bass aged 1 to 2 were captured and ranged in length from 117-200 mm TL (Table 13). Older striped bass were most abundant at site 7W where CPUE was 0.6 (Table 14). Four of the yearling striped bass, ranging in length from 170 to 200 mm, were tagged with internal anchor tags as part of the United States Fish and Wildlife Service coast-wide tagging program.

White perch, Morone americana

In 2005, only 736 white perch were captured. White perch were classified as either young-of-the-year or older, based on observed size-distribution among the catch. Of the white perch captured, 419 were YOY and 317 were age-1 or older. Young-of-the-year white perch were most abundant at sites 8E (Table 15). Catch-per-unit-effort of YOY white perch was highest in week 5 (7.48 fish per haul), and lowest in week 2 (0.04 fish per haul). Older white perch were most abundant at site 16WN (Table 16). During the sampling season catch-per-unit-effort of older white perch was highest in week 2 (5.42 fish per haul) and lowest in weeks 6 and 7 which yielded one fish from 25 hauls (Table 16). Catches remained low within weeks 8 (0.25 fish per haul) and 9 (0.12 fish per haul) (Table 16).

Through the entire study period, the highest mean catch rates of YOY white perch were 75.75 fish per haul in 1988 and 37.89 fish per haul in 1986 (Figure 5). Catch rates of less than 2 fish per haul occurred in 1995 and 1997. In 2005, mean catch rates of YOY white perch were 1.89 fish per haul. This catch rate is equivalent to historically low catch rates found from 1990 to 1998. The reasons for the low catch rates are unknown. Catch rate has slightly decreased from last year and are much lower than the catch rates observed prior to 2004 (Figure 5). Catch rates of older white perch went down in 2005 to 1.43 fish per haul, the lowest observed catch per unit effort since 1985 (Figure 5).

Atlantic tomcod, Microgadus tomcod

During the 2005 sampling season, zero Atlantic tomcod were captured. This is the first sampling season where no Atlantic tomcod have been caught (Figure 5). However, the CPUE was also low in 1991, 1993, 1994, 1995, 1999 and 2002. In those years, catch rates were as low as 0.019 fish per haul. High catches of 2.64 and 2.30 fish per haul were observed in 1988 and 1998 respectively (Figure 5).

American eel, Anguilla rostrata

In 2005, a total of 22 American eel were captured during sampling. The highest catch rate (4 fish) were observed at site 12W (Table 19). The catch rate of 0.1 eels per haul was the lowest recorded catch per unit effort within the historical records (Figure 6). The highest catches (0.78 fish per haul) occurred in 1988. American eel ranged in length from 83 to 690 mm TL, with an overall mean length of 268.27 mm. The bi-weekly size-frequency distributions of American eel are shown in Table 20.

Bluefish, Pomatomus saltatrix

In 2005, 145 YOY bluefish were captured. They were caught during the first 6 weeks of the survey (Table 21). The bluefish spring-spawned cohort was present in the catches from week 1 to week 6, while the summer-spawned cohort was first observed in week 4 and was present in the catches until week 6 (Table 22). The highest Bluefish CPUE was 4.3 fish/haul at station 8E. The mean CPUE was 0.656 fish per haul in 2005 (Table 21), this was the lowest CPUE on record. Catch rates of YOY bluefish have been declining since 2001 (Figure 6). CPUE in 2001 (4.14 fish per haul) was the 4th highest CPUE effort recorded, CPUE in 2002, 2003, and 2004 were 2.9, 1, and 0.79 fish per haul, respectively (Figure 6.) The highest bluefish captured in 2005 ranged in length from 55 to 226 mm TL (Table 22). Based on the size-frequency distributions (Table 22), spring spawned bluefish were more abundant than the summer spawned bluefish. The spring cohort is spawned in the South Atlantic Bight in March-April, and the summer cohort is spawned in the Mid-Atlantic Bight in June-July (Munch and Conover 2000).

Winter flounder, Pleuronectes americanus

In 2005, a total of three winter flounder were caught during week 1. All three winter flounder were caught in the south eastern region of our sampling area, stations 17E and 16E, (Table 23.) This was the lowest CPUE (0.01 fish per haul) on record for the history of this survey (Figure 6). The previous historical extreme low CPUE (0.17 fish per haul) was observed in 1999 (Figure 6). The highest catch rates recorded were observed in 1985 with a CPUE of 2.52 fish per haul (Figure 6.) The winter flounder lengths were 31, 50, and 95 mm TL. The bi-weekly size-frequencies are shown in Table 24.

American shad, Alosa sapidissima

In 2005, 147 American shad were captured. American shad were most abundant at site 8E (Table 25). Weekly CPUE of American shad was highest (3.83 fish per haul) in week 2 of sampling, which yielded more than half of the total catch. Historically, peak CPUE of American shad occurred most commonly in weeks 1-2 or 8-9. The CPUE of American shad in 2005 (0.67 fish per haul) was the second lowest CPUE recorded for American shad (Figure 7). The highest catch rate (22.3 fish per haul) was observed in 1986 while the lowest catch rate (0.439 fish per haul) was recorded in 1998 (Figure 7). American shad ranged from 29-98 mm TL, with a mean length of 88.33 mm (Table 26).

Alewife, Alosa pseudoharengus, and Blueback herring, Alosa aestivalis

During the 2005 sampling, 478 alewife and 9,671 blueback herring were captured (Table 27 and 29). Alewife ranged in length from 41-96 mm TL, with a mean of 55.92 mm (Table 28). Blueback herring measured 30-108 mm TL with a mean length of 65.43 mm TL (Table 30). The mean CPUE of alewife and blueback herring were 2.16 and 43.76 fish per haul respectively (Table 27 and 29). Catches of blueback herring were significantly higher than the previous 5 years where low abundance levels have been observed (Figure 7).

Atlantic menhaden, Brevoortia tyrannus

During the 2005 sampling, 1,280 Atlantic menhaden were captured with a mean CPUE of

5.79 fish per haul (Table 31, Figure 8). Measured Atlantic menhaden ranged from 24 to 133 mm TL with a mean of 83.27 mm TL (Table 32). High catches of Atlantic menhaden were caught in week 3 (619 fish) and week 7 (523 fish) (Table 31). Almost all of the Atlantic menhaden caught on the east side of the river in weeks 3 and 7 (Table 31.)

Silverside species, Menidia sp.

During the 2005 sampling, 23,397 silversides were caught. The mean CPUE of 2005 was 105.87 fish per haul. This CPUE is higher than the previous two years and about the same as 2002 (Figure 8.) Atlantic silversides are the most common and were most abundant at site 17E, 11E, and 15 WS with catch rates higher than 300 fish per haul (Table 33). In 2005, 3637 silversides were measured and they ranged in length from 30 to 105 mm TL with a mean of 72 mm (Table 35). Annual catch rates of Atlantic silversides in the survey have been extremely variable, ranging from 7.9 fish per haul in 1989 to 191.9 fish per haul in 1994.

Blue crab, Callinectes sapidus

During sampling in 2005, 314 blue crabs were captured. Of the total crabs captured 271 were YOY blue crabs while 43 were older blue crabs. YOY blue crabs were most abundant at sites 11E and 17E while older blue crabs were most abundant at 12E and 18E (Tables 35 and 36). Catch rates peaked in weeks 6 and 4 for YOY and older blue crab respectively. Prior to 1998, no distinction was made between YOY and older crabs, so the time trend of catch rates is presented for the total numbers of blue crabs. Catch rate in 2005 was 1.42 crabs per haul, which is below the average of the 21 year time series. The 2005 catch rate was slightly higher than the catch rate of 0.90 crabs per haul recorded in the 2004 season and 0.779 crabs per haul recorded in the 2003 season (Figure 8).

Conclusions

Catch composition during the 2005 Hudson River beach seine sampling season was generally consistent with previous years. The most abundant species were Silversides, blueback herring, and striped bass, although the abundance of striped bass was below those in recent years

with peak catches occurring in the fifth week of sampling. The 6-week YOY striped bass index of relative abundance was 8.48, which was lower than the historical average of 13.87. Growth rates of YOY striped bass, based on length frequency progression, was 0.59 mm/day. Catches of American eel, bluefish, winter flounder, and tomcod were the lowest recorded within the historical records, while catches of YOY white perch and American shad were equivalent to historical lows. The Silverside spp. catch rate was above average and recovered from last 2 year's low catch level.

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			Air Temp	berature			H2O Tem	perature	
Dates	Week	Avg	Std	Min	Max	Avg	Std	Min	Max
Jul. 11	1					27.00	1.14	25.00	29.70
Jul. 25	2	30.29	4.69	23.00	37.00	27.44	1.07	24.00	28.90
Aug. 8	3	29.18	2.79	26.00	36.00	28.59	0.84	27.50	30.10
Aug. 22	4	30.42	2.93	24.00	35.00	28.21	2.47	26.10	38.80
Sept. 7	5	27.30	4.78	18.40	36.10	26.22	1.05	24.70	28.10
Sept. 19	6	25.18	3.56	18.00	30.10	25.91	1.11	24.00	27.40
Oct. 19	7	18.90	4.00	10.40	24.70	15.96	0.49	15.00	16.80
Oct. 27	8	9.50	1.59	7.00	12.00	12.03	0.66	10.10	12.70
Nov. 9	9	9.12	1.72	6.0	11.0	11.33	0.32	11.0	11.7

			Salin	ity			Dissolve	d Oxygen	
Dates	Week	Avg	Std	Min	Max	Avg	Std	Min	Max
Jul. 11	1	3.52	1.09	2.1	5.9	7.20	1.42	4.7	10.9
Jul. 25	2	4.90	1.85	2.80	9.40	8.16	1.59	6.00	12.00
Aug. 8	3	6.11	1.52	4.60	10.00	7.12	1.18	4.98	10.09
Aug. 22	4	7.94	0.45	5.50	12.50	8.08	1.38	6.50	13.23
Sept. 7	5	6.84	1.93	4.60	11.10	6.20	1.25	4.90	11.18
Sept. 19	6	7.66	1.36	5.20	10.00	7.29	3.93	4.74	24.80
Oct. 19	7	0.16	0.08	0.01	0.30	7.80	1.77	6.65	16.13
Oct. 27	8	0.78	0.53	0.2	1.7	8.22	0.57	7.30	9.29
Nov. 9	9	1.03	0.76	0.2	2.2				

Mean Air Temperature (deg. C)

Week	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	28.7	27.9	30.4	28.7	23.6	27.4	27.4	22.2	28.4	24.6	27.9	24.1	24.0	30.1	28.2	28.2		31.3	27.9	26.5	
2	29.3	26.8	31.4	28.0	33.0	25.3	22.8	23.1	27.6	27.7	30.3	27.0	28.2	27.6	26.1	31.7	26.9	33.9	25.0	26.5	30.3
3		24.2	28.2	31.1	24.5	22.5	22.6	23.2	24.0	23.6	26.8	26.2	29.3	26.4	27.0	26.5	28.4	31.2	30.7	23.9	29.2
4	25.0	24.1	22.1	20.5	24.7	23.4	20.6	19.0	25.4	20.0	24.4	27.1	24.7	27.1	25.1	25.1	25.2	27.9	15.0	22.2	30.1
5	21.4	23.0	24.8	21.7	19.7	27.4	16.4	21.0	20.8	20.2	20.2	16.2	20.8	23.4	22.2	20.3	24.5	28.2	22.6	21.2	27.3
6	17.6	23.0	22.1	24.1	22.0	20.8	16.9	10.8	13.2	16.5	16.8	17.9	18.5	25.8	20.2	20.6	18.0	21.7	13.8	20.6	25.2
7	18.9	20.0	15.7	15.2	18.3	19.9	9.2	10.2	13.9	12.6	15.6	18.9	23.2	14.7	15.5	13.7	12.2	15.6	15.1	14.8	18.9
8	13.3	16.7	13.4	13.5	14.1	15.8	4.6	9.9	13.0	12.9	11.8	13.1	14.3	14.4	12.9	13.0	20.0	8.2	11.2	14.6	9.5
9	13.1	4.4	11.0	11.5	13.8	12.5	8.2	5.6	7.1	16.2	3.6	9.1	14.4	9.2	12.2	6.1	9.9	7.5	3.8	10.3	9.1

Mean Water Temperature (deg. C)

Week	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	26.5	25.2	28.0	26.5	24.3	27.2	28.0	25.5	26.9	27.9	26.9	24.0	24.5	25.1	28.5	24.6	26.0	26.0	26.8	26.0	27.0
2	27.0	26.1	28.4	26.9	27.2	26.3	26.4	24.5	26.7	29.7	29.4	26.4	25.8	26.5	27.6	27.0	27.2	27.5	27.0	26.8	27.4
3	27.9	25.4	28.4	27.4	25.5	25.8	25.0	24.0	26.1	28.0	28.0	25.8	25.8	26.5	27.5	23.8	27.9	27.4	28.5	26.4	28.6
4	25.6	23.9	23.6	22.2	25.2	25.4	24.7	23.4	26.0	25.3	25.4	26.3	24.0	26.8	24.8	23.3	27.0	26.8	23.6	25.5	27.6
5	22.3	22.6	24.0	21.5	23.6	24.5	21.1	23.0	25.3	21.1	23.0	20.8	23.0	20.4	24.7	19.6	25.1	25.0	23.7	21.4	26.2
6	19.8	21.5	21.1	22.0	22.1	19.6	19.5	16.5	18.5	21.7	20.3	20.6	20.9	25.1	20.4	19.5	20.5	23.1	20.6	20.2	25.9
7	19.0	19.1	14.4	17.7	17.4	18.8	15.1	13.9	17.2	18.1	19.8	15.9	20.1	19.0	15.5	16.1	14.4	20.1	18.1	15.6	16.0
8	15.6	15.9	13.2	14.0	16.4	18.2	12.3	12.6	14.9	16.5	17.2	11.5	13.2	16.0	13.8	12.1	17.6	15.6	14.1	14.6	12.0
9	13.7	11.5	9.6	11.0	13.4	13.7	10.0	10.0	11.3	16.2	12.7	8.1	13.8	11.6	11.8	8.8	12.3	11.0	9.5	9.3	11.3

Mean Salinity (ppt)

Week	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	5.8	4.5	6.0	7.4	4.4	11.9	7.5	3.0	6.2	6.0	5.6	0.6	6.1	4.0	5.1	1.6	4.2	8.3	3.9	6.5	3.5
2	4.5	4.8	6.8	6.5	7.4	5.8	8.4	3.9	9.3	3.9	5.5	2.2	6.7	3.3	8.6	1.2	7.1	8.0	3.7	2.6	4.9
3	3.7	2.6	7.2	6.1	5.9	4.9	7.7	0.8	6.1	7.0	6.2	4.2	5.3	6.8	8.1	2.0	7.5	9.7	1.1	1.3	6.1
4	3.9	2.5	6.9	6.3	8.6	3.4	7.8	4.7	6.9	3.9	8.8	3.7	7.2	4.8	9.6	1.7	8.5	9.5	5.9	0.7	7.7
5	7.1		4.5	5.8	7.1	6.7	8.1	5.8	5.1	6.2	9.1	4.7	6.9	7.9	8.6	3.5	9.0	10.9	3.2	0.4	6.8
6	6.0	4.3	3.8	5.0	7.4	5.1	6.4	6.3	4.4	5.5	9.6	2.6	6.2	6.3	1.5	2.9	8.3	9.2	1.6	0.2	7.7
7	2.6	5.0	3.5	5.0	3.2	6.0	6.8	5.1	4.5	4.0	8.0	5.3	6.6	5.6	3.3	6.7	9.6	8.7	1.7	5.1	0.2
8	3.8	4.6	5.8	5.4	5.4	2.4	7.0	3.1	4.7	5.4	2.3	1.5	8.2	4.8	3.9	7.1	8.0	7.3	0.7	4.2	0.8
9	5.7	5.4	2.2	6.4	3.7	3.7	6.4	4.4		6.8	0.6	0.3	6.1	5.6	1.9	6.5	9.1	5.0	0.6	5.0	1.0

Mean Dissolved Oxygen (mg/L)

