HD
9457
.D3
W45
2001

LIBRARY

Commercial Fishing in Delaware 2000

William H. Whitmore and Richard W. Cole
State of Delaware
Department of Natural Resources and Environmental Control
Division of Fish and Wildlife
89 Kings Highway
Dover, DE 19901

This is the seventeenth year (sixteenth full year) of mandatory commercial catch reporting under the provisions enacted by the Delaware General Assembly in April 1984. Every fisherman holding a commercial food fishing license is required to submit a monthly report specifying where he fished, the type and amount of fishing gear deployed, and the pounds landed of each species taken for each day fished. A total of 251 commercial food fish licenses were issued in 2000, consisting of 108 gill net and 169 hook and line permits. The figures in this report are compiled from these logbook reports, and represent the best available profile of Delaware's commercial finfish landings. Only reports received by April 30, 2001 are included in this report. However, late reports are incorporated into the 2000 commercial landings database, as we intend to provide an updated, complete profile of annual landings. Consequently, moderate changes in the summary tables occur from year-to-year as we report landings from our updated database. Every effort is made to detect and eliminate duplicate records from the data.

2000 Highlights

The total landings and exvessel value dropped almost 22 percent in 2000. Landings went from 1,397,889 pounds in 1999 to 1,096,904 pounds, and dockside value dropped from $1,304,661 to $1,020,438.

Harvest of white perch reached a 16-year high of 113,997 pounds, valued at $66,807.

Weakfish continued as the number one commercial fish landed in 2000, with 328,269 pounds valued at $317,077.

Striped bass landings fell 24.8 percent in 2000, with 140,634 pounds (ranked 3rd), with an exvessel value of $241,144 (ranked 2nd).

Bluefish landings increased to 28,948 pounds in 2000, which is 58.2 percent above last year's all time lowest commercial harvest on record.

This is the fourth year supporting a fall striped bass season reopened for hook and line and gill net fisheries. The 4-month hook and line fishery caught 6,135 lbs. (September-December), and the 2-month (November-December) gill net fishery netted 18,078 lbs.

Total number of commercial food fish seller licenses issued in 2000 declined 2 percent from 256 to 251 and the number of hook and line permits decreased 1.7 percent from 172 to 169.

A total of 5,043 commercial fishing trips were taken in Delaware during 2000, with most effort occurring in April. Included in this number are 880 commercial eel trips.

Findings

A total of 1,096,904 pounds comprising more than thirty-two species groups of fish was landed commercially during 2000 (Table 1). Four species comprised 69 percent of the total landings, and eight species accounted for 91 percent. Weakfish dominated the catch (30%) with 328,269 pounds landed, followed by American shad with 173,105 pounds (16%), striped bass 140,634 pounds (13%), and American eel 119,180 pounds (11%). Landings from 17 other species groups each comprised less then one percent of the total catch. Only white perch was landed during every month.

Overall, the 2000 commercial landings dropped 21.5 percent from the previous year (Table 2). Statewide annual landings from 1985-2000 are presented for weakfish, American shad, black sea bass, bluefish, Atlantic menhaden, spot, white perch, striped bass, tautog, Atlantic croaker, summer flounder, and

American eel (Table 3, and Figures 1-12). American eel landings prior to 1999 were derived from surveys conducted by NMFS port agents.

Discussion of the Fisheries, by Gear Type

Commercial Gill Net Fishery

The twelve-year annual statewide landings by gear type indicate that the dominant gear used by commercial fishermen continues to be gill net (Tables 4 to 6). Catch by total gill net (combined anchor and drift net) fell 14 percent from the previous year to 837,884 pounds, which was 24 percent below the 12-year average landing of 1,102,058 pounds (Table 4). During 2000, gill net remained the dominant gear responsible for over 76 percent of the catch (Tables 5A-5B). The anchored (or fixed) gill net accounted for 48.5 percent of the catch (531,488 pounds), followed by 306,396 pounds of fish landed from drifted gill net (27.9%).

Most of the gill net catch and exvessel value came from the Delaware Bay and Atlantic Ocean (Tables 5A and 5B). The total value of the commercial gill net fishery was $671,061 in 2000, with most ($444,440) derived from anchored gill net fishery. Principal species caught were weakfish, American shad, Atlantic menhaden, spot, and striped bass.