WEEK 19	985 1986	5 1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1		7.1	7.4	9.9	7.4	8.6	9.1	9.2		8.3			8.4	6.2		5.8	6.3	6.8	6.5	7.2
2		9.3	8.1	8.1	8.0	8.9	8.2	7.6	7.2				7.4	6.5	6.5	5.2	6.3	5.9	7.6	8.16
3		7.4	10.2	8.7	7.9	6.3	7.6	9.0	7.7	8.3			6.7	5.6	7.4	4.8	6.8	8.7	7.7	7.12
4		7.6		8.3	7.4	8.5	9.1	7.0	7.8	7.5			7.2	5.2	7.4	5.4	6.9	5.5	6.7	8.08
5		8.6	8.0	8.2		7.8	8.9	7.2	7.9	8.9			7.1	4.4	6.5	6.1	6.1	7.3	11.4	6.2
6		8.6	9.6	7.4	9.6	9.3	9.4	8.5	7.7	6.3				4.8	7.3	4.6	6.0	7.0	9.4	7.29
7		9.7	9.9	8.5	8.4	9.2	9.8	9.0	8.3	5.1				4.1	6.9		6.0	7.0	8.5	7.8
8		7.8	9.3	8.3	9.1	9.6	9.2	8.7	8.2	5.9				4.5	9.0	5.6	7.4	7.9	9.5	8.22
9		8.3	9.4	9.1	8.8	10.2	9.3		8.0	6.2				5.0	8.8	7.2	8.2	9.0	10.5	

2005 HUDSON RIVER SPECIES COMPOSITION

		Jul	Jul	Aug	Aug	Sep	Sep	Oct	Oct	Nov	Weeks	Weeks
Species	Age*	11	25	8	22	7	19	19	27	9	4 - 9	1 - 9
Diadromous												
Alewife	99	253	137	66	16	0	0	4	2	0	22	478
American eel	99	1	2	2	2	1	0	2	6	6	17	22
American shad	99	10	92	1	0	0	0	23	19	2	44	147
Blueback herring	99	4	73	135	2	0	2	3899	3838	1718	9459	9671
Striped bass	0	1213	805	528	820	2160	1780	159	151	111	5181	7727
Striped bass	1	1	6	0	0	4	3	7	1	0	15	22
Estuarine												
Fourspine stickleback	99	0	0	0	0	3	0	0	1	0	4	4
Hogchoker	99	3	23	8	0	0	1	0	0	0	1	35
Killifish spp.	99	100	63	390	128	21	51	47	12	6	265	818
Threespine stickleback	99	0	0	1	0	1	0	6	0	0	7	8
White perch	0	9	1	33	74	187	22	7	46	40	376	419
White perch	1	104	130	16	12	44	1	1	6	3	67	317
Freshwater												
Blueaill	99	0	0	3	5	1	0	4	6	0	16	19
Carp	99	0	0	0	0	0	0	2	3	1	6	6
Gizzard shad	99	Õ	Õ	Õ	Õ	Õ	Õ	3	0	0	3	3
Hickory shad	99	1	0	0	0	0	0	0	0	0	Õ	1
Pumpkinseed	99	0	Õ	2	Õ	15	Õ	Õ	3	1	19	21
Smallmouth bass	99	1	Õ	0	1	0	1	Õ	Õ	0	2	3
Snottail shiner	99	5	0	1	0	0	0	2	1	1	4	10
Tesselated darter	aa	0	0	1	4	1	0	1	1	0	7	8
Yellow nerch	99	1	0	0	0	0	1	0	1	0	2	3
reliow perch	33		0	0	0	0	'	0	'	0	2	0
Marine												
Atlantic menhaden	0	4	123	619	6	2	2	523	1	0	534	1280
Atlantic needlefish	99	60	3	2	4	5	1	0	0	0	10	75
Bay anchovy	99	0	2080	1311	0	145	48	1875	1	0	2069	5460
Bluefish	0	14	32	21	39	23	16	0	0	0	78	145
Naked Goby	99	0	0	0	0	1	0	0	0	1	2	2
Northern kingfish	99	0	5	3	3	0	0	0	0	0	3	11
Northern pipefish	99	0	13	18	24	29	23	0	0	0	76	107
Northern puffer	99	0	2	3	2	0	0	0	0	0	2	7
Northern stargazer	99	0	0	0	0	1	0	0	0	0	1	1
Silverside spp.	99	388	4109	4891	5479	5326	3032	99	40	33	14009	23397
Spot	99	2	0	1	0	0	0	1	2	0	3	6
Striped mullet	99	0	0	0	0	0	1	0	0	0	1	1
Striped searobin	99	0	3	1	0	1	0	0	0	0	1	5
Summer flounder	99	1	2	0	0	0	0	0	0	0	0	3
Tautog	0	0	0	0	1	0	0	0	0	0	1	1
Weakfish	99	Õ	2	1	0	0	0	0	0	0	0	3
White mullet	99	1	0	0	0	0	0	0	0	0	Õ	1
Winter flounder	0	3	0	0	0	0	0	0	0	0	0	3
Total Fish Catch		2179	7706	8058	6622	7971	4985	6665	4141	1923	32307	50250
· · · · ·		-										
Invertebrate												
Blue crab	0	3	2	1	20	25	69	68	19	64	265	271
Blue crab	1	1	6	6	12	4	9	4	0	1	30	43
Total Invertebrate Catch		4	8	7	32	29	78	72	19	65	295	314
Number of seines (n)		24	24	25	24	25	25	25	24	25	148	221

* 0=Young-of-the-year; 1=Older; 99=age unknown

HUDSON RIVER TOTAL SPECIES CPUE 1980 - 2005, WEEKS 4 - 9

Species	Age*	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Diadromous																											
Alewife American eel Atterican shad Atlantic tomcod Blueback herring Striped bass Striped bass Striped bass (hatchery) Striped bass (hatchery)	99 99 99 99 99 0 1 0 1	1.1 0.2 4.4 0.2 27.7 23.9 1.4	55.6 0.5 22.1 1.8 0.2 21.4 0.4	1.1 0.9 9.2 5.7 19.9 30.5 0.8	1.1 0.8 17.5 1.0 38.1 48.0 0.2 0.1	0.3 0.8 9.1 1.3 12.6 37.1 0.5 0.3	0.8 0.4 10.5 1.8 40.8 3.8 0.6 1.1 0.0	1.6 0.2 27.1 2.2 7.7 6.1 0.3 1.7 0.0	0.4 0.5 8.0 1.8 44.7 60.7 0.1 0.5 0.0	2.8 0.6 8.8 3.8 33.6 52.3 0.8 0.4 0.0	0.4 0.4 11.5 2.3 46.8 41.9 0.6 0.6	0.4 0.4 7.7 1.3 196.6 38.0 0.4	0.1 0.4 1.1 0.1 53.6 6.9 0.7	0.0 0.2 10.5 0.8 155.6 17.3 0.8 0.3	0.1 1.6 0.0 16.1 26.5 0.6 0.5 0.0	0.4 0.2 12.0 0.1 9.1 28.5 0.2 0.1	0.0 0.2 3.0 0.0 156.7 27.4 1.0 1.4 0.0	0.0 0.2 2.8 0.1 3.0 14.7 0.4	0.5 0.5 2.3 0.1 26.4 50.3 0.6	0.1 0.2 0.0 0.1 22.9 0.9	4.4 0.3 5.4 0.0 98.4 52.5 0.5	0.4 0.1 1.0 0.1 2.1 7.8 0.7	0.1 0.1 2.2 0.0 1.9 91.2 0.6	0.1 0.2 4.4 0.0 12.1 21.5 1.1	1.1 0.2 3.0 2.1 6.5 35.0 0.3	0.3 0.1 2.2 0.1 1.4 14.3 0.2	0.1 0.1 0.3 63.9 35.0 0.1
Estuarine Fourspine stickleback Hogchoker Killifish spp. Striped anchovy Threespine stickleback White perch White perch	99 99 99 99 99 99 0 1	0.2 0.3 4.9 0.1 54.4 3.6	0.5 0.4 9.5 50.9 13.1	0.6 2.0 16.1 0.5 107.1 70.1	0.7 4.6 12.2 0.0 40.8 45.4	0.4 1.4 5.6 28.0 41.3	1.8 2.7 18.4 11.0 11.3	1.2 2.3 8.8 0.0 40.5 12.9	2.6 0.9 18.9 0.3 11.4 8.0	1.2 1.8 19.8 0.0 80.3 12.3	0.1 1.9 2.8 33.2 9.8	0.2 1.2 4.9 7.0 7.8	0.1 0.6 0.7 0.0 2.0 6.5	0.0 0.8 0.7 0.2 3.8 4.6	0.7 0.1 0.0 2.3 6.7	0.0 1.6 2.2 0.0 6.4 4.2	0.7 1.4 0.0 2.3 3.7	0.0 0.3 0.1 0.0 2.4 4.4	0.3 0.6 5.0 1.9 6.9	0.2 0.4 1.9 4.1 10.2	0.0 0.3 20.8 2.5	0.1 0.9 3.1 5.0	0.0 3.4 25.9 3.0	0.6 6.8 0.0 7.8 11.2	0.3 0.1 2.3 0.0 0.0 19.2 5.8	0.2 8.6 0.2 1.8 1.5	0.0 0.0 1.8 0.0 2.5 0.5
Freshwater Black crappie Bluegill Brown bullead catfish Carp Chain pickerel Follfoch	99 99 99 99 99	0.1 0.1 0.0	0.0 0.1	0.0 0.0 0.2	0.1 0.1 0.0	0.4 0.0 0.1	0.1 0.0 0.1	0.6 0.0 0.1	0.4 0.0 0.2	0.2 0.0 0.1	0.0 0.2 0.0 0.2 0.0	0.1 0.0 0.2 0.0	0.0 0.0	0.1	0.0 0.1 0.0	0.1 0.0 0.2	0.1 0.1	0.0 0.0 0.1	0.2 0.0	0.1	0.0 0.0 0.1 0.1	0.3 0.0 0.1 0.0	0.0 0.0	0.7 0.1	0.0 0.0 0.1	0.0 0.1 0.0	0.1 0.0
Gizzard shad Golden shiner Goldfish Hickory shad	99 99 99 99	0.0 0.3 0.0	0.1 0.1	0.1	0.1 0.1 0.0	0.1 0.2 0.0	0.0	0.0	0.3	0.0 0.0	0.0 0.0	0.0 0.0 0.0	0.1 0.0	0.0		0.0 0.0	0.1		0.2		0.1 0.0	0.2	0.1	0.1	0.1	0.1 0.0	0.0
Johnny darter Largemouth bass Longnose sucker Pumpkinseed	99 99 99 99	0.0 0.0 3.2	1.4	0.0 3.6	0.5 0.0 1.7	0.2 0.0 1.4	0.3	0.0	0.0 0.1	0.0 0.1	0.0	0.0 0.2	0.0 0.0		0.0	0.0 0.1	0.0	0.0	0.0 0.4	0.0	0.1	0.1	0.3	0.0	0.0 0.1	0.0 0.0 0.1	0.1
Redbreast sunfish Redear sunfish Smallmouth bass Spottail shiner	99 99 99 99	0.7	0.2 0.0 0.2	0.4	0.3	0.2	0.0	0.0	0.0	0.0	0.1	0.0 0.0 0.3	0.0	0.0		0.2	0.0	0.1	0.6 0.0 2.0	0.5		0.1	0.0	0.0	0.0 0.0 0.2	0.0	0.0
Tesselated darter White catfish White sucker Yellow perch	99 99 99 99	0.0 0.0 0.1 0.2	0.0 0.1 0.3 0.1	0.1 0.2 0.0 0.2	0.8 0.0 0.1	0.2 0.1 0.0 0.0	0.0 0.0	0.0 0.1 0.0	0.4 0.1 0.0 0.0	0.0 0.1 0.0	0.1 0.1 0.0 0.0	0.2 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.1 0.0	0.1 0.0 0.0	0.0 0.0 0.0	0.1 0.0 0.0 0.0	0.9 0.0 0.0	0.4	0.0	0.0 0.0 0.0 0.0	0.3	0.0 0.0 0.0	0.3	0.1 0.0 0.0	0.0
Invertebrates Blue crab Blue crab Blue crab Clam Mudcrab	0 1 99 99	0.0	0.0 0.0 0.5	0.2 0.2 0.2	0.0 0.0	0.5	0.1 0.1 0.9	0.3	1.9	2.1 0.0 3.0	2.7	0.0 2.2	0.3 0.0 8.2 0.2	2.9 0.0	0.5 0.1 0.8	0.3 0.2 0.7	0.4 0.1 1.3	0.2 0.3 0.0	12.5 0.2 1.1	30.1 1.8 0.0	17.4 1.0	0.2 0.3	2.5 0.3	1.5 0.9 0.7	0.3 0.1	0.4 0.2	1.8 0.2
Marine Atlantic croaker Atlantic menhaden Atlantic menhaden	99 0 1	0.2	0.0	0.6 0.1		0.2						0.0				0.0			0.0	0.0	12.3 0.0	50.8	0.2	0.9 8.1	0.0 2.3 0.1	0.4 63.6	3.6
Atlantic menhaden Atlantic needlefish	99 99	0.5 0.3	7.0 0.3	0.3 0.7	4.0 0.1	0.0 0.0	1.3 1.1	8.6 0.1	6.3 0.3	0.1 0.3	0.2 0.7	7.5 0.6	0.2 0.1	4.2 0.1	0.1	4.2 0.1	0.1 0.1	0.5 0.0	0.1 1.9	21.7 0.1	117.3 0.0	0.0		0.0	0.0	0.0	0.1
Atlantic threadfin Bay anchovy Bluefish Bluefish	99 99 0 1	5.2 2.2	2.0 2.7	7.2 3.0	51.3 2.5 0.0	111.6 1.2	26.8 2.4	0.9 2.2	53.6 0.9	33.5 3.6	0.0 94.7 1.3	6.5 1.5 0.0	11.2 0.6	35.0 0.7	6.7 0.7	40.7 0.8	75.6 1.5 0.0	31.3 0.4	35.0 1.3	32.5 1.2	6.4 15.0	15.5 0.2	2.3 4.8	16.3 2.2	15.4 0.6	1.1 0.3	14.0 0.5
Butterfish Butterflyfish	99 99	0.0	0.0		0.0						0.1							0.0				0.0		0.0			
Cornettish, bluespotted Crevalle jack Cunner Grey snapper	99 99 99 99	0.0	0.1	0.1	0.1	0.2	0.1 0.0	0.1	0.0	0.2 0.0	0.1	0.2	0.1	0.0	0.1	0.1 0.0	0.1 0.0	0.1		0.1	0.0	0.0	0.0	0.0	0.0	0.0	
Houndfish Inshore lizardfish Lookdown Naked Goby	99 99 99 99	0.0	0.0	0.0 0.0			0.1 0.0 0.0	0.1	0.3	0.1	0.0 0.0 0.0 0.1	0.2	0.1 0.2	0.1 0.1	0.0 0.0 0.0	0.0	0.1		0.0	0.0 0.1	0.0 0.0 0.2	0.0	0.0	0.0 0.1	0.0 0.0	0.0	0.0
Northern kingfish Northern pipefish Northern puffer Northern searobin	99 99 99 99	0.0 0.5	0.0 1.0 0.0	0.1 1.5 0.0	0.0 1.0 0.0	0.0 1.1	0.3 2.3 0.0 0.0	0.0 0.9	0.0 1.7 0.0	0.2 4.4	0.1 1.9	0.0 1.4	0.2 1.2	0.2 0.6	0.2 0.8 0.0	0.1 0.4	0.1 1.5 0.0	0.0 0.2	0.4 4.0 0.0	0.3 1.5 0.0	0.0 0.7 0.0	0.1	0.1 2.4 0.1	0.3 1.2	0.0 0.4	0.0	0.0 0.5 0.0
Northern sennet Northern stargazer Northern tonguefish	99 99 99						0.0			0.0			0.0 0.0		0.0				0.1		0.0			0.0			0.0
Oyster toadfish Permit Biafiah	99 99															0.0			0.0	0.0							
Pinfish Silver perch Silverside spp.	99 99 99 99	6.5	14.4	0.0 9.9	9.0	2.2	0.0 24.1	98.2	16.9	0.0 152.2	8.1	73.4	0.1 41.2	0.1 54.5	0.4	0.0 0.5 146.1	1.3 198.0	0.1 62.9	0.0 0.1 148.7	0.0 127.6	72.1	0.0 60.2	91.3	85.2	22.9	0.0 41.0	94.7
Spanish mackerel Spot Spotfin butterflyfish	99 99 99			0.3	0.0		0.0	0.0		1.1	0.0 0.0	0.0 0.0	0.0 0.0		0.0 0.1	0.0		0.0	0.0		0.0	0.0		0.0	0.0		0.0
Spotfin mojarra Spotted hake	99 99												0.0	0.0		0.0			0.0	0.0 0.0							
Striped mullet Striped searobin Summer flounder Tautog Tautog	99 99 99 0 1	0.0 0.0 0.1	0.0	0.3 0.1 0.1	0.4 0.0 0.0	0.2 0.0 0.0	0.0 0.1 0.1	0.1 0.3 0.1 0.0	0.0 0.0 0.0 0.0	0.2 0.3	0.0 0.0	0.0 0.0 0.0	0.0 0.1 0.2 0.1	0.0 0.1 0.0	0.1 0.2	0.1	0.0 0.1	0.1	0.4 0.1 0.0	0.2 0.0 0.0	0.0 0.0 0.0	0.0	0.0 0.2 0.1	0.1 0.0 0.1	0.0	0.1	0.0 0.0 0.0
Tautog Weakfish White mullet	99 99 99	0.0 0.0 0.1	0.3 0.0 0.0	0.1 0.0 0.1	0.1 0.1	0.0 0.0 0.0	0.0 0.4 0.1	0.0 0.1		0.1 0.0 0.1	0.0 0.1	0.1 0.1	0.1 0.0	0.0	0.1	0.0 0.0			0.1 0.0	0.0 0.0	0.0			0.0 0.0	0.0	0.0	
Windowpane flounder Winter flounder Winter flounder	99 0 1	0.0	0.0	0.0	0.0	0.0	0.7	0.8	0.3	0.0	0.4 0.0	0.0 0.7 0.0	0.5	0.9 0.0	0.9 0.0	0.0 0.6 0.0	0.2	0.2	1.6	0.6 0.0	0.2	0.2	0.3 0.0	0.3 0.0	0.2 0.0	0.3 0.0	
Reptiles Diamondback terrapin	99	0.0	0.3	0.9	0.3	0.2	2. <i>1</i> 0.0	0.0		0.0		0.0	U.U				0.0	0.0	0.0		0.0						
Painted turtle Number of samples (n)	99	150	132	143	148	146	146	147	150	0.0	150	142	140	146	150	146	147	134	139	127	104	136	135	137	147	145	148
			-		-	-										-								-			-

* 0=Young-of-the-year; 1=Older; 99=age unknown

18

HUDSON RIVER TOTAL SPECIES CPUE 1985 - 2005, WEEKS 1 - 9

Species Age* 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005

Diadromous Alewife	99	1.3	1.4	0.8	2.5	0.5	0.7	0.1	0.0		0.4	0.4	0.2	3.3	0.1	2.7	0.3	0.3	0.7	2.0	0.4	2.2
American eel American shad Atlantic sturgeon	99 99 1	0.6 10.1	0.3 22.3	0.5 6.8	0.8 11.5	0.5 11.9	0.6 11.2	0.5 1.0	0.4 12.0	0.2 2.2	0.3 10.3	0.3 2.2	0.2 8.3	0.4 11.0	0.2 0.4	0.3 3.9	0.2 0.8	0.2 1.9	0.2 3.3	0.2 4.4	0.3 1.8	0.1 0.7
Atlantic tomcod Blueback herring	99 99	1.9 28.3	1.7 6.2	1.2 32.2	2.6 27.8	1.6 38.0	1.3 139.8	0.1 35.1	1.4 104.6	0.0 10.7	0.1 6.3	0.0 104.2	0.5 29.7	0.2 19.1	2.3 0.1	0.0 59.9	0.6 1.4	0.6 1.5	0.0 7.9	1.4 8.0	0.2 1.2	43.8
Striped bass Striped bass Striped bass (batchery)	0 1 0	4.6 0.9	8.7 0.2 1.2	82.9 0.1	70.4 0.7	59.5 0.7 0.4	58.0 0.4	15.2 0.8	26.6 0.8	55.9 0.6	43.5 0.3	33.7 1.2	21.3 0.5	59.0 0.5	33.7 0.7	57.7 0.7	22.9 0.8	77.4 0.8	22.2 0.9	72.6 0.3	16.4 0.5	35.0 0.1
Striped bass (hatchery)	1	0.0	0.0	0.0	0.0	0.4	0.0		0.2	0.0	0.0	0.0	0.0									
Estuarine Fourspine stickleback Hogchoker	99	1.3	0.9	2.0	1.1	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.1	0.3	0.1	0.4	0.0	03	17	0.2	0.1	0.0
Killifish spp. Rainbow smelt	99 99	14.1	6.8	15.3	18.8 0.0	3.8	5.0	2.4	0.7	0.8	1.6	3.6	0.3	4.9	2.4	1.8	0.6	2.4	5.5	10.1	9.2	3.7
Striped anchovy Threespine stickleback	99 99		0.0	0.0	0.0	22.0		0.0	0.1	0.0	0.0	0.0	0.0	0.0		00 F		04.0	0.1	0.0	0.1	0.0
White perch	1	20.5	28.9	11.5	20.2	33.8 26.7	7.5 10.8	2.3 9.8	5.5 6.4	3.7 7.7	7.8	1.9	2.9 7.3	5.6	4.1 9.7	7.0	6.3 16.2	21.8	20.1	25.6 8.2	2.0 3.7	1.9
Freshwater Black crappie	99					0.0				0.0						0.0						
Biuegili Brown bullead catfish Carp	99 99 99	0.0 0.0 0.2	0.4 0.0 0.2	0.3 0.0 0.2	0.3 0.0 0.2	0.2 0.5 0.3	0.1 0.1 0.3	0.0	0.0 0.0 0.1	0.0	0.2 0.0 0.2	0.0	0.0 0.0 0.1	0.2 0.0 0.0	0.0	0.0 0.0 0.1	0.3 0.1 0.1	0.0 0.0 0.1	1.4 0.0 0.1	0.1 0.2 0.1	0.0 0.1 0.1	0.1
Chain pickerel Fallfish	99 99					0.0	0.0	0.0		0.0							0.0					
Gizzard shad Golden shiner Goldfish	99 99 99	0.0	0.0	0.2	0.0	0.0 0.0 0.0	0.0 0.0	0.1 0.0	0.0		0.0 0.0	0.1	0.0 0.0	0.1	0.0	0.1 0.0	0.3	0.1	0.1	0.1 0.0	0.1 0.0	0.0
Green sunfish Hickory shad	99 99	0.0	0.0	0.0	0.0	0.0			0.0			0.0			0.0					0.0	0.3	0.0
Largemouth bass Longnose sucker Rumpkinseed	99 99 99	0.3	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Red Finned Pickerel Redbreast sunfish	99 99	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.4	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.1
Smallmouth bass Spottail shiner	99 99	0.0	0.0	0.0	0.3	1.3	0.0	0.1	0.0	0.0	0.2	0.1	0.2	0.0 1.9	0.6	0.1	0.2	0.0 0.1	0.0	0.0	0.0	0.0
White catfish White sucker	99 99 99	0.0	0.0 2.3 0.0	0.3	0.1 0.2 0.0	0.2	0.2	0.1 0.1 0.0	0.1	0.2	0.2	0.0 0.0 0.0	0.2	3.5 0.0	0.8	0.0	0.2 0.0 0.0	0.4	0.1	0.5	0.5	0.0
Yellow perch	99	0.0	0.0	0.0	0.0	0.0	0.0	0.0					0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Blue crab	0	0.1			1.4		0.0	0.3		0.3	0.4	0.2	0.4	11.8 0.4	24.6 2.9	14.1 2.1	0.3	1.8 0.5	2.0 1.5	0.4	0.4	1.2 0.2
Blue crab Clam	99 99	1.5	0.3	1.4	3.3	3.0	2.7	6.1 0.1	5.5 0.0	0.8	0.6	1.8	0.0	1.4	0.0				1.1			
Marsh crab Mudcrab	99 99										0.0	0.0	0.0	0.0 0.0	0.0	0.1			0.0			
Marine Atlantic croaker	99																			0.0	0.3	
Atlantic menhaden Atlantic menhaden Atlantic menhaden	0 1 99	0.0 20.9	23.5	4.8	0.9	0.8	0.0	2.8	57	0.1	35	0.3	0.0	0.0	0.0	9.5 0.0 84.0	48.8 0.0	0.5	0.7 9.6	3.6 0.1	44.6	5.8
Atlantic needlefish Atlantic threadfin	99 99	1.0	0.2	0.8	0.4	0.0 0.7 0.0	0.7	0.5	0.2	0.1	0.3	0.2	0.1	1.5	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3
Bay anchovy Bluefish Bluefish	99 0	52.9 6.1	5.3 3.5	60.4 3.5	37.3 5.0	244.4 2.0	11.0 3.1	34.0 1.3	40.3 1.3	7.6 2.6	184.5 1.1	88.3 1.5	42.6 0.8	47.4 1.7	34.5 1.1	9.2 13.8	14.0 0.9	1.8 4.1	13.3 2.9	11.7 1.0	1.1 0.8	24.7 0.7
Bonefish Butterfish	99 99	0.0			0.0	0.0	0.0			0.0	0.0 0.0	0.0	0.0						0.0			
Butterflyfish Crevalle jack	99 99	0.3	0.1	0.0	0.2	0.3	0.2	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0 0.1	0.1	0.0 0.2	0.1	0.1	0.0	0.0	
Grey snapper Houndfish	99 99 99	0.0		0.0	0.0	0.0					0.0	0.0									0.0	
Inshore lizardfish Lookdown	99 99	0.0				0.0	0.1	0.1	0.1	0.1	0.0			0.1	0.1	0.0		0.0	0.1	0.0		
Naked Goby Northern kingfish Northern pipefish	99 99 99	0.0 0.2 2.5	0.1 0.0 0.9	0.2 0.0 1.7	0.1 0.2 3.7	0.1 0.1 1.5	0.1 0.1 1.7	0.2 0.3 2.6	0.1 0.2 0.8	0.0 0.2 0.7	0.0 0.1 0.5	0.2 0.1 2.1	0.0 0.2	0.1 0.4 3.6	0.1 0.4 1.3	0.4 0.1 1.2	0.0 0.0 0.2	0.2 0.1 1.8	0.1 0.4 1.1	0.0 0.0 0.6	0.1 0.2 0.6	0.0 0.0 0.5
Northern puffer Northern searobin	99 99	0.0	0.0	0.0	0.0	0.0	0.0	0.1		0.0	0.0	0.0		0.0	0.0	0.1		0.1 0.0	0.0	0.0	0.0	0.0
Northern sennet Northern stargazer Northern tonguefish	99 99 99	0.0		0.0	0.0	0.0	0.0	0.0 0.0	0.0	0.0				0.1		0.0		0.0	0.1		0.0	0.0
Oyster toadfish Permit	99 99													0.0	0.0		0.0					
Pigfish Pinfish Scup	99 99 99										0.0			0.0		0.0						
Silver perch Silverside spp.	99 99	0.0 21.3	69.9	20.0	0.0 116.6	7.9	55.8	0.1 147.4	0.1 50.2	0.3 90.7	0.4 191.7	0.8 171.4	0.1 65.8	0.1 126.8	0.0 120.6	0.0 90.8	0.0 68.5	93.8	104.4	20.7	0.0 65.0	105.9
Smallmouth flounder Spanish mackerel Spot	99 99 99	0.0	3.2	03	0.8	0.0	0.0	0.0	0.0	0.0 0.0 1.0	0.0	0.0	0.4	0.0	0.0	0.2	0 1	0.0	03	0.0	0.0	0.0
Spotfin butterflyfish Spotfin mojarra	99 99	0.0	0.2	0.0	0.0	0.0	1.7	0.0	0.0	1.0	0.0	0.0	0.4	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0
Spotted hake Striped mullet	99 99 99	0.0	0.3	0.0		0.0	0.1	0.0	0.0	0.1	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0
Summer flounder Tautog	99 0	0.3	0.4 0.0	0.0 0.0	0.0 0.2	0.0	0.1 0.0	0.2	0.2 0.0	0.2	0.2	0.1	0.1	0.1	0.0	0.1 0.0	0.1	0.0 0.0 0.1	0.1	0.0	0.1 0.1 0.0	0.0
Tautog Tautog	1 99	0.0	0.0 0.0	0.0	0.3 0.0		0.0 0.0	0.1						0.0				0.1				
Weakfish White mullet	99 99	0.0 0.3 0.0	0.0 0.0	0.0	0.0 0.1	0.0 0.1	0.0 0.1	0.4 0.2	0.0 0.0	0.0 0.1	0.0 0.0	0.0	0.0	0.1 0.0	0.0 0.0	0.1 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0
Windowpane flounder Winter flounder	99 0		0.9	0.2	0.0 0.7	0.3	0.0 0.8	0.7	0.0	0.0	0.0	0.6	0.2	1.8	0.6	0.2	0.4	0.4	0.2	0.5	0.4	0.0
winter flounder Winter flounder	1 99	2.5	0.0		0.1	0.0 0.0	0.0 0.0	0.0	0.0	U.O	U.O	0.0 0.0	0.0 0.0	0.0	U.O	0.0		0.0	0.0	U.U	0.0	
Reptiles Diamondback terrapin	99	0.0	0.0			0.0	0.0						0.0									
Painted turtle	99	216	222	225	0.0	225	217	215	221	225	0.0 221	221	204	104	109	0.0	211	209	210	222	220	221
+ 0-)/	-014-		 ao unka					210		19		1		1.04				-00	210			1

* 0=Young-of-the-year; 1=Older; 99=age unknown

6 week su	rvey							
Year	Hauls	Catch	CPUE	StDev	Range	Zeros	Index	Confidence Intervals
1980	150	3586	23.91	57.47	0-547	34	6.10	4.53 - 8.11
1981	132	2830	21.44	42.37	0-346	11	8.71	6.81 - 11.08
1982	143	4362	30.50	48.02	0-285	8	14.13	11.32 - 17.57
1983	148	7108	48.03	110.69	0-1178	8	16.25	12.56 - 20.93
1984	146	5418	37.11	89.85	0-906	6	15.00	12.03 - 18.65
1985	146	562	3.85	5.72	0-31	53	1.85	1.42 - 2.36
1986	147	902	6.14	8.98	0-55	35	2.89	2.26 - 3.64
1987	150	9100	60.67	157.77	0-1333	13	15.90	11.98 - 21.01
1988	145	7584	52.30	45.10	0-205	2	33.46	27.89 - 40.10
1989	150	6291	41.94	57.84	0-537	4	21.35	17.23 - 26.41
1990	142	5392	37.97	43.50	0-240	2	19.08	15.31 - 23.72
1991	140	959	6.85	7.95	0-41	30	3.60	2.84 - 4.52
1992	146	2525	17.29	15.51	0-83	5	11.43	9.62 - 13.55
1993	150	3974	26.49	34.32	0-230	7	12.59	10.08 - 15.67
1994	146	4159	28.49	31.73	0-246	4	17.64	14.74 - 21.09
1995	147	4027	27.39	45.16	0-389	2	16.23	13.72 - 19.16
1996	134	1964	14.66	18.40	0-143	6	8.93	7.41 - 10.72
1997	139	6998	50.35	63.58	0-328	6	22.31	17.42 - 28.50
1998	127	2910	22.91	24.07	0-135	5	13.47	10.95 - 16.53
1999	104	5464	52.54	76.86	1-474	0	26.61	21.11 - 33.49
2000	136	1064	7.82	16.57	0-120	31	3.18	2.45 - 4.06
2001	135	12317	91.24	220.33	0-1711	11	22.97	16.94 - 31.01
2002	137	2949	21.53	26.74	0-203	5	12.26	10.08 - 14.88
2003	147	5141	34.97	39.16	0-209	9	17.34	13.75 - 21.79
2004	145	2078	14.33	16.47	0-121	9	8.81	7.31 - 10.59
2005	148	5181	35.01	90.24	0-797	21	8.48	6.34 - 11.25