Commercial Hook and Line Fishery

The total commercial hook and line landings fell 34% from 117,875 pounds in 1999 to 77,378 pounds in 2000 (Table 4). The 12-year total average catch from the commercial hook and line fishery was 88,336 pounds, representing nearly 6 percent of the average total catch. During 20000, over 7 percent of the harvest was obtained from the hook and line fishery, which ranked fourth in total landings and exvessel value behind anchored gill net, drift gill net, and eel pot for landings and in dollar value (Tables 5A-5B). All tuna, dolphin, northern puffer, and scup were caught in the commercial hook and line fishery. Sixty six percent of the total commercial hook and line landings came from the Delaware Bay and the total value of the hook and line fishery was $96,700 in 2000.

The number of participants in the commercial hook and line fishery increased substantially from 1993 to a peak of 281 in 1996. Subsequently, the number of participants has declined, and there were only 169 participants in 2000 (Table 21).

The 2000 hook and line weakfish season resembled the 1997-1999 seasons. Fishing was limited to four days per week (selected by each fisherman at permit renewal). There was an 27.6 percent drop in hook and line fishing effort for weakfish from the previous year, with a corresponding 30.6 percent decline in landings per trip (41.3 lbs./trip) (Table 20; and Whitmore and Cole, 2000).

Commercial Fish Pot Fishery

The total commercial fish pot harvest of 39,967 pounds valued at $55,027 was concentrated primarily in the Atlantic Ocean (Tables 5A-5B). The commercial fish pot fishery ranked fifth in total pounds landed, comprising 3.6 percent of total landings, and was dominated by one species (black sea bass) which accounted for over 95 percent of the commercial fish pot landings (Table 6). All conger eels landed in 2000 were caught in fish pots.

Commercial Haul Seine Fishery

The commercial haul seine harvest of 16,709 pounds valued at $3,002 occurred primarily from the Delaware River (78%) and the Delaware Bay (Table 5A and 5B). The commercial haul seine fishery continues to be driven by one species (carp), captures few different species, and had an insignificant impact overall (less than 2 percent of the total pounds landed). In 2000, carp comprised over 95 percent of the total commercial haul seine landings, and most (97%) of the total carp landed from all gear types (Table 6).

Commercial Fyke Net Fishery

The 2000 commercial fyke net landings dropped 82 percent from the 1999 peak, with 5,764 pounds of fish valued at $3,015 (Tables 4, 5-A, 5-B). This drop was due to the absence of Atlantic menhaden which dominated the 1999 catch. In 2000, white perch accounted for most (36%) of the fyke net landings, followed by catfishes (30%) and weakfish (24%). The commercial fyke net fishery concentrated in the Delaware Bay (Tables 5-A, 6).

Commercial Eel Pot Fishery

In 1999, the commercial eel pot fishery came under the mandatory reporting requirements imposed on our other commercial fisherys. American eel landings are included in this report for the first time. Prior to 1999, the American eel harvest was estimated annually by a survey of cooperating commercial eelers conducted by the National Marine Fisheries Service. Historical landings do not compare in quality with the monthly logbook reporting program, and usage of the survey data is limited (Table 3, Figure 12). The American eel monthly logbook report differs from the trip-based commercial finfish logbook, and the summary data is merged with the commercial finfish database at the end of the year.

The commercial eel pot fishery landed 119,180 pounds of American eel in 2000 with an exvessel value of $191,626. Most (46%) of the landings came from the Delaware Bay and its tributaries. Interestingly, American eel was the dominant species landed from the Indian River Bay during 2000 with a dockside value of $27,300 (Tables 5-A,5-B, 12). Overall, American eel landings represented 10.9 percent of the total 2000 harvest (Tables 1 and 6). Harvest peaked during October (Table 7).

Seasonal Abundance

More than half (61.6%) of the commercial finfish landings occurred during the months of March through May, attributable to the abundance of weakfish, American shad, and striped bass (Table 7). The total landings peaked in April, with 329,570 pounds, representing 30% of the annual harvest, followed closely by March (18.5%), May (13.1%), and October (7.9%). The lowest landings occurred during January and December accounting for 1.0 and 2.3 percent of the total annual harvest, respectively.

Most of the principal species experienced a decline in harvest during 2000, with the exception of white perch, which rose over 112 percent from 1999 (Table 2).

The monthly distribution of landings statewide, for the Delaware Bay, Delaware River, Nanticoke River, Atlantic Ocean, Indian River and Bay, and Rehoboth Bay appears in Tables 8-13. Table 14 summarizes catch by area with Delaware Bay comprising most (66%) of the total annual harvest, followed by the Atlantic Ocean (21.6%).

Fishing Effort

The 2000 drift gill net fishery was closed for 35 days during the months of May and June in order to comply with the fishing exploitation reduction recommendations in the Weakfish Fisheries Management Plan (FMP). This closure was designed to achieve a 25-percent reduction in exploitation. Drift gill net effort peaked in May, with 25 commercial fishermen working 152 man-days, and fishing a total of 114,525 net-yards (Table 15).

The fixed (anchored) gill net fishery effort peaked in April, with 59 commercial fisherman working 680 man-days, and deploying a total of 450,313 net yards and 277,920 pounds of fish (Table 15). Annually, there were 76 participants who used fixed gill net in 2000, and 59 involved with the drift gill net fishery. This fishery primarily targets American shad, weakfish, and striped bass. The anchored gill net remains set for days and is tended daily (weather permitting). In the case of the drift net fishery, nets are deployed and retrieved the same day.

An analysis of gill netting effort for nine selected species (American shad, Atlantic croaker, Atlantic menhaden, bluefish, spot, striped bass, summer flounder, weakfish, and white perch) is presented by pounds landed (Table 16), total net yards deployed (Table 17), catch per unit of effort (Table 18), and

man-days of fishing effort (Table 19). The effort measured in these tables is associated with trips in which the respective species were landed, although this assumes that there was no effort when there was no catch, and this may not always be valid. The way to obtain more comprehensive effort data would be to require fisherman to report data at the trip level, regardless of whether fish were landed. This method of trip-level data submission for all commercial fishing has been proposed by the Atlantic Coastwide Cooperative Statistics Program (ACCSP). Presently, Delaware commercial fishermen are not required to submit negative reports (on trips where they caught no fish). However, these effort measures provide useful trend analysis data for assessing catch trends relating to species abundance levels. The CPUE is a measure of landings in pounds per yard of gill net deployed for a species. The distinction with the 1992-2000 CPUE calculations is that gill net yardage is not accumulated for days when tended nets were empty. As stated, we don't measure the effort from trips in which there was no catch.

Two of the nine species evidenced an improved gill net CPUE in 2000 from the previous year. The 2000 white perch overall gill net CPUE increased the most, from 0.205 to 0.366 (78%) and summer flounder rose from 0.020 to 0.033 (67%). The spot CPUE fell the most in 2000, dropping 37% from 0.209 in 1999 to 0.132. Atlantic menhaden CPUE continues near the 1999 record low of 0.343 level, and which is nearly 29% below the 1992-2000 time series average. Bluefish and spot are also seriously below the 1992-2000 time series average CPUE. Assuming CPUE indices reflect population abundance (i.e., an increase in stock size will result in a similar change in CPUE in the commercial fishery), this data can be used to track annual population fluctuations (Tables 15-18).

The number of man days, or trips of fishing effort over the nine-year time series (1992-2000), by gear type, is presented for selected fishes caught in the gill net fishery in Table 19. The 2000 overall gill net effort increased for bluefish, white perch, spot, and weakfish, and declined form Atlantic croaker, American shad, and striped bass. American shad directed gill net effort reached a new low of 738 man-days in 2000 (Table 19). The highest (17.3 lbs.) average pounds of summer flounder per trip reflected the abundance of summer flounder experienced during 2000 (Table 20).

Participants

There were 251 food fish licenses issued in 2000, which was a slight (2%) decline from the previous year. (Table 21). Delaware statute requires that anyone who sells fish must have a food fish license in conjunction with a specific gear permit. The most popular gear permit issued in 2000 was hook and line, although there were 1.7% fewer issued than in the previous year. The number of gill net permits issued in 2000 declined 2.7% from 111 in 1999 to 108. This downward trend continues which began in 1984 when a moratorium restricting new entrants was imposed (Figure 15).