9 week survey

Year	Hauls	Catch	CPUE	StDev	Range	Zeros	Index	Confidence Intervals
1985	216	984	4.56	6.60	0-32	73	2.15	1.73 - 2.62
1986	222	1940	8.74	11.30	0-57	39	4.27	3.53 - 5.13
1987	225	18649	82.88	184.57	0-1432	13	25.12	20.09 - 31.34
1988	220	15488	70.40	85.38	0-869	2	42.16	36.33 - 48.89
1989	225	13397	59.54	86.16	0-642	4	28.42	23.79 - 33.92
1990	217	12591	58.02	64.65	0-473	2	29.80	24.90 - 35.63
1991	215	3275	15.23	22.57	0-160	32	6.56	5.35 - 7.99
1992	221	5874	26.58	25.50	0-142	5	16.93	14.67 - 19.52
1993	225	12587	55.94	74.18	0-402	7	23.32	19.13 - 28.38
1994	221	9624	43.55	50.38	0-367	4	25.71	22.10 - 29.89
1995	221	7457	33.74	44.64	0-389	2	20.23	17.59 - 23.25
1996	204	4346	21.30	25.83	0-188	6	12.76	10.94 - 14.85
1997	194	11452	59.03	71.07	0-412	7	27.93	22.80 - 34.17
1998	198	6674	33.71	34.46	0-183	5	19.26	16.25 - 22.79
1999	173	9981	57.69	67.47	1-474	0	33.80	28.63 - 39.88
2000	211	4830	22.89	51.89	0-416	31	7.19	5.75 - 8.94
2001	208	16103	77.42	179.92	0-1711	12	26.36	21.22 - 32.70
2002	210	4656	22.17	25.60	0-203	6	13.30	11.44 - 15.44
2003	222	16116	72.59	99.03	0-626	10	31.24	25.56 - 38.13
2004	220	3613	16.42	18.48	0-121	11	9.86	8.45 - 11.47
2005	221	7727	34.96	80.27	0-797	26	10.26	8.20 - 12.79

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	C/E	C/E
	River	Jul	Jul	Aug	Aug	Sep	Sep	Oct	Oct	Nov	Weeks	Weeks
Station	Mile	11	25	8	22	7	19	19	27	9	4 - 9	1 - 9
East												
18E	23	345	24	48	35	27	16	0	25	8	18.5	58.7
21E	23	136	74	133	29	85	26	0	3	2	24.2	54.2
17E	24	51	44		221	15	24	3	0	1	44.0	44.9
16E	25	15	18	34	18	1	27	9	1	8	10.7	14.6
12E	29	24	53	40	19	19	5	3	0	0	7.7	18.1
14E	29	28	10	14	25	49	21	5	0	1	16.8	17.0
19E	33	37	42	23	17	196	139	13		1	73.2	58.5
11E	34	108	4	18	87	0	2	28	0	6	20.5	28.1
9E	34	8	173	17		147		15	1	16	44.8	53.9
7EE	35	14	75	9	47	172	363	8	0	1	98.5	76.6
7EW	35			0	38	797	468	10	4	2	219.8	188.4
8E	35	51	3	57	4	289	1	0	3	0	49.5	45.3
3E	39	0	7	10	36	68	108				70.7	38.2
4E	39	3	0	1	26	23	13	0	9	0	11.8	8.3
West												
15WS	27	237	60	19	32	27	1	1	3	0	10.7	42.2
16WN	27	22	54	0	21	54	4	18	3	4	17.3	20.0
14W	29	19	18	30	23	80	1	12	6	3	20.8	21.3
12W	30	1	55	13	32	2	5	11	4	5	9.8	14.2
11W	32	17	24	0	24	31	0	2	9	0	11.0	11.9
10W	35	17	31	6	4	1	0	1	2	0	1.3	6.9
9W	35	4	10	3	8	8	1	0	10	3	5.0	5.2
8W	36	1	3	13	22	1	76	4	31	15	24.8	18.4
7W	37	1	6	16	24	17	219	7	23	21	51.8	37.1
3W	39		4	3		26	120	2	2	1	30.2	22.6
4W	39	13	13	4	6		98	0	0	1	21.0	16.9
5W	39	61		17	22	25	42	7	12	12	20.0	24.8
		<i>a</i> :	a :	a-	.	a -	a-	a-	a :	a-		
Effort		24	24	25	24	25	25	25	24	25	148	221
Catch		1213	805	528	820	2160	1/80	159	151	111	5181	(121
C/E		50.54	33.54	21.12	34.17	86.40	71.20	6.36	6.29	4.44	35.01	34.96

HUDSON RIVER YOY STRIPED BASS CPUE BY STATION 1985 - 2005, WEEKS 1 - 9

STATION	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
East																					
18E	0.1	3.3	64.2	56.0	30.5	35.8	7.3	21.5	66.5	39.5	34.7	18.3	41.4	26.8	22.2	13.2	45.9	21.3	115.5	11.3	58.7
21E		1.0	70.3	23.5	111.8	70.0	1.0	24.6	89.8	42.3	59.4	46.1	26.1	44.4	38.6	12.2	27.3	9.6	106.4	22.6	54.2
17E	0.1	8.3	45.7	96.4	157.7	97.6	13.8	21.7	61.8	61.6	34.2	18.0	27.5	48.6	48.2	12.3	30.1	18.0	81.8	16.2	44.9
16E		3.0	135.0	50.1	34.5	42.6	4.7	17.0	50.7	26.6	38.7	14.3	23.2	38.8	37.8	4.6	30.1	6.2	44.1	13.2	14.6
15E		8.0	29.0	38.0	51.3	45.6	6.3		73.6				48.0	80.0	126.0	7.0					
12E	1.9	1.9	35.4	49.7	36.5	39.8	0.9	18.4	57.3	29.9	31.1	11.3	10.9	21.0	51.9	11.0	9.6	8.0	50.6	7.8	18.1
13E	3.7	4.5	93.3	14.5	12.5	31.0	24.2	19.7	55.6	14.3	82.3	13.0	44.4	22.3	47.5	4.6	24.5	26.4	58.5	61.0	
14E	0.1	9.1	37.0	78.4	96.6	67.6	2.7	37.7	35.1	44.0	33.4	20.0	41.1	58.5	48.8	22.7	36.5	27.8	126.1	8.8	17.0
19E	1.6	6.0	259.5	88.8	67.6	33.1	7.0	19.8	33.1	59.7	31.8	16.5	100.4	30.4	15.2	16.0	57.8	12.8	70.8	12.0	58.5
10E	1.0																				
11E	6.0	9.8	319.9	128.3	45.3	28.0	36.0	37.3	73.3	51.0	129.4	29.3	124.8	69.6	79.5	79.1	159.2	25.8	115.6	23.0	28.1
9E	1.0	6.0	47.4	37.0	42.9	57.3	17.0	35.5	73.0	55.8	14.8	23.2	54.1	40.7	92.5	18.2	50.3	15.9	124.2	24.1	53.9
7E1		10.0	54.0		1.0	17.5				149.0											
7EC	15.5																				
7EE	4.9	12.9	222.0	54.3	58.0	30.1	9.0	13.9	65.1	26.4	17.1	19.0	54.1	11.8	35.1	34.8	193.3	50.5	41.8	19.3	76.6
7EW	5.7	10.8	358.7	66.3	99.7	52.5	7.9	26.5	57.3	28.1	42.7	12.3	31.6	27.7	35.6	51.7	231.0	21.3	39.5	15.1	188.4
8E	1.2	5.0		29.0		15.3	7.0		85.3	90.0	13.3	34.7	122.4	54.0	85.3	131.1	266.3	51.9	168.0	14.8	45.3
6E	1.3	1.8	38.9	51.8	31.0																
3E	4.3	4.9	46.9	29.9	24.4	21.9	6.7	13.1	17.4	46.8	17.8	8.9	96.6	22.1	60.0	12.9	118.1	18.5	43.0	9.0	38.2
4E	7.9	6.4	38.0	42.3	30.4	40.3	15.0	27.8	33.2	21.6	13.3	16.7	78.6	18.3	47.3	7.8	213.4	25.4	40.0	8.5	8.3
5E	5.0	18.3	9.0	25.8	26.0	34.0	16.0	13.5	186.0	11.0	10.5	22.3	28.0								
20E	8.0																				
West																					
15WN	0.7		63.3	32.3	53.3	53.5	3.0	32.5	11.0	105.0											
15WS	3.9	7.1	145.8	109.8	63.0	159.6	45.8	32.4	80.6	57.9	22.8	8.1	153.8	56.6	149.0	13.9	48.3	17.0	98.1	3.8	42.2
16WN	3.9	15.3	53.1	89.6	62.2	162.4		22.2	48.4	11.0	20.2	5.1	79.5	15.0	81.6	5.2	63.8	12.8	60.1	9.1	20.0
16WS	3.0	16.3	20.0	149.5	25.3	82.4		6.0													
13W		16.0	25.3	21.0		3.5	20.7	13.7													
14W	4.4	10.0	93.0	65.1	55.6	64.9	40.6	20.0	76.9	24.4	26.6	12.2	36.9	29.2	54.2	19.8	70.8	19.3	75.2	10.2	21.3
12W	3.0	3.4	46.4	36.7	36.6	83.1	15.8	22.4	53.3	41.8	21.7	14.6	26.2	25.0	100.5	7.8	37.0	17.9	35.4	8.3	14.2
11W	2.6	4.9	18.7	42.8	11.2	7.0	11.6	11.9	28.7	39.9	31.1	37.4	4.0	22.0	78.6	20.4	39.2	16.9	35.7	18.2	11.9
10W	4.0	2.8	24.3	37.1	41.5	47.9	14.0	25.6	55.1	29.0	18.3	18.2	53.4	16.3	33.6	18.3	34.6	21.7	61.8	29.1	6.9
9W	5.1	6.4	25.4	96.5	37.4	39.5	6.6	21.1	20.9	32.3	20.3	12.3	41.3	30.1	26.6	11.2	20.0	12.8	44.6	14.9	5.2
8W	8.4	15.8	35.6	127.8	137.9	95.3	26.1	69.0	87.3	83.2	34.5	34.1	42.9	28.6	44.7	6.0	34.2	29.7	77.1	41.4	18.4
7W	10.6	15.7	65.7	114.1	56.6	71.0	20.9	59.5	43.2	74.2	35.6	54.3	68.3	14.3	45.8	17.5	52.0	37.6	121.1	32.0	37.1
3W		5.7																			22.6
4W	15.8	20.1	71.4	93.9	143.8	80.6	23.4	28.6	38.8	27.8	35.1	31.3	97.7	37.3	51.8	33.7	87.0	30.8	33.0	25.0	16.9
4WN																					
5W	10.6	18.1	43.1	64.8	63.8	54.1	27.1	26.2	46.8	33.2	34.6	25.3	78.0	42.7	49.5	22.6	46.9	18.2	42.0	18.0	24.8
20W	11.0																				
Annual C/E	4.6	8.7	82.9	70.4	59.5	58.0	15.2	26.6	55.9	43.5	33.7	21.3	59.0	33.7	58.0	22.9	77.4	22.2	72.6	16.4	35.0

HUDSON RIVER YOY STRIPED BASS CPUE BY STATION 1980 - 2005, WEEKS 4 - 9

STATION	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
East	_																									
18E	13.5	30.8	24.2	36.7	23.1	0.2	2.6	27.8	68.3	36.0	15.0	2.6	17.3	39.0	23.4	31.2	12.0	31.7	7.8	23.7	3.2	41.0	7.4	74.2	12.3	18.5
21E							1.0	65.5		60.5	50.5	0.8	15.7	18.5	30.0	30.8	16.3	10.5	17.3	36.3	2.0	10.2	5.0	61.3	28.0	24.2
17E	9.5	17.6	35.3	91.7	36.8	0.2	7.0	46.5	96.3	73.3	57.6	5.8	13.0	31.7	60.3	14.0	12.3	19.2	35.5	18.3	1.0	22.2	14.5	61.0	15.2	44.0
16E	6.3	4.0	19.8	21.4	11.0		3.0		48.7	15.2	22.3	1.3	12.8	30.8	16.8	13.0	7.2	12.2	15.2	31.7	1.7	20.2	6.2	31.5	17.5	10.7
15E	24.0			302.4	52.8		8.0	29.0	38.0	10.0	10.0	6.3		12.5							5.0	44.0		39.5		
12E	2.7	3.5	8.4	24.3	10.4	2.6	1.8	17.5	29.0	20.0	21.8	1.0	17.6	13.7	8.2	14.0	10.5	9.5	12.7	60.3	3.5	10.7	9.8	23.5	6.5	7.7
13E	6.3	4.0			11.0	4.5	4.5	46.3	17.0	12.5	31.0	8.5	12.0	12.2	9.4	18.0	8.0	20.8	11.0	33.7	0.6	26.5	29.4	31.3		
14E	35.5	10.4	15.0	42.2	11.8		4.3	30.2	51.0	42.3	28.0	2.0	15.7	26.8	20.0	16.0	12.0	29.3	27.4	42.0	2.2	34.0	15.8	27.2	8.6	16.8
19E					20.7	2.0	2.8	121.8	21.3	34.2	22.8	4.8	11.5	14.8	30.5	25.4	11.3	50.0	24.2	21.7	5.8	54.3	11.2	25.7	12.2	73.2
10E																										
11E		22.5	9.6	26.4	7.3	2.8	2.5	163.8	62.4	59.0	22.4	22.2	33.8	19.8	44.8	146.0	31.4	114.8	50.5	61.6	39.3	205.0	24.0	35.8	12.7	20.5
9E	3.1	6.7	8.8	5.2	6.2	0.3	0.8	33.4	33.8	22.3	50.6	7.6	17.8	21.8	16.6	14.3	20.3	52.8	44.2	76.6	18.0	62.5	22.0	62.8	29.6	44.8
7E1							10.0			1.0	17.5					52.0										
7EC			94.0																							
7EE		22.0	88.5	48.2	146.0	0.7	6.6	274.7	41.5	50.3	28.8	6.8	6.8	90.0	16.8	16.0	12.5	61.7	10.0	30.2	8.2	286.8	63.2	35.2	11.5	98.5
7EW	19.7	10.0	66.0	35.5	215.3	2.2	5.0	406.6	37.5	106.3	54.6	8.0	23.2	57.3	25.6	47.0	10.5	36.7	33.2	27.0	17.3	327.8	12.5	39.5	13.4	219.8
8E	38.2	11.0	103.3	45.0	48.2	1.5	5.0		16.3		15.3	3.5		70.7	70.8	11.3	34.3	130.0	56.6	48.4	36.2	345.7	34.2	38.0	9.3	49.5
6E	12.7	5.5	41.5	147.0	34.3	0.5	2.3	39.7	18.5	34.8																
3E		12.0			109.5	3.6	2.0	37.2	36.3	28.0	17.7	4.0	9.7	9.6	55.6	20.2	8.0	87.0	22.3	76.0	9.4	153.8	23.4	42.0	7.3	70.7
4E	29.0	14.3	27.8	22.2	41.8	6.5	6.3	32.7	36.6	31.5	30.7	5.5	16.2	9.3	16.0	14.8	13.3	94.2	14.8	93.0	4.6	339.0	36.0	36.3	5.7	11.8
5E	28.5	29.8	20.7	14.5	53.0	5.0		9.0	26.0	21.0	17.0	9.2	13.5		11.0	18.0	19.0		24.0					11.5		
1E				5.0																						
West																										
15WN	39.0	9.4	16.7	36.3	42.7			21.0	28.5	53.4	47.6	3.0	16.2	11.0		26.7		16.0								
15WS	20.4	10.2	8.4	82.8	26.2	2.4	5.5	9.8	67.7	22.0	77.5	15.6	17.4	56.4	55.0	16.3	6.5	78.3	22.5	176.8	3.2	56.6	27.0	48.3	4.4	10.7
16WN	68.2	32.0	11.0	17.5	15.2	3.5	12.3	27.8	64.8	82.7	93.0		15.8	21.7	11.0	21.0	4.2	100.5	12.8	99.3	2.0	83.0	15.8	31.7	12.3	17.3
16WS	59.3	29.2	8.5	49.7	11.0	2.6	15.2	3.7	50.7	32.8	44.0		6.0													
13W	10.2	14.7	17.3					25.3	21.0		3.5	2.3	6.0													
14W	45.3	55.5	17.8	33.3	4.2	5.3		71.5	58.2	36.7	39.6	9.5	8.3	30.7	16.8	18.2	8.8	25.5	23.3	48.5	6.7	48.8	18.7	16.3	11.3	20.8
12W	8.3	9.5	12.0	10.8	7.0	2.7	1.4	35.8	40.7	36.8	65.2	9.5	10.2	8.0	37.2	12.0	8.3	14.8	14.0	124.8	3.8	28.0	21.6	23.8	8.3	9.8
11W	137.0	9.4	12.2	8.0	5.0	2.5	2.2	12.5	45.6	13.2	6.6	7.5	13.2	17.2	32.3	23.3	10.5		37.0	101.8	5.3	37.5	18.4	19.0	16.2	11.0
10W	21.0	22.0		15.4	7.5	3.0	2.0	20.7	37.2	24.2	29.5	9.0	16.4	24.3	17.0	14.2	11.7	47.7	17.2	13.0	5.4	47.4	14.6	40.8	15.6	1.3
9W	27.7	61.3	13.3	16.3	12.0	5.2	5.0	24.4	86.8	30.3	36.0	4.7	18.6	15.3	13.8	21.4	6.8	45.6	5.5	15.2	3.2	20.2	11.3	26.0	13.7	5.0
8W	19.5	26.8	15.0	29.7	18.2	10.5	15.5	23.5	99.2	47.8	29.8	8.2	42.8	35.8	38.5	24.4	17.7	38.3	13.5	16.2	5.5	53.7	20.2	26.2	37.2	24.8
7W	4.0	46.3	51.0	46.5	34.3	11.3	10.0	13.2	97.2	61.5	74.6	8.5	42.8	13.8	36.8	31.5	36.5	60.2	13.7	23.0	13.0	37.3	35.8	47.7	34.5	51.8
3W	12.2	10.3	23.4	8.0			2.0																		11.2	30.2
4W	15.0	26.2	41.8	37.5	38.0	17.8	15.8	52.0	95.0	69.0	73.0	12.5	20.0	15.5	17.8	40.8	24.3	71.8	19.0	103.0	8.0	90.8	38.8	10.0	11.0	21.0
4WN																17.0										
5W	7.8	20.4	38.6	44.0	39.8	8.3	15.0	27.3	39.4	33.0	40.6	9.5	19.0	14.2	14.8	35.2	17.5	69.8	39.0	72.0	4.3	35.8	20.5	21.0	8.5	20.0
Annual C/E	23.9	21.4	30.7	48.4	37.1	3.8	6.1	60.7	52.3	41.9	38.0	6.9	17.3	26.5	28.5	27.4	14.7	50.3	22.9	52.5	7.8	91.2	21.5	35.0	14.3	35.0