Delaware commercial watermen took 5,043 fishing trips during 2000 (Table 25). Most (73%) trips occurred in the Delaware Bay. The least amount of effort occurred during January. Anchored gill net trips comprised nearly 34% of the total effort, followed by hook and line fishing trips (28%). There were 880 commercial eeling trips taken in 2000, concentrated in the Delaware Bay and its tidal tributaries.

Economic Impact of Commercial Fishing

The dockside (exvessel) value of landed commercial finfish is not systematically collected by Division of Fish and Wildlife staff. The National Marine Fisheries Service (NMFS) provided average monthly prices for most of the species, from which annual dockside cash values were estimated, by gear type and area fished (Table 5B), by month (Table 22), and by area fished (Table 23). The 2000 total exvessel value of commercial finfish landings fell 21.8 percent from $1,304,661 in 1999 to $1,020,438 (Table 24). The dominant species of economic importance in 2000 were weakfish, striped bass, and American eel. The estimated exvessel value of weakfish ($317,077) dropped 10 percent from the previous year, striped bass fell 15.7% to $241,144, and American eel declined from $230,822 to $191,626, a drop of 17 percent. In contrast, the 2000 exvessel value of white perch doubled from $33,265 in 1999 to $66,807.

Most (68.2%) of the total revenue was generated from fishing activity concentrated within the Delaware Bay, while an additional 19.6% came from the Atlantic Ocean (Table 23). Table 22 indicates the most lucrative month of fishing was April ($316,087) driven by the weakfish and striped bass landings. Figures 13 and 14 depict the annual Delaware commercial finfish harvest (pounds landed and exvessel

value) since mandatory reporting went into effect. These figures have been revised historically to include American eel, in view of the 1999 mandatory reporting for the commercial eel pot fishery.

Accuracy

Late reports will be incorporated into the database, but for the purposes of this document, only reports submitted by April 30, 2001 were used. Additionally, any data entry errors detected in the process of computerizing the fisherman logbook reports will be corrected in subsequent reports, as we strive to maintain an accurate compilation of the commercial finfish landings in Delaware.

Late 1999 logbook reports received affected black sea bass and weakfish landings data. An additional 28,625 pounds of black sea bass landings were reported from fish pot and hook and line fisherys, and 310 pounds of weakfish from the hook and line fishery. These revised landings are reflected herein.

The American eel logbook reporting is a new and distinct data collection program, the harvest data is merged into the commercial finfish landings database. There are some difficulties in the transfer process, in that the conventional database is trip-based in design, while the commercial eel logbook is in a monthly format. Furthermore, the commercial eel logbook partitions the catch into four different market categories (elvers, yellow, bait, and silver eels). Often, the areas fished by eelers are legally off-limits to other commercial fishermen, since eelers can set their pots in creeks and tidal tributaries. The merged eel data consists of total American eel landed by month and area fished, rather than by fisherman and trip date. Differences such as these create complications when the data is merged. Water body definitions need to be modified to handle the commercial eel pot fishery. For instance, the Delaware Bay now would have to include the river systems (Mispillion, Simons, Leipsic Rivers) where much of the eeling occurs. The merged database loses the identity of the individual river system, however it is retained in the original commercial eel database. All data in this report is compiled from the merged commercial finfish landings database.

Literature Cited

Whitmore, W.H. and R.W. Cole. 2000. Commercial Fishing in Delaware 1999. Annual landings report. Delaware Division of Fish and Wildlife, Dover, DE 19901.

Table 1. Reported 2000 Delaware commercial landings in pounds.

Species	Pounds	Percent	Month of Occurrance J	F	M	A	M	J	J	A	S	O	N	D
Weakfish	328,269	29.93			+	+	+	+	+	+	+	+	+	+
American shad	173,105	15.78	+	+	+	+	+				+		+	+
Striped bass	140,634	12.82			+	+					+	+	+	+
American eel	119,180	10.87			+	+	+	+	+	+	+	+	+	+
White perch	113,997	10.39	+	+	+	+	+	+	+	+	+	+	+	+
Atlantic menhaden	47,980	4.37			+	+	+	+	+	+	+	+	+	
Black sea bass	40,354	3.68	+				+	+	+	+	+	+		
Spot	32,288	2.94					+	+	+	+	+	+		
Bluefish	28,948	2.64				+	+	+	+	+	+	+	+	
Carp	16,409	1.50	+	+	+	+	+	+	+			+	+	+
Alewife	13,494	1.23		+	+	+	+	+				+	+	
Summer flounder	11,549	1.05			+	+	+	+	+	+	+	+	+	+
Atlantic croaker	11,118	1.01					+	+	+	+	+	+	+	
Tuna	9,848	0.90						+	+	+	+	+		
Catfishes	2,835	0.26	+	+	+	+		+	+	+			+	+
Atlantic mackerel	1,062	0.10			+	+		+			+			
Black drum	1,029	0.09	+			+	+							
Hakes	840	0.08					+	+	+			+	+	
Gizzard shad	763	0.07			+	+	+							
Butterfish	653	0.06				+	+			+	+	+	+	
Kingfish	647	0.06				+	+	+			+	+		
Toadfish	572	0.05				+	+	+		+				
Windowpane flounder	463	0.04		+	+	+		+				+	+	
Sharks	282	0.03					+	+	+	+	+	+		
Tautog	251	0.02				+	+	+			+	+	+	+
Dolphin	225	0.02								+	+			
Conger eel	50	< 0.01	+											
Sheepshead	42	< 0.01	+									+		
Northern puffer	10	< 0.01									+			
Scup	6	< 0.01									+			
Mullet	1	< 0.01	+											
TOTAL LANDINGS	1,096,904	100 %	J	F	M	A	M	J	J	A	S	O	N	D

Table 2. Comparison of 1999-2000 Delaware commercial finfish landings, by species, for all gear types in all Delaware waters. The species are in 2000 rank order, by pounds landed.

Species	1999	2000	Percent Change
Weakfish	441,176	328,269	-25.6%
American shad	228,561	173,105	-24.3%
Striped bass	187,096	140,634	-24.8%
American eel	140,154	119,180	-15.0%
White perch	53,712	113,997	112.2%
Atlantic menhaden	78,551	47,980	-38.9%
Black sea bass	114,024	40,354	-64.6%
Spot	47,770	32,288	-32.4%
Bluefish	18,293	28,948	58.2%
Carp	35,823	16,409	-54.2%
Alewife	6,215	13,494	117.1%
Summer flounder	7,403	11,549	56.0%
Atlantic croaker	15,068	11,118	-26.2%
Tuna	6,736	9,848	46.2%
Catfishes	8,812	2,835	-67.8%
Atlantic mackerel	388	1,062	173.7%
Black drum	274	1,029	275.5%
Hakes	642	840	30.8%
Gizzard shad	1,817	763	-58.0%
Butterfish	709	653	-7.9%
Kingfish	389	647	66.3%
Toadfish	2,014	572	-71.6%
Windowpane	350	463	32.3%
Sharks	459	282	-38.6%
Tautog	212	251	18.4%
Dolphin	574	225	-60.8%
Conger eel	495	50	-89.9%
Sheepshead	-	42	-
Northern puffer	-	10	-
Scup	17	6	-64.7%
Mullet	2	1	-50.0%
Ocean pout	100	-	-100.0%
Red Drum	6	-	-
Trigger fish	47	-	-
Annual Totals	**1,397,889**	**1,096,904**	-21.5%

Table 3. Comparison of annual landings (pounds) of specific species that generally comprise 95% of Delaware's commercial finfish landings, along with other species that currently have a fishery management plan (FMP) established to monitor harvest.