2005 HUDSON RIVER YOY STRIPED BASS TOTAL LENGTH FREQUENCY

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	C/F	C/F
	Jul	Jul	Aug	Aug	Sep	Sep	Oct	Oct	Nov	Weeks	Weeks
TL (mm)	11	25	8	22	7	19	19	27	9	4 - 9	1 - 9
<10	0	0	0	0	0	0	0	0	0	0	0
10-14	0	0	0	0	0	0	0	0	0	0	0
15-19	0	0	0	0	0	0	0	0	0	0	0
20-24	6	1	0	0	0	0	0	0	0	0	7
25-29	50	0	0	0	0	0	0	0	0	0	50
30-34	86	21	0	0	0	0	0	0	0	0	107
35-39	134	46	1	0	0	0	0	0	0	0	181
40-44	105	78	8	0	0	0	0	0	0	0	191
45-49	72	100	35	1	1	0	0	0	0	2	209
50-54	66	119	57	12	7	1	1	2	2	25	267
55-59	27	98	91	47	16	2	0	1	1	67	283
60-64	20	78	82	91	52	9	2	7	5	166	346
65-69	6	37	65	118	61	38	4	18	8	247	355
70-74	0	29	46	118	103	65	14	27	12	339	414
75-79	0	3	29	103	86	91	19	21	14	334	366
80-84	0	0	14	65	126	103	26	21	16	357	371
85-89	0	0	7	31	80	84	22	11	14	242	249
90-94	1	0	3	15	57	68	19	10	14	183	187
95-99	0	0	0	8	37	52	8	12	9	126	126
100-104	0	0	0	0	30	26	8	5	3	72	72
105-109	0	0	0	1	28	25	5	9	3	71	71
110-114	0	0	0	0	15	7	10	3	2	37	37
115-119	0	0	0	0	8	7	5	0	3	23	23
120-124	0	0	0	1	9	6	1	3	1	21	21
125-129	0	0	0	0	2	2	6	0	1	11	11
130-134	0	0	0	0	2	1	4	1	0	8	8
135-139	0	0	0	1	1	0	1	0	0	3	3
140-144	0	0	0	0	0	1	2	0	1	4	4
>144	0	0	0	0	0	0	2	0	2	4	4
# Maggurget	E70	610	400	610	704	500	150	151	111	0040	2062
# ivieasured	5/3 40 00	010 51 70	430	012 71 20	121	000 05 05	109	101	05 71	2042	2903 60 52
StdDov	40.09	0.05	10 00	10 11	02.00 14 00	00.20 10.07	92.11 10 00	02.00	00./I 10.24	00.93 15 12	20.00
SluDev	9.04	9.90	10.09	10.11	14.02	12.07	10.00	15.24	10.34	15.13	20.00

AVERAGE TOTAL LENGTH (mm) OF HUDSON RIVER YOY STRIPED BASS, 1985 - 2005

YEAR		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
1985	Mean	54.23	63.53	81.55	85.44	93.37	100.91	103.68	99.84	101.39
	StdDev	7.53	11.04	12.03	12.06	13.26	11.64	16.35	12.45	16.08
1986	Mean	58.03	67.05	75.98	87.92	92.65	99.67	96.49	98.55	98.58
	StdDev	7.14	10.68	13.39	12.47	12.23	14.77	13.24	21.18	16.78
1987	Mean	47.84	59.77	67.12	72.23	80.56	85.62	84.95	87.52	84.96
	StdDev	9.51	9.56	10.40	10.59	10.70	12.04	13.37	13.59	15.29
1988	Mean	41.72	50.15	59.48	74.08	80.98	84.06	86.67	85.74	86.92
	StdDev	10.65	15.40	14.60	15.61	16.32	15.80	15.77	18.42	16.43
1989	Mean	36.02	46.20	57.37	65.27	72.37	81.12	81.05	82.14	85.05
	StdDev	9.35	9.64	10.85	11.32	11.02	12.16	12.43	12.61	14.17
1990	Mean	48.96	46.03	57.55	65.08	71.64	76.35	77.49	78.35	74.82
	StdDev	23.58	15.72	14.98	13.46	13.95	13.87	13.96	14.34	16.01
1991	Mean	62.57	71.49	82.01	89.96	97.58	100.96	101.95	93.76	97.59
	StdDev	15.53	14.33	15.01	18.51	18.52	22.94	27.32	27.56	22.76
1992	Mean	46.89	57.76	65.38	72.50	82.08	85.46	91.01	89.59	89.89
	StdDev	10.82	12.46	12.31	12.61	12.12	14.47	15.23	15.26	15.57
1993	Mean	38.13	52.73	62.11	68.62	75.84	82.95	83.99	87.50	88.59
	StdDev	8.13	11.67	12.30	13.09	12.86	14.55	12.90	15.29	19.19
1994	Mean	41.26	54.55	62.12	71.21	75.99	84.03	83.97	87.26	88.74
	StdDev	8.77	10.84	11.79	13.68	14.37	15.55	13.17	14.14	13.32
1995	Mean	42.00	62.39	69.85	77.87	87.50	94.73	100.04	99.84	90.78
	StdDev	8.94	11.21	11.39	11.81	13.15	16.24	17.97	20.31	20.11
1996	Mean	44.43	51.79	58.60	66.78	81.48	86.36	88.09	84.31	83.25
	StdDev	12.02	12.45	13.49	12.25	17.56	19.53	16.02	17.03	16.46
1997	Mean	41.50	52.29	73.30	72.88	79.14	83.51	87.66	87.71	87.16
	StdDev	9.19	11.10	10.00	12.99	13.48	13.61	13.61	12.23	15.10
1998	Mean	39.28	47.88	60.56	/0.51	/9./3	81.81	84.88	98.30	91.93
4000	StdDev	11.93	12.68	11.81	14.20	11.85	15.03	13.15	15.23	15.21
1999	Mean	52.53	62.91	75.34	93.44	101.45	95.64	89.42	91.13	88.49
0000	StaDev	11.43	10.90	14.86	20.11	18.39	22.37	21.01	24.39	23.93
2000	Mean	41.66	47.55	53.04	62.40	71.50	13.03	19.30	/1.55	/0./1
0004	StaDev	9.93	10.77	11.76	13.27 75.74	14.35	15.40	17.53	8.06	4.92
2001		44.29	04.78 40.04	10 00	10.74	85.94 42.40	93.95	92.02	92.02	104.57
2002	Slubev	10.00	13.21	12.80	12.00	13.10	15.92	10.49	17.59	104.05
2002		43.74	04.0Z		10.00	00.13 47.40	93.25	112.83	100.98	104.25
2002	Slubev	12.50	10.14	17.00	19.01	17.40	10.30	ZZ.ZI 72.40	21.38	ZI.IZ 71.67
2003	StdDov	39.70	40.20	10.00	03.ZI	07.20	10.70	12.49	14.40	11.07
2004	Slubev	10.79	12.24	12.20	11.1Z	11.21	12.73	13.99	14.94	14.00
2004	StdDov	02.20 12.47	00.04 15.07	19.51	02.17	30.13 17.02	00.00	00.00 10 40	00.73 17 94	00.91 16 79
2005	Mean	10.47	51 79	61 75	71 22	17.00 82.00	10.01 85.25	10.42 02.11	17.24 82.25	10.70 85 71
2005	StdDov	40.09	0.05	10 00	10 11	02.00 1/ 82	00.20 12.87	92.11 18.80	02.33 15 24	00.71 18.37
	SluDev	9.04	ອ.ອວ	10.09	10.11	14.02	12.07	10.00	10.24	10.34

AGE	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
0	984	1940	18649	15488	13397	12591	3275	5874	12587	9624	7457	4346	11452	6674	9981	4830	16103	4656	16116	3613	7727
1	179	41	25	149	145	57	154	156	104	56	240	93	88	128	118	150	168	174	63	102	21
2	10	3	2	6	11	9	11	7	23	5	23	4	10	15	4	11	7	12	7	4	1
3	0	4	0	1	0	2	3	2	6	0	4	3	2	1	0	1	0	2	1	0	0
4	0	3	0	1	0	0	1	4	1	3	3	0	0	1	0	0	1	0	0	0	0
5	1	0	2	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
6	0	0	0	1	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	1	0	0	0	0	2	2	0	0	1	0	0	0	0	0	0
9	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1174	1991	18678	15646	13555	12661	3444	6044	12721	9689	7730	4449	11552	6819	10106	4992	16279	4844	16187	3719	7749

Tagged with USFWS Internal Anchor Tags

AGE	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
0				0	0	0	0	0	1	0	4	0	0	0	13	0	0	0	0	0	0
1				50	41	27	80	83	43	13	68	40	29	46	57	33	63	97	28	20	4
2				4	11	8	10	6	21	4	18	3	9	14	3	6	6	12	7	4	0
3				1	0	2	2	2	5	0	3	2	1	1	0	1	0	2	1	0	0
4				1	0	0	1	4	1	3	2	0	0	1	0	0	1	0	0	0	0
5				0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
6				1	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0
7				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8				0	0	1	0	0	0	0	2	1	0	0	1	0	0	0	0	0	0
9				0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10				0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
UNK				0	0	6	0	0	0	0	0	3	0	0	1	0	0	0	0	0	0
Tagged	0	0	0	57	54	45	93	95	71	21	98	49	39	62	77	40	70	111	36	24	4

2005 HUDSON RIVER OLDER STRIPED BASS LENGTH FREQUENCY

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	C/F	C/F
	Jul	Jul	Aug	Aug	Sep	Sep	Oct	Oct	Nov	Weeks	Weeks
TL	11	25	8	22	7	19	19	27	9	4 - 9	1 - 9
<110	0	0	0	0	0	0	0	0	0	0	0
110-114	0	0	0	0	0	0	0	0	0	0	0
115-119	0	0	0	0	0	1	0	0	0	1	1
120-124	1	0	0	0	0	0	0	0	0	0	1
125-129	0	0	0	0	0	0	0	0	0	0	0
130-134	0	1	0	0	0	0	1	0	0	1	2
135-139	0	1	0	0	1	0	0	0	0	1	2
140-144	0	2	0	0	0	1	2	1	0	4	6
145-149	0	0	0	0	1	0	0	0	0	1	1
150-154	0	0	0	0	0	1	0	0	0	1	1
155-159	0	0	0	0	0	0	0	0	0	0	0
160-164	0	0	0	0	0	0	0	0	0	0	0
165-169	0	0	0	0	0	0	1	0	0	1	1
170-174	0	1	0	0	1	0	3	0	0	4	5
175-179	0	0	0	0	1	0	0	0	0	1	1
180-184	0	0	0	0	0	0	0	0	0	0	0
185-189	0	0	0	0	0	0	0	0	0	0	0
190-194	0	0	0	0	0	0	0	0	0	0	0
195-199	0	0	0	0	0	0	0	0	0	0	0
200-204	0	1	0	0	0	0	0	0	0	0	1
205-209	0	0	0	0	0	0	0	0	0	0	0
210-214	0	0	0	0	0	0	0	0	0	0	0
215-219	0	0	0	0	0	0	0	0	0	0	0
220-224	0	0	0	0	0	0	0	0	0	0	0
225-229	0	0	0	0	0	0	0	0	0	0	0
230-234	0	0	0	0	0	0	0	0	0	0	0
235-239	0	0	0	0	0	0	0	0	0	0	0
240-244	0	0	0	0	0	0	0	0	0	0	0
245-249	0	0	0	0	0	0	0	0	0	0	0
>249	0	0	0	0	0	0	0	0	0	0	0
Total	1	6	0	0	4	3	7	1	0	15	22

2005 HUDSON RIVER OLDER STRIPED BASS CATCH BY STATION

	River	Week 1 Jul	Week 2 Jul	Week 3 Aug	Week 4 Aug	Week 5 Sep	Week 6 Sep	Week 7 Oct	Week 8 Oct	Week 9 Nov	C/E Weeks	C/E Weeks
Station	Mile	11	25	8	22	7	19	19	27	9	4 - 9	1 - 9
East	_											
18E	23	0	0	0	0	0	0	1	0	0	0.2	0.1
21E	23	0	0	0	0	0	0	0	0	0	0.0	0.0
17E	24	0	0		0	0	1	0	0	0	0.2	0.1
16E	25	0	1	0	0	0	0	2	0	0	0.3	0.3
12E	29	0	0	0	0	0	0	0	0	0	0.0	0.0
14E	29	0	0	0	0	0	0	0	0	0	0.0	0.0
19E	33	0	0	0	0	0	0	0		0	0.0	0.0
11E	34	0	0	0	0	1	0	2	0	0	0.5	0.3
9E	34	0	0	0		1		0	0	0	0.3	0.1
7EE	35	1	0	0	0	0	0	0	0	0	0.0	0.1
7EW	35			0	0	1	1	0	0	0	0.3	0.3
8E	35	0	0	0	0	1	0	0	0	0	0.2	0.1
3E	39	0	0	0	0	0	0				0.0	0.0
4E	39	0	0	0	0	0	0	0	0	0	0.0	0.0
West												
15WS	27	0	0	0	0	0	0	1	0	0	0.2	0.1
16WN	27	0	0	0	0	0	0	1	1	0	0.3	0.2
14W	29	0	0	0	0	0	0	0	0	0	0.0	0.0
12W	30	0	0	0	0	0	0	0	0	0	0.0	0.0
11W	32	0	0	0	0	0	0	0	0	0	0.0	0.0
10W	35	0	0	0	0	0	0	0	0	0	0.0	0.0
9W	35	0	0	0	0	0	0	0	0	0	0.0	0.0
8W	36	0	1	0	0	0	0	0	0	0	0.0	0.1
7W	37	0	4	0	0	0	1	0	0	0	0.2	0.6
3W	39		0	0		0	0	0	0	0	0.0	0.0
4W	39	0	0	0	0		0	0	0	0	0.0	0.0
5W	39	0		0	0	0	0	0	0	0	4.9	0.0
Effort		24	24	25	24	25	25	25	24	25	148	221
Catch		1	6	0	0	4	3	7	1	0	15	22
C/E		0.04	0.25	0.00	0.00	0.16	0.12	0.28	0.04	0.00	0.10	0.10