SPECIES	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Average
Weakfish	990,817	723,444	577,735	530,603	543,741	625,006	503,289	362,042	195,216	262,263	291,010	317,317	558,919	552,947	441,176	328,269	487,737
American shad	203,368	242,356	258,985	317,296	229,736	492,870	526,562	283,895	309,499	240,918	205,693	275,340	172,574	217,314	228,561	173,105	273,630
Black sea bass	82,159	167,235	196,562	171,010	132,082	150,381	190,547	187,402	85,794	68,292	152,153	166,148	156,522	78,288	114,024	40,354	133,685
Bluefish	187,989	400,216	354,634	209,263	105,078	148,778	70,570	95,100	26,122	34,966	38,141	126,341	26,673	27,876	18,293	28,948	118,687
Atlantic menhaden	176,135	20,081	22,034	127,713	104,382	167,116	278,774	105,718	164,046	78,672	101,388	100,063	55,733	58,048	78,551	47,980	105,402
Spot	17,237	86,455	140,109	37,722	31,249	23,864	262,498	112,967	21,862	100,435	62,324	80,930	35,686	140,363	47,770	32,288	77,110
White perch	14,395	22,170	32,326	37,799	39,502	25,321	45,726	70,104	89,403	81,077	80,135	73,688	78,007	39,866	53,712	113,997	56,077
Striped bass	-- *Closed season from 1985-1989* --					6,402	21,079	17,795	28,032	33,897	38,198	120,450	165,978	163,212	187,096	140,634	76,898
Tautog	2,574	349	889	670	588	463	1,246	1,021	150	378	639	1,599	1,047	1,544	212	251	851
Atlantic croaker	66	466	770	162	0	42	1,111	678	2,435	3,044	12,106	9,681	10,509	10,384	15,068	11,118	4,853
Summer flounder	4,077	3,679	4,105	6,564	3,061	1,930	4,453	12,791	7,602	4,246	4,313	7,887	5,328	11,208	7,403	11,549	6,262
American eel	132,900	130,300	95,400	93,900	115,700	259,000	256,200	69,800	132,000	215,000	161,200	86,100	113,580	131,471	140,154	119,180	140,743

Table 4. Annual commercial finfish landings from all Delaware waters, by gear type from 1989-2000. The pounds landed represent all species taken during the year, in all fishing areas.

YEAR	HAUL SEINE	HOOP & BAG NET	FYKE NET	FISH POT	ANCHOR GILL NET	DRIFT GILL NET	TOTAL GILL NET	HOOK & LINE	EEL POT	TOTAL
1989	0	1,353	0	132,723	446,338	634,828	1,081,166	32,798	115,700	1,363,740
1990	81	2,869	110	170,086	795,181	721,682	1,516,863	34,254	259,000	1,983,263
1991	0	60	4,163	193,657	1,049,758	718,712	1,768,470	67,330	256,200	2,289,880
1992	0	9,972	1,965	183,449	758,341	431,055	1,189,396	58,021	69,800	1,512,603
1993	0	591	13,013	86,610	651,331	212,725	864,056	42,838	132,000	1,139,108
1994	0	0	22,559	73,121	444,541	386,227	830,768	48,707	215,000	1,190,155
1995	13,452	120	12,298	147,453	511,245	406,999	918,243	157,222	161,200	1,409,988
1996	20,533	0	5,880	163,646	665,657	445,420	1,111,076	124,134	86,100	1,511,370
1997	26,522	0	1,601	153,793	523,810	505,898	1,029,708	145,595	113,580	1,470,798
1998	50,039	0	1,688	95,154	633,178	474,945	1,108,123	153,880	131,471	1,540,355
1999	23,764	0	32,488	114,662	631,425	337,522	968,946	117,875	140,154	1,397,889
2000	16,709	22	5,764	39,967	531,488	306,396	837,884	77,378	119,180	1,096,904
12-YR MEAN	12,592	1,249	8,461	129,527	636,858	465,201	1,102,058	88,336	149,949	1,492,171
PERCENTAGE	0.84%	0.08%	0.57%	8.7%	42.7%	31.2%	73.9%	5.9%	10.0%	
Percent Change 2000 vs 1999	-30%	- -	-82%	-65%	-16%	-9%	-14%	-34%	-15%	-22%
1999 vs 12-YR MEAN (1989-2000)	33%	- -	-32%	-69%	-17%	-34%	-24%	-12%	-21%	-26%

Table 5A. Commercial finfish pounds landed from all Delaware waters, by gear type and location during 2000.

LOCATION	HAUL SEINE	HOOP & BAG NET	FYKE NET	FISH POT	ANCHOR GILL NET	DRIFT GILL NET	TOTAL GILL NET	HOOK & LINE	EEL POT	TOTAL POUNDS	Percent of Total
DELAWARE RIVER	13,078	0	51	0	0	13,006	13,006	345	21,815	48,295	4.4%
DELAWARE BAY	3,631	0	5,668	1,471	347,632	236,453	584,085	54,500	74,992	724,347	66.0%
ATLANTIC OCEAN	0	0	0	38,359	175,814	6,096	181,910	17,198	0	237,467	21.6%
INDIAN RIVER & BAY	0	0	45	0	6,718	16,816	23,534	5,046	16,947	45,572	4.2%
REHOBOTH BAY	0	22	0	137	0	6,875	6,875	0	5,426	12,460	1.1%
NANTICOKE RIVER	0	0	0	0	1,324	27,150	28,474	289	0	28,763	2.6%
STATEWIDE	16,709	22	5,764	39,967	531,488	306,396	837,884	77,378	119,180	1,096,904	
PERCENTAGE	1.5%	0.0%	0.5%	3.6%	48.5%	27.9%	76.4%	7.1%	10.9%		

Table 5B. Exvessel (dockside) dollar value of the 2000 commercial finfish harvest, by gear type and location.