TABLE 152005 HUDSON RIVER YOY WHITE PERCH CATCH BY STATION

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	
Ctation	River	Jul	Jul	Aug	Aug	Sep	Sep	Oct	Oct	Nov	
Station	IVIIIe		25	8	22	1	19	19	21	9	C/E
	• <u></u>	0	0	0	0	0	0	0	0	0	1.0
	23	0	0	0	0	0	0	0	0	9	1.0
	23	0	0	0	0	0	0	0	0	0	0.0
	24	0	0	0	0	0	0	0	0	0	0.0
100	20	0	0	0	0	0	0	0	0	0	0.0
	29	0	0	0	0	0	0	0	0	0	0.0
14E 10E	29	0	1	0	0	0	0	3 0	0	0	0.3
190	33 24	0	1	0	0	о О	0	0	0	0	0.5
	24	0	0	0	0	0	0	0	0	0	0.0
90 700	25	0	0	0	11	0	0	0	0	0	0.0
	25	0	0	0	1	11	0	0	0	0	1.2
	25	0	0	0	0	156	0	0	0	0	1.7
2⊑ 0⊑	30	0	0	0	2	2	0	0	0	0	17.7
	30	0	0	0	22	1	2	0	5	0	1.0
40	39	0	0	0	22	I	5	0	5	0	3.4
West											
15WS	27	0	0	0	0	0	0	0	0	0	0.0
16WN	27	0	0	0	0	0	0	1	0	2	0.3
14W	29	0	0	30	29	10	0	1	0	1	7.9
12W	30	0	0	0	8	2	0	2	5	0	1.9
11W	32	0	0	0	0	0	0	0	2	4	0.7
10W	35	0	0	0	0	0	0	0	0	0	0.0
9W	35	0	0	0	0	0	0	0	0	0	0.0
8W	36	0	0	0	0	0	1	0	15	4	2.2
7W	37	9	0	0	0	0	17	0	1	2	3.2
3W	39		0	0		0	0	0	3	0	0.4
4W	39	0	0	0	0		1	0	0	0	0.1
5W	39	0		0	0	1	0	0	15	18	4.3
Effect			0.4	05	0.4	05	05	05	0.4	05	004
		24	24	25	24	25	25	25	24	25	221
		9	1	33	/4	187	22	/	40	40	419
U/E		0.38	0.04	1.32	3.08	7.48	0.88	0.28	1.92	1.60	1.90

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	
	River	Jul	Jul	Aug	Aug	Sep	Sep	Oct	Oct	Nov	
Station	Mile	11	25	8	22	7	19	19	27	9	C/E
East											
18E	23	0	0	1	0	0	0	0	0	2	0.3
21E	23	0	0	2	0	0	0	0	0	0	0.2
17E	24	0	0		0	0	0	0	0	0	0.0
16E	25	0	3	2	0	0	0	0	0	0	0.6
12E	29	3	11	0	0	0	0	0	0	0	1.6
14E	29	0	0	0	0	0	1	0	0	0	0.1
19E	33	1	0	0	0	0	0	0		0	0.1
11E	34	19	0	0	10	0	0	0	0	0	3.2
9E	34	1	2	0		0		0	0	0	0.4
7EE	35	0	0	0	0	0	0	0	0	0	0.0
7EW	35			0	0	0	0	0	0	0	0.0
8E	35	5	0	0	0	0	0	0	0	0	0.6
3E	39	3	0	0	2	1	0				1.0
4E	39	4	9	0	0	0	0	0	2	0	1.7
West											
15WS	27	2	1	0	0	0	0	0	0	0	0.3
16WN	27	42	98	0	0	43	0	0	0	0	20.3
14W	29	22	2	3	0	0	0	1	0	0	3.1
12W	30	2	1	3	0	0	0	0	0	0	0.7
11W	32	0	0	0	0	0	0	0	0	0	0.0
10W	35	0	0	0	0	0	0	0	0	0	0.0
9W	35	0	0	1	0	0	0	0	0	0	0.1
8W	36	0	0	0	0	0	0	0	4	1	0.6
7W	37	0	0	4	0	0	0	0	0	0	0.4
3W	39		0	0		0	0	0	0	0	0.0
4W	39	0	3	0	0		0	0	0	0	0.4
5W	39	0		0	0	0	0	0	0	0	0.0
Effort		24	24	25	24	25	25	25	24	25	221
Catch		104	130	16	12	44	1	1	6	3	317
C/E		4.33	5.42	0.64	0.50	1.76	0.04	0.04	0.25	0.12	1.43

TABLE 172005 HUDSON RIVER ATLANTIC TOMCOD CATCH BY STATION

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	
	River	Jul	Jul	Aug	Aug	Sep	Sep	Oct	Oct	Nov	
Station	Mile	11	25	8	22	7	19	19	27	9	C/E
East											
18E	23	0	0	0	0	0	0	0	0	0	0.0
21E	23	0	0	0	0	0	0	0	0	0	0.0
17E	24	0	0		0	0	0	0	0	0	0.0
16E	25	0	0	0	0	0	0	0	0	0	0.0
12E	29	0	0	0	0	0	0	0	0	0	0.0
14E	29	0	0	0	0	0	0	0	0	0	0.0
19E	33	0	0	0	0	0	0	0		0	0.0
11E	34	0	0	0	0	0	0	0	0	0	0.0
9E	34	0	0	0		0		0	0	0	0.0
7EE	35	0	0	0	0	0	0	0	0	0	0.0
7EW	35			0	0	0	0	0	0	0	0.0
8E	35	0	0	0	0	0	0	0	0	0	0.0
3E	39	0	0	0	0	0	0				0.0
4E	39	0	0	0	0	0	0	0	0	0	0.0
West											
15WS	27	0	0	0	0	0	0	0	0	0	0.0
16WN	27	0	0	0	0	0	0	0	0	0	0.0
14W	29	0	0	0	0	0	0	0	0	0	0.0
12W	30	0	0	0	0	0	0	0	0	0	0.0
11W	32	0	0	0	0	0	0	0	0	0	0.0
10W	35	0	0	0	0	0	0	0	0	0	0.0
9W	35	0	0	0	0	0	0	0	0	0	0.0
8W	36	0	0	0	0	0	0	0	0	0	0.0
7W	37	0	0	0	0	0	0	0	0	0	0.0
3W	39		0	0		0	0	0	0	0	0.0
4W	39	0	0	0	0		0	0	0	0	0.0
5W	39	0		0	0	0	0	0	0	0	0.0
Effort		24	24	25	24	25	25	25	24	25	221
Catch		0	0	0	0	0	0	0	0	0	0
C/E		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TL (mm)	Week 1 Jul 11	Week 2 Jul 25	Week 3 Aug 8	Week 4 Aug 22	Week 5 Sep 7	Week 6 Sep 19	Week 7 Oct 19	Week 8 Oct 27	Week 9 Nov 9	C/F Weeks 4 - 9	C/F Weeks 1 - 9
5-10			-		-				-	0	0
10-15										0	0
15-20										0	0
20-25										0	0
25-30										0	0
30-35										0	0
35-40										0	0
40-45										0	0
45-50										0	0
50-55										0	0
55-60										0	0
60-65										0	0
65-70										0	0
70-75										0	0
75-80										0	0
80-85										0	0
85-90										0	0
90-95										0	0
95-100										0	0
100-105										0	0
105-110										0	0
110-115										0	0
115-120										0	0
120-125										0	0
125-130										0	0
130-135										0	0
135-140										0	0
140-145										0	0
>145										0	0
Measured	0	0	0	0	0	0	0	0	0	0	0
Mean	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
StdDev	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	
	River	Jul	Jul	Aug	Aug	Sep	Sep	Oct	Oct	Nov	
Station	Mile	11	25	8	22	7	19	19	27	9	C/E
East											
18E	23	0	0	1	0	0	0	0	0	0	0.1
21E	23	0	0	0	0	0	0	0	0	0	0.0
17E	24	0	0		0	0	0	0	0	0	0.0
16E	25	0	1	0	0	0	0	0	0	0	0.1
12E	29	0	0	0	0	0	0	0	0	0	0.0
14E	29	0	0	0	0	0	0	0	0	0	0.0
19E	33	0	0	0	0	0	0	1		0	0.1
11E	34	0	0	0	2	0	0	0	0	0	0.2
9E	34	0	0	0		0		0	0	0	0.0
7EE	35	0	0	0	0	0	0	0	0	0	0.0
7EW	35			0	0	0	0	0	0	0	0.0
8E	35	0	0	0	0	0	0	0	1	0	0.1
3E	39	0	0	0	0	0	0				0.0
4E	39	0	0	0	0	0	0	0	0	0	0.0
West	-										
15WS	27	0	0	0	0	0	0	0	1	0	0.1
16WN	27	1	0	0	0	1	0	0	0	0	0.2
14W	29	0	1	0	0	0	0	0	2	0	0.3
12W	30	0	0	0	0	0	0	1	0	4	0.6
11W	32	0	0	0	0	0	0	0	0	2	0.2
10W	35	0	0	0	0	0	0	0	0	0	0.0
9W	35	0	0	0	0	0	0	0	0	0	0.0
8W	36	0	0	0	0	0	0	0	2	0	0.2
7W	37	0	0	0	0	0	0	0	0	0	0.0
3W	39		0	0		0	0	0	0	0	0.0
4W	39	0	0	1	0		0	0	0	0	0.1
5W	39	0		0	0	0	0	0	0	0	0.0
Effort		24	24	25	24	25	25	25	24	25	221
Catch		1	2	2	2	1	0	2	6	6	22
C/E		0.04	0.08	0.08	0.08	0.04	0.00	0.08	0.25	0.24	0.10

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	C/F	C/F
	Jul	Jul	Aug	Aug	Sep	Sep	Oct	Oct	Nov	Weeks	Weeks
TL (mm)	11	25	8	22	7	19	19	27	9	4 - 9	1 - 9
< 60	0	0	0	0	0	0	0	0	0	0	0
60 - 79	0	0	0	0	0	0	0	0	0	0	0
80 - 99	0	0	0	0	0	0	0	1	1	2	2
100 - 119	0	0	0	0	0	0	0	0	2	2	2
120 - 139	0	0	0	0	0	0	0	2	2	4	4
140 - 159	0	0	0	0	0	0	0	2	0	2	2
160 - 179	0	0	0	1	0	0	0	0	0	1	1
180 - 199	0	0	0	0	0	0	0	1	0	1	1
200 - 219	0	0	0	0	0	0	1	0	1	2	2
220 - 239	0	0	0	0	0	0	0	0	0	0	0
240 - 259	0	0	0	0	0	0	0	0	0	0	0
260 - 279	0	0	0	0	0	0	0	0	0	0	0
280 - 299	0	0	0	0	0	0	0	0	0	0	0
300 - 319	0	0	0	0	0	0	0	0	0	0	0
320 - 339	0	0	0	0	0	0	0	0	0	0	0
340 - 359	0	1	0	0	0	0	0	0	0	0	1
360 - 379	0	1	0	0	0	0	0	0	0	0	1
380 - 399	0	0	1	1	0	0	0	0	0	1	2
400 - 419	0	0	0	0	0	0	0	0	0	0	0
420 - 439	0	0	0	0	0	0	0	0	0	0	0
440 - 459	0	0	0	0	0	0	0	0	0	0	0
460 - 479	0	0	0	0	0	0	0	0	0	0	0
480 - 499	0	0	0	0	0	0	0	0	0	0	0
500 - 519	0	0	0	0	0	0	0	0	0	0	0
520 - 539	0	0	0	0	0	0	1	0	0	1	1
540 - 559	0	0	1	0	0	0	0	0	0	0	1
560 - 579	0	0	0	0	0	0	0	0	0	0	0
580 - 599	0	0	0	0	0	0	0	0	0	0	0
600 - 619	0	0	0	0	0	0	0	0	0	0	0
620 - 639	0	0	0	0	0	0	0	0	0	0	0
640 - 659	0	0	0	0	0	0	0	0	0	0	0
660 - 679	1	0	0	0	0	0	0	0	0	0	1
680 - 699	0	0	0	0	1	0	0	0	0	1	1
> 699	0	0	U	0	U	0	U	0	U	0	U
Measured	1	2	2	2	1	0	2	6	6	17	22
Mean	690.0	355.0	470.0	278 5	685.0	0	369.0	136.3	127.3	209 5	268.3
StDev	0.0	21.2	106.1	167.6	0.0	0	239.0	36.2	37.0	169.1	195.5

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	
Station	Mile	JUI 11	25	Aug	Aug 22	Sep 7	Sep 19	19	27	NOV Q	C/F
Fast	Wille		20	0		1	10	10	21	5	0/L
18F	23	0	0	1	14	2	0	0	0	0	19
21F	23	0	2	0	0	0	0	Õ	0	0	0.2
17F	24	0	1	Ũ	Õ	Õ	2	Õ	0	0	0.4
16E	25	0	1	2	0	0	0	0	0	0	0.3
12E	29	1	1	0	0	1	0	0	0	0	0.3
14E	29	0	2	0	0	1	0	0	0	0	0.3
19E	33	0	1	1	1	3	0	0	-	0	0.8
11E	34	0	0	0	1	3	0	0	0	0	0.4
9E	34	0	1	1		1		0	0	0	0.4
7EE	35	0	1	0	0	2	0	0	0	0	0.3
7EW	35			0	5	1	1	0	0	0	1.0
8E	35	4	8	9	11	2	5	0	0	0	4.3
3E	39	1	1	0	1	0	0				0.5
4E	39	0	0	0	0	0	0	0	0	0	0.0
West	_										
15WS	27	1	0	0	0	0	0	0	0	0	0.1
16WN	27	0	1	0	0	1	0	0	0	0	0.2
14W	29	1	1	2	4	5	2	0	0	0	1.7
12W	30	1	1	0	0	0	0	0	0	0	0.2
11W	32	1	1	0	0	0	0	0	0	0	0.2
10W	35	0	0	1	0	0	0	0	0	0	0.1
9W	35	0	0	0	2	0	0	0	0	0	0.2
8W	36	4	1	1	0	0	0	0	0	0	0.7
7W	37	0	5	1	0	0	3	0	0	0	1.0
3W	39		0	0		0	0	0	0	0	0.0
4W	39	0	3	0	0		0	0	0	0	0.4
5W	39	0		2	0	1	3	0	0	0	0.8
		0.4	0.4	05	0.4	05	05	05	0.4	05	004
		24	24 20	25 24	24 20	25 22	25 16	25 0	24	25	221 4 4 5
		14	చ∠ 1.00	21	39 1.60	23	0.64	0	0	0	145
U/E		0.58	1.33	0.84	1.63	0.92	0.64	0.00	0.00	0.00	0.00

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	C/F	C/F
	Jul	Jul	Aug	Aug	Sep	Sep	Oct	Oct	Nov	Weeks	Weeks
TL (mm)	11	25	8	22	7	19	19	27	9	4 - 9	1 - 9
< 65	2	0	0	0	0	0				0	2
65 - 69	0	0	0	2	0	0				2	2
70 - 74	0	0	0	1	0	0				1	1
75 - 79	0	0	0	0	0	0				0	0
80 - 84	2	0	0	0	0	0				0	2
85 - 89	2	3	0	0	0	0				0	5
90 - 94	3	1	0	0	2	0				2	6
95 - 99	1	1	0	0	1	0				1	3
100 - 104	0	6	0	0	0	0				0	6
105 - 109	3	5	0	0	1	0				1	9
110 - 114	0	4	0	0	0	0				0	4
115 - 119	0	3	0	0	1	1				2	5
120 - 124	0	3	0	1	3	0				4	7
125 - 129	0	1	2	0	1	1				2	5
130 - 134	0	0	1	2	1	2				5	6
135 - 139	0	1	2	0	0	1				1	4
140 - 144	0	3	3	2	0	1				3	9
145 - 149	0	0	3	2	1	2				5	8
150 - 154	0	1	2	5	0	1				6	9
155 - 159	0	0	2	4	2	0				6	8
160 - 164	0	0	2	3	2	0				5	7
165 - 169	0	0	1	5	1	1				7	8
170 - 174	1	0	1	2	0	1				3	5
175 - 179	0	0	2	3	0	1				4	6
180 - 184	0	0	0	1	0	0				1	1
185 - 189	0	0	0	2	0	1				3	3
190 - 194	0	0	0	0	2	0				2	2
195 - 199	0	0	0	1	0	2				3	3
200 - 204	0	0	0	2	1	0				3	3
205 - 209	0	0	0	0	1	1				2	2
210 - 214	0	0	0	0	0	0				0	0
215 - 219	0	0	0	0	1	0				1	1
220 - 224	0	0	0	0	1	0				1	1
225 - 229	0	0	0	0	1	0				1	1
230 - 234	0	0	0	0	0	0				0	0
235 - 239	0	0	0	0	0	0				0	0
240 - 244	0	0	0	0	0	0				0	0
245 - 249	0	0	0	0	0	0				0	0
250 - 254	0	0	0	0	0	0				0	0
255 - 259	0	0	0	0	0	0				0	0
260 - 264	0	0	0	0	0	0				0	0
265 - 269	0	0	0	0	0	0				0	0
>269	0	0	0	0	0	0				0	0
Measured	14	32	21	38	23	16	0	0	0	77	144
Mean	94.0	112.6	150.0	155.5	154.8	157.9				155.8	139.4
StDev	27.9	16.6	15.1	31.8	43.2	27.9				34.5	36.3

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	
	River	Jul	Jul	Aug	Aug	Sep	Sep	Oct	Oct	Nov	
Station	Mile	11	25	8	22	7	19	19	27	9	C/E
East	-										
18E	23	0	0	0	0	0	0	0	0	0	0.0
21E	23	0	0	0	0	0	0	0	0	0	0.0
17E	24	2	0		0	0	0	0	0	0	0.3
16E	25	1	0	0	0	0	0	0	0	0	0.1
12E	29	0	0	0	0	0	0	0	0	0	0.0
14E	29	0	0	0	0	0	0	0	0	0	0.0
19E	33	0	0	0	0	0	0	0		0	0.0
11E	34	0	0	0	0	0	0	0	0	0	0.0
9E	34	0	0	0		0		0	0	0	0.0
7EE	35	0	0	0	0	0	0	0	0	0	0.0
7EW	35			0	0	0	0	0	0	0	0.0
8E	35	0	0	0	0	0	0	0	0	0	0.0
3E	39	0	0	0	0	0	0				0.0
4E	39	0	0	0	0	0	0	0	0	0	0.0
West	-										
15WS	27	0	0	0	0	0	0	0	0	0	0.0
16WN	27	0	0	0	0	0	0	0	0	0	0.0
14W	29	0	0	0	0	0	0	0	0	0	0.0
12W	30	0	0	0	0	0	0	0	0	0	0.0
11W	32	0	0	0	0	0	0	0	0	0	0.0
10W	35	0	0	0	0	0	0	0	0	0	0.0
9W	35	0	0	0	0	0	0	0	0	0	0.0
8W	36	0	0	0	0	0	0	0	0	0	0.0
7W	37	0	0	0	0	0	0	0	0	0	0.0
3W	39		0	0		0	0	0	0	0	0.0
4W	39	0	0	0	0		0	0	0	0	0.0
5W	39	0		0	0	0	0	0	0	0	0.0
Effort		24	24	25	24	25	25	25	24	25	221
Catch		3	0	0	0	0	0	0	0	0	3
C/E		0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	C/F	C/F
TL (mm)	Jui 11	Jui 25	Aug 8	Aug 22	Sep 7	Sep 19	19	27	NOV 9	vveeks 4 - 9	vveeks 1 - 9
< 25	0	20	0		1	10	10	21	Ū	0	0
25 - 29	0									0	0
30 - 34	1									0	1
35 - 39	0									0	0
40 - 44	0									0	0
45 - 49	0									0	0
50 - 54	1									0	1
55 - 59	0									0	0
60 - 64	0									0	0
65 - 69	0									0	0
70 - 74	0									0	0
75 - 79	0									0	0
80 - 84	0									0	0
85 - 89	0									0	0
90 - 94	1									0	1
95 - 99	0									0	0
100 - 104	0									0	0
105 - 109	0									0	0
110 - 114	0									0	0
115 - 119	0									0	0
120 - 124	0									0	0
125 - 129	0									0	0
130 - 134	0									0	0
135 - 139	0									0	0
140 - 144	0									0	0
145 - 149	0									0	0
150 - 154	0									0	0
155 - 159	0									0	0
160 - 164	0									0	0
165 - 169	0									0	0
170 - 174	0									0	0
175 - 179	0									0	0
180 - 184	0									0	0
185 - 189	0									0	0
190 - 194	0									0	0
195 - 199	0									0	0
> 199	0									0	0
Measured	3	0	0	0	0	0	0	0	0	0	3
Mean	58.67	0.0	0.0	0.00	0.0	0.00	0.0	0.0	0.0	0.0	58.67
StDev	32.87	0.0	0.0	0.00	0.0	0.00	0.0	0.0	0.0	0.0	32.87

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	
01-11-1-1	River	Jul	Jul	Aug	Aug	Sep	Sep	Oct	Oct	Nov	0/5
Station	MIIE	11	25	8	22	1	19	19	27	9	C/E
Last	• ••					•	•				
18E	23	0	0	0	0	0	0	0	0	0	0.0
21E	23	1	0	0	0	0	0	0	0	0	0.1
17E	24	0	0		0	0	0	0	0	0	0.0
16E	25	0	0	0	0	0	0	0	2	0	0.2
12E	29	1	11	0	0	0	0	1	2	1	1.8
14E	29	0	1	0	0	0	0	1	2	0	0.4
19E	33	0	1	0	0	0	0	0		0	0.1
11E	34	0	0	0	0	0	0	1	0	0	0.1
9E	34	0	9	0		0		1	0	0	1.4
7EE	35	0	1	0	0	0	0	0	0	0	0.1
7EW	35			0	0	0	0	1	0	0	0.1
8E	35	0	35	1	0	0	0	12	0	0	5.3
3E	39	0	10	0	0	0	0				1.7
4E	39	0	16	0	0	0	0	0	0	0	1.8
W/ost											
151/0		1	0	0	0	0	0	0	0	0	0.4
10000	27	1	0	0	0	0	0	0	0	0	0.1
	27	1	1	0	0	0	0	1	0	0	0.3
1400	29	0	0	0	0	0	0	0	1	0	0.1
1200	30	0	0	0	0	0	0	0	0	0	0.0
1100	32	0	0	0	0	0	0	0	0	0	0.0
1000	35	2	3	0	0	0	0	1	0	1	0.8
9W	35	1	0	0	0	0	0	0	11	0	1.3
8W	36	0	0	0	0	0	0	1	0	0	0.1
7W	37	0	0	0	0	0	0	0	0	0	0.0
3W	39		0	0		0	0	0	1	0	0.1
4W	39	3	4	0	0	-	0	1	0	0	1.0
5W	39	0		0	0	0	0	2	0	0	0.3
Effort		24	24	25	24	25	25	25	24	25	221
Catch		۲ ۱	2 4 02	20 1	2 4 0	20 0	20 0	20	2 4 10	20	۲۲ م 1/17
		0 42	322 202	0.04				20 0.02	0.70	ے 0 00	0.67
0/E		0.42	3.03	0.04	0.00	0.00	0.00	0.92	0.19	0.00	0.07

TABLE 262005 HUDSON RIVER AMERICAN SHAD LENGTH FREQUENCY

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	C/F	C/F
	Jul	Jul	Aug	Aug	Sep	Sep	Oct	Oct	Nov	Weeks	Weeks
TL (mm)	11	25	8	22	7	19	19	27	9	4 - 9	1 - 9
< 25	0	0	0	0	0	0	0	0	0	0	0
25 - 29	0	1	0	0	0	0	0	0	0	0	1
30 - 34	0	2	0	0	0	0	0	0	0	0	2
35 - 39	0	0	0	0	0	0	0	0	0	0	0
40 - 44	0	2	0	0	0	0	0	0	0	0	2
45 - 49	1	2	0	0	0	0	0	0	0	0	3
50 - 54	1	4	0	0	0	0	0	0	0	0	5
55 - 59	2	25	0	0	0	0	0	0	0	0	27
60 - 64	3	26	0	0	0	0	0	0	0	0	29
65 - 69	1	12	1	0	0	0	0	0	0	0	14
70 - 74	1	4	0	0	0	0	0	0	0	0	5
75 - 79	0	0	0	0	0	0	1	0	0	1	1
80 - 84	0	0	0	0	0	0	11	6	1	18	18
85 - 89	1	0	0	0	0	0	9	4	0	13	14
90 - 94	0	0	0	0	0	0	2	4	0	6	6
95 - 99	0	0	0	0	0	0	0	5	1	6	6
100 - 104	0	0	0	0	0	0	0	0	0	0	0
105 - 109	0	0	0	0	0	0	0	0	0	0	0
110 - 114	0	0	0	0	0	0	0	0	0	0	0
115 - 119	0	0	0	0	0	0	0	0	0	0	0
120 - 124	0	0	0	0	0	0	0	0	0	0	0
125 - 129	0	0	0	0	0	0	0	0	0	0	0
130 - 134	0	0	0	0	0	0	0	0	0	0	0
135 - 139	0	0	0	0	0	0	0	0	0	0	0
140 - 144	0	0	0	0	0	0	0	0	0	0	0
145 - 149	0	0	0	0	0	0	0	0	0	0	0
> 149	0	0	0	0	0	0	0	0	0	0	0
Measured Mean	10 62.8	78 58.7	1 66.0	0 0.0	0 0.0	0 0.0	23 84.5	19 89.3	2 88.0	44 93.2	133 88.3
StDev	11./	8.2	0.0	0.0	0.0	0.0	3.2	5.6	9.9	8.2	11.2

2005 HUDSON RIVER ALEWIFE CATCH BY STATION

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	
.	River	Jul	Jul	Aug	Aug	Sep	Sep	Oct	Oct	Nov	
Station	Mile	11	25	8	22	7	19	19	27	9	C/E
East	-										
18E	23	0	0	0	0	0	0	0	0	0	0.0
21E	23	0	0	0	0	0	0	0	1	0	0.1
17E	24	0	0		0	0	0	0	0	0	0.0
16E	25	0	1	0	0	0	0	0	0	0	0.1
12E	29	0	1	0	0	0	0	0	0	0	0.1
14E	29	0	0	0	0	0	0	4	0	0	0.4
19E	33	0	0	0	1	0	0	0		0	0.1
11E	34	0	0	0	2	0	0	0	0	0	0.2
9E	34	44	98	0		0		0	0	0	20.3
7EE	35	5	0	0	0	0	0	0	0	0	0.6
7EW	35			0	0	0	0	0	0	0	0.0
8E	35	129	24	56	12	0	0	0	0	0	24.6
3E	39	5	0	0	0	0	0				0.8
4E	39	7	7	3	0	0	0	0	0	0	1.9
vvest	-										
15WS	27	1	0	0	0	0	0	0	0	0	0.1
16WN	27	1	1	0	0	0	0	0	0	0	0.2
14W	29	1	2	0	0	0	0	0	0	0	0.3
12W	30	1	0	0	1	0	0	0	0	0	0.2
11W	32	8	0	0	0	0	0	0	0	0	0.9
10W	35	17	3	0	0	0	0	0	1	0	2.3
9W	35	19	0	0	0	0	0	0	0	0	2.1
8W	36	1	0	0	0	0	0	0	0	0	0.1
7W	37	9	0	7	0	0	0	0	0	0	1.8
3W	39		0	0		0	0	0	0	0	0.0
4W	39	0	0	0	0		0	0	0	0	0.0
5W	39	5		0	0	0	0	0	0	0	0.6
Effect			<u> </u>	07	0.1	05	0.5	07			001
		24	24	25	24	25	25	25	24	25	221
		253	137	66	16	U	0	4	2	U	4/8
C/E		10.54	5.71	2.64	0.67	0.00	0.00	0.16	0.08	0.00	2.16

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	C/F	C/F
	Jul	Jul	Aug	Aug	Sep	Sep	Oct	Oct	Nov	Weeks	Weeks
TL (mm)	11	25	8	22	7	19	19	27	9	4 - 9	1 - 9
< 25	0	0	0	0	0	0	0	0	0	0	0
25 - 29	0	0	0	0	0	0	0	0	0	0	0
30 - 34	0	0	0	0	0	0	0	0	0	0	0
35 - 39	0	0	0	0	0	0	0	0	0	0	0
40 - 44	2	3	0	0	0	0	0	0	0	0	5
45 - 49	9	11	0	0	0	0	0	0	0	0	20
50 - 54	51	20	6	0	0	0	0	0	0	0	77
55 - 59	48	2	15	1	0	0	0	0	0	1	66
60 - 64	12	2	18	9	0	0	0	0	0	9	41
65 - 69	3	0	1	5	0	0	0	0	0	5	9
70 - 74	0	0	0	0	0	0	2	1	0	3	3
75 - 79	0	0	0	1	0	0	1	0	0	2	2
80 - 84	0	0	0	0	0	0	0	0	0	0	0
85 - 89	0	0	0	0	0	0	0	0	0	0	0
90 - 94	0	0	0	0	0	0	0	1	0	1	1
95 - 99	0	0	0	0	0	0	1	0	0	1	1
100 - 104	0	0	0	0	0	0	0	0	0	0	0
105 - 109	0	0	0	0	0	0	0	0	0	0	0
110 - 114	0	0	0	0	0	0	0	0	0	0	0
115 - 119	0	0	0	0	0	0	0	0	0	0	0
120 - 124	0	0	0	0	0	0	0	0	0	0	0
125 - 129	0	0	0	0	0	0	0	0	0	0	0
130 - 134	0	0	0	0	0	0	0	0	0	0	0
135 - 139	0	0	0	0	0	0	0	0	0	0	0
140 - 144	0	0	0	0	0	0	0	0	0	0	0
145 - 149	0	0	0	0	0	0	0	0	0	0	0
> 149	0	0	0	0	0	0	0	0	0	0	0
Maggurge	105	20	40	16	0	0	4	2	0	22	225
Moon	120 54 5	30 50 6	40 50 0	01	0	0	4 79 0	∠ 015	0	22 69 0	220 55 0
Niean	04.0 4 E	0.00	0.00	03.0 4.2	0.0	0.0	10.0	12.0	0.0	0.00	55.9
SiDev	4.0	4.4	3.9	4.3	0.0	0.0	12.2	12.0	0.0	9.0	6.9

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	
	River	Jul	Jul	Aug	Aug	Sep	Sep	Oct	Oct	Nov	
Station	Mile	11	25	8	22	7	19	19	27	9	C/E
East											
18E	23	0	0	8	0	0	0	2198	291	6	278.1
21E	23	0	16	33	0	0	2	124	107	119	44.6
17E	24	0	0		0	0	0	129	23	0	19.0
16E	25	0	1	0	0	0	0	76	353	5	48.3
12E	29	1	5	0	0	0	0	0	100	1	11.9
14E	29	0	3	0	0	0	0	182	0	1560	193.9
19E	33	0	0	0	0	0	0	0		6	0.8
11E	34	0	0	0	0	0	0	44	0	0	4.9
9E	34	0	1	0		0		9	7	2	2.7
7EE	35	0	0	0	0	0	0	186	0	0	20.7
7EW	35			0	0	0	0	360	0	6	52.3
8E	35	0	4	93	2	0	0	77	0	0	19.6
3E	39	0	1	0	0	0	0				0.2
4E	39	0	1	1	0	0	0	45	403	0	50.0
West	-										
15WS	27	3	2	0	0	0	0	12	17	0	3.8
16WN	27	0	5	0	0	0	0	11	0	0	1.8
14W	29	0	0	0	0	0	0	6	0	0	0.7
12W	30	0	0	0	0	0	0	7	0	1	0.9
11W	32	0	0	0	0	0	0	46	116	1	18.1
10W	35	0	0	0	0	0	0	38	240	0	30.9
9W	35	0	0	0	0	0	0	3	1674	2	186.6
8W	36	0	0	0	0	0	0	5	1	0	0.7
7W	37	0	34	0	0	0	0	0	118	0	16.9
3W	39		0	0		0	0	21	229	9	37.0
4W	39	0	0	0	0		0	5	17	0	2.8
5W	39	0		0	0	0	0	315	142	0	57.1
Effort		24	24	25	24	25	25	25	24	25	221
Catch		4	73	135	2	0	2	3899	3838	1718	9671
C/E		0.17	3.04	5.40	0.08	0.00	0.08	155.96	159.92	68.72	43.76

TABLE 302005 HUDSON RIVER BLUEBACK HERRING LENGTH FREQUENCY

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	C/F	C/F
	Jul	Jul	Aug	Aug	Sep	Sep	Oct	Oct	Nov	Weeks	Weeks
TL (mm)	11	25	8	22	7	19	19	27	9	4 - 9	1 - 9
< 25	0	0	0	0	0	0	0	0	0	0	0
25 - 29	0	0	0	0	0	0	0	0	0	0	0
30 - 34	0	10	3	0	0	0	0	0	0	0	13
35 - 39	3	7	9	0	0	0	0	0	0	0	19
40 - 44	0	3	16	0	0	0	0	0	0	0	19
45 - 49	0	9	7	0	0	0	1	0	0	1	17
50 - 54	0	26	17	0	0	0	2	1	0	3	46
55 - 59	1	2	16	0	0	0	13	7	2	22	41
60 - 64	0	0	1	2	0	0	109	86	5	202	203
65 - 69	0	0	0	0	0	0	181	161	33	375	375
70 - 74	0	0	0	0	0	0	126	107	36	269	269
75 - 79	0	0	0	0	0	1	29	28	11	69	69
80 - 84	0	0	0	0	0	0	6	3	5	14	14
85 - 89	0	0	0	0	0	1	0	1	4	6	6
90 - 94	0	0	0	0	0	0	0	1	2	3	3
95 - 99	0	0	0	0	0	0	0	0	1	1	1
100 - 104	0	0	0	0	0	0	1	0	0	1	1
105 - 109	0	0	0	0	0	0	1	0	0	1	1
110 - 114	0	0	0	0	0	0	0	0	0	0	0
115 - 119	0	0	0	0	0	0	0	0	0	0	0
120 - 124	0	0	0	0	0	0	0	0	0	0	0
125 - 129	0	0	0	0	0	0	0	0	0	0	0
130 - 134	0	0	0	0	0	0	0	0	0	0	0
135 - 139	0	0	0	0	0	0	0	0	0	0	0
140 - 144	0	0	0	0	0	0	0	0	0	0	0
145 - 149	0	0	0	0	0	0	0	0	0	0	0
> 149	0	0	0	0	0	0	0	0	0	0	0
Measured	4	57	69	2	0	2	469	395	99	967	1097
Mean	43	45.16	47.48	60.50	0.00	82.50	67.40	67.75	71.64	68.0	65.4
StDev	9.35	7.86	7.53	0.71	0.00	4.95	5.42	4.77	6.93	5.5	9.1

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	
	River	Jul	Jul	Aug	Aug	Sep	Sep	Oct	Oct	Nov	
Station	Mile	11	25	8	22	7	19	19	27	9	C/E
East											
18E	23	0	0	0	0	0	0	336	0	0	37.3
21E	23	0	0	26	0	0	0	55	0	0	9.0
17E	24	0	0		0	0	0	15	1	0	2.0
16E	25	0	0	0	6	0	0	105	0	0	12.3
12E	29	0	0	0	0	0	0	0	0	0	0.0
14E	29	0	0	0	0	0	0	0	0	0	0.0
19E	33	0	0	0	0	0	0	0		0	0.0
11E	34	0	0	0	0	0	0	0	0	0	0.0
9E	34	0	1	0		0		6	0	0	1.0
7EE	35	0	0	0	0	0	0	0	0	0	0.0
7EW	35			0	0	0	0	1	0	0	0.1
8E	35	0	118	592	0	0	0	0	0	0	78.9
3E	39	0	0	0	0	0	0				0.0
4E	39	0	0	1	0	1	0	0	0	0	0.2
West	-										
15WS	27	4	3	0	0	0	1	1	0	0	1.0
16WN	27	0	1	0	0	0	0	3	0	0	0.4
14W	29	0	0	0	0	0	0	0	0	0	0.0
12W	30	0	0	0	0	0	0	0	0	0	0.0
11W	32	0	0	0	0	1	0	0	0	0	0.1
10W	35	0	0	0	0	0	0	0	0	0	0.0
9W	35	0	0	0	0	0	0	0	0	0	0.0
8W	36	0	0	0	0	0	1	1	0	0	0.2
7W	37	0	0	0	0	0	0	0	0	0	0.0
3W	39		0	0		0	0	0	0	0	0.0
4W	39	0	0	0	0		0	0	0	0	0.0
5W	39	0		0	0	0	0	0	0	0	0.0
Effort		24	24	25	24	25	25	25	24	25	221
Catch		4	123	619	6	2	2	523	1	0	1280
C/E		0.17	5.13	24.76	0.25	0.08	0.08	20.92	0.04	0.00	5.79

TABLE 32 2005 HUDSON RIVER ATLANTIC MENHADEN LENGTH FREQUENCY

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	C/F	C/F
	Jul	Jul	Aug	Aug	Sep	Sep	Oct	Oct	Nov	Weeks	Weeks
TL (mm)	11	25	8	22	7	19	19	27	9	4 - 9	1 - 9
< 25	0	0	0	0	0	0	1	0	0	1	1
25 - 29	0	0	0	0	0	0	0	0	0	0	0
30 - 34	0	0	0	0	0	0	0	0	0	0	0
35 - 39	0	0	1	0	0	0	0	0	0	0	1
40 - 44	0	0	1	0	0	0	0	0	0	0	1
45 - 49	0	3	4	0	1	0	1	0	0	2	9
50 - 54	0	1	12	0	0	0	0	0	0	0	13
55 - 59	0	0	7	0	0	0	0	0	0	0	7
60 - 64	0	0	2	2	0	1	2	0	0	5	7
65 - 69	1	1	0	2	0	0	3	0	0	5	7
70 - 74	0	0	1	1	0	0	7	0	0	8	9
75 - 79	1	0	1	0	0	0	20	0	0	20	22
80 - 84	0	1	1	1	1	0	29	0	0	31	33
85 - 89	0	1	0	0	0	0	25	0	0	25	26
90 - 94	0	4	0	0	0	0	9	1	0	10	14
95 - 99	2	18	1	0	0	1	5	0	0	6	27
100 - 104	0	5	3	0	0	0	5	0	0	5	13
105 - 109	0	0	6	0	0	0	3	0	0	3	9
110 - 114	0	1	10	0	0	0	0	0	0	0	11
115 - 119	0	0	5	0	0	0	0	0	0	0	5
120 - 124	0	0	0	0	0	0	0	0	0	0	0
125 - 129	0	0	2	0	0	0	0	0	0	0	2
130 - 134	0	0	0	0	0	0	1	0	0	1	1
135 - 139	0	0	0	0	0	0	0	0	0	0	0
140 - 144	0	0	0	0	0	0	0	0	0	0	0
145 - 149	0	0	0	0	0	0	0	0	0	0	0
> 149	0	0	0	0	0	0	0	0	0	0	0
Measured	4	35	57	6	2	2	111	1	0	122	218
Measureu		90 1	81 5	68 5	65 5	2 79 5	83.1	، م <u>4</u> ۵	0.0	82.1	83.3
StDov	45.0	40.0	01.0	7.0	00.0	10.0	44.0	0-1.0	0.0	40.4	00.0

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	
	River	Jul	Jul	Aug	Aug	Sep	Sep	Oct	Oct	Nov	
Station	Mile	11	25	8	22	7	19	19	27	9	C/E
East											
18E	23	19	30	56	86	128	14	0	8	4	38.3
21E	23	84	59	52	21	49	73	26	2	4	41.1
17E	24	69	50		355	3103	73	10	9	3	459.0
16E	25	1	37	8	12	104	18	3	14	3	22.2
12E	29	10	63	182	33	17	278	3	2	0	65.3
14E	29	38	36	18	129	79	195	8	0	12	57.2
19E	33	11	103	94	20	16	151	1		3	49.9
11E	34	44	695	1573	186	410	65	24	2	0	333.2
9E	34	1	363	711		65		15	0	0	165.0
7EE	35	5	431	121	182	341	189	0	0	0	141.0
7EW	35			1	876	37	33	0	0	0	135.3
8E	35	25	315	373	687	206	230	2	0	2	204.4
3E	39	0	119	4	269	0	98				81.7
4E	39	0	9	37	32	39	28	0	1	0	16.2
\M/oot											
	07	04	000	707	1000	<u> </u>	000	0	4	0	004.0
15005	27	31	282	191	1003	6Z	830	2	1	0	334.9
1677N	27	22	63	24	106	37	36	1	0	0	32.1
1400	29	22	68	51	167	52	155	1	0	0	57.3
	30	4	1016	414	451	58	154	0	1	1	233.2
1100	32	0	4	0	180	43	0	0	0	0	25.2
	35	1	29	15	99	10	74	0	0	0	25.3
900	35	0	14	76	63	141	0	3	0	0	33.0
8VV 7\\\	30	0	11	39	130	99	19	0	0	0	33.8
7 VV	37	0	110	1/8	131	107	198	0	0	1	80.8 24.6
300	39	0	109	17	05	44	51	0	0	0	31.0
4VV 5\//	39 30	0	87	/ 43	85 170	29	22 42	0	0	0	25.1 35.6
511	00			τu	170	20	76	5	5	5	55.0
Effort		24	24	25	24	25	25	25	24	25	221
Catch		388	4109	4891	5479	5326	3032	99	40	33	23397
C/E		16.17	171.21	195.64	228.29	213.04	121.28	3.96	1.67	1.32	105.87

TABLE 342005 HUDSON RIVER ATLANTIC SILVERSIDE LENGTH FREQUENCY

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	C/F	C/F
	Jul	Jul	Aug	Aug	Sep	Sep	Oct	Oct	Nov	Weeks	Weeks
TL (mm)	11	25	8	22	7	19	19	27	9	4 - 9	1 - 9
< 25	0	0	0	0	0	0	0	0	0	0	0
25 - 29	0	0	0	0	0	0	0	0	0	0	0
30 - 34	5	0	0	0	0	0	0	0	0	0	5
35 - 39	17	1	0	1	0	0	0	0	0	1	19
40 - 44	40	2	0	0	0	0	1	1	0	2	44
45 - 49	28	4	3	0	1	0	1	0	2	4	39
50 - 54	54	20	2	0	2	0	1	0	0	3	79
55 - 59	35	82	9	3	2	0	1	0	2	8	134
60 - 64	45	142	48	23	11	10	10	4	0	58	293
65 - 69	32	168	122	68	50	54	19	6	7	204	526
70 - 74	2	157	156	177	151	95	7	2	2	434	749
75 - 79	1	77	146	203	181	162	5	2	1	554	778
80 - 84	0	9	73	150	165	176	8	5	0	504	586
85 - 89	0	0	13	49	73	90	17	9	6	244	257
90 - 94	0	1	1	7	29	31	16	3	2	88	90
95 - 99	0	1	1	0	5	3	10	6	0	24	26
100 - 104	0	0	0	2	2	2	3	2	0	11	11
105 - 109	0	0	0	0	0	1	0	0	0	1	1
110 - 114	0	0	0	0	0	0	0	0	0	0	0
115 - 119	0	0	0	0	0	0	0	0	0	0	0
120 - 124	0	0	0	0	0	0	0	0	0	0	0
125 - 129	0	0	0	0	0	0	0	0	0	0	0
130 - 134	0	0	0	0	0	0	0	0	0	0	0
135 - 139	0	0	0	0	0	0	0	0	0	0	0
140 - 144	0	0	0	0	0	0	0	0	0	0	0
145 - 149	0	0	0	0	0	0	0	0	0	0	0
> 149	0	0	0	0	0	0	0	0	0	0	0
Measured	259	664	574	683	672	624	99	40	22	2140	3637
Mean	52.5521	66.488	72.2666	75.9268	77.7277	78.7612	79.2525	81.075	73.3182	77.5421	72.9117
StDev	9.64929	7.13371	6.74339	6.50427	7.15562	6.94988	13.6721	14.072	14.0319	7.71728	10.3844

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	
	River	Jul	Jul	Aug	Aug	Sep	Sep	Oct	Oct	Nov	
Station	Mile	11	25	8	22	7	19	19	27	9	C/E
East											
18E	23	1	0	0	0	0	11	0	4	8	2.7
21E	23	0	0	0	2	7	0	0	2	8	2.1
17E	24	0	0		12	0	10	1	0	0	2.9
16E	25	0	0	1	0	5	0	0	0	10	1.8
12E	29	1	0	0	4	0	2	8	0	0	1.7
14E	29	0	0	0	0	3	1	2	0	0	0.7
19E	33	0	0	0	2	2	0	14		3	2.6
11E	34	0	0	0	0	0	0	26	0	0	2.9
9E	34	0	0	0		0		0	0	0	0.0
7EE	35	0	0	0	0	0	1	0	0	3	0.4
7EW	35			0	0	0	0	0	0	0	0.0
8E	35	1	0	0	0	0	15	0	0	0	1.8
3E	39	0	0	0	0	0	0				0.0
4E	39	0	0	0	0	0	0	2	3	1	0.7
West	-										
15WS	27	0	0	0	0	1	4	0	0	1	0.7
16WN	27	0	2	0	0	0	0	0	0	0	0.2
14W	29	0	0	0	0	5	7	10	1	0	2.6
12W	30	0	0	0	0	0	4	2	1	18	2.8
11W	32	0	0	0	0	0	0	0	0	5	0.6
10W	35	0	0	0	0	0	4	0	2	0	0.7
9W	35	0	0	0	0	2	6	0	0	2	1.1
8W	36	0	0	0	0	0	0	1	3	1	0.6
7W	37	0	0	0	0	0	1	2	1	0	0.4
3W	39		0	0		0	3	0	0	2	0.7
4W	39	0	0	0	0		0	0	0	0	0.0
5W	39	0		0	0	0	0	0	2	2	0.5
Effort		24	24	25	24	25	25	25	24	25	221
Catch		3	2	1	20	25	69	68	19	64	271
C/E		0.13	0.08	0.04	0.83	1.00	2.76	2.72	0.79	2.56	1.23

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	
01-11-1-1	River	Jul	Jul	Aug	Aug	Sep	Sep	Oct	Oct	Nov	
Station	Mile	11	25	8	22	1	19	19	27	9	C/E
East	• • • •	•	0	0	•	•	4	0	0	0	0.0
18E	23	0	2	2	0	0	4	0	0	0	0.9
21E	23	0	0	0	0	1	0	0	0	0	0.1
1/E	24	0	0		0	0	0	0	0	0	0.0
16E	25	0	3	1	0	1	0	0	0	0	0.6
12E	29	1	0	1	11	0	1	0	0	0	1.6
14E	29	0	0	0	0	0	0	0	0	0	0.0
19E	33	0	0	0	0	0	0	0		0	0.0
11E	34	0	0	0	0	0	4	0	0	0	0.4
9E	34	0	1	0		0		0	0	0	0.1
7EE	35	0	0	0	0	0	0	0	0	0	0.0
7EW	35			0	0	0	0	0	0	0	0.0
8E	35	0	0	0	0	0	0	0	0	0	0.0
3E	39	0	0	0	0	1	0				0.2
4E	39	0	0	0	0	0	0	0	0	0	0.0
West											
15WS	27	0	0	0	0	0	0	0	0	0	0.0
16WN	27	0	0	0	0	0	0	2	0	0	0.2
14W	29	0	0	0	0	0	0	1	0	0	0.1
12W	30	0	0	0	0	0	0	0	0	1	0.1
11W	32	0	0	0	0	0	0	1	0	0	0.1
10W	35	0	0	0	0	0	0	0	0	0	0.0
9W	35	0	0	0	0	1	0	0	0	0	0.1
8W	36	0	0	0	0	0	0	0	0	0	0.0
7W	37	0	0	0	0	0	0	0	0	0	0.0
3W	39	-	0	0	-	0	0	0	0	0	0.0
4W	39	0	0	2	1	•	0	0	0	0	0.4
5W	39	0	Ũ	ō	Ö	0	Ő	Ő	Ő	Ő	0.0
Effect			0.4	05	0.4	05	05	05	0.4	05	004
		24	24	25	24	25	25	25	24	25	221
Catch		1	6	6	12	4	9	4	U	1	43
C/E		0.04	0.25	0.24	0.50	0.16	0.36	0.16	0.00	0.04	0.19

FIGURE 1







Bi-weekly Mean Air Temperature, 1985-2005



Hudson River YOY Striped Bass Index of Abundance (weeks 4 - 9)

FIGURE 4



2005 Hudson River YOY Striped Bass Growth

Date











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FIGURE 7