LOCATION	HAUL SEINE	HOOP & BAG NET	FYKE NET	FISH POT	ANCHOR GILL NET	DRIFT GILL NET	TOTAL GILL NET	HOOK & LINE	EEL POT	TOTAL VALUE	Percent of Total
DELAWARE RIVER	$2,658	$0	$20	$0	$0	$14,006	$14,006	$253	$40,549	$57,485	5.6%
DELAWARE BAY	344	0	2,970	2,039	333,146	183,701	516,847	57,378	116,613	$696,191	68.2%
ATLANTIC OCEAN	0	0	0	52,805	106,068	8,172	114,241	33,155	0	$200,201	19.6%
INDIAN RIVER & BAY	0	0	25	0	4,485	7,939	12,424	5,769	27,300	$45,518	4.5%
REHOBOTH BAY	0	7	0	183	0	3,399	3,399	0	7,164	$10,753	1.1%
NANTICOKE RIVER	0	0	0	0	741	9,404	10,145	145	0	$10,290	1.0%
STATEWIDE	$3,002	$7	$3,015	$55,027	$444,440	$226,621	$671,061	$96,700	$191,626	$1,020,438	
PERCENTAGE	0.3%	0.0%	0.3%	5.4%	43.6%	22.2%	65.8%	9.5%	18.8%		

Table 6. The 2000 reported commercial finfish landings in pounds from Delaware waters, by gear types for all species.

Landings from all Delaware waters

Species	HAUL SEINE	HOOP & BAG NET	FYKE NET	FISH POT	ANCHOR GILL NET	DRIFT GILL NET	TOTAL GILL NET	HOOK & LINE	EEL POT	TOTAL
Weakfish			1,390	136	134,138	150,960	285,098	41,645		328,269
American shad			10		164,514	8,581	173,095			173,105
Striped bass					111,907	23,927	135,834	4,800		140,634
American eel									119,180	119,180
White perch	89		2,080	773	77,219	31,806	109,025	2,030		113,997
Atlantic menhaden		15			21,243	26,722	47,965			47,980
Black sea bass				38,304		5	5	2,045		40,354
Spot		2			301	31,635	31,936	350		32,288
Bluefish		5	122		6,865	16,872	23,737	5,084		28,948
Carp	15,954				350	105	455			16,409
Alewife					2,016	11,478	13,494			13,494
Summer flounder				1	7,878	92	7,970	3,578		11,549
Atlantic croaker			14		1,732	2,321	4,053	7,051		11,118
Tuna								9,848		9,848
Catfishes	35		1,737	127	386	302	688	248		2,835
Atlantic mackerel					1,036	15	1,051	11		1,062
Black drum					491	538	1,029			1,029
Hakes			258		534	22	556	26		840
Gizzard shad	631					132	132			763
Butterfish					465	188	653			653
Kingfish					67	578	645	2		647
Toadfish				571	1		1			572
Windowpane flounder			153		309	1	310			463
Sharks						116	116	166		282
Tautog				5	8		8	238		251
Dolphin								225		225
Conger eel				50						50
Sheepshead					27		27	15		42
Northern puffer								10		10
Scup								6		6
Mullet					1		1			1
TOTALS	16,709	22	5,764	39,967	531,488	306,396	837,884	77,378	119,180	1,096,904
PERCENTAGES	1.5 %	< 0.1 %	0.5 %	3.6 %	48.5 %	27.9 %	76.4 %	7.1 %	10.9 %	

Table 7. The 2000 reported commercial finfish landings in pounds, from Delaware waters, by species.
All gear combined from all Delaware waters

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Weakfish			15,430	109,999	109,577	36,879	8,991	11,946	14,112	14,578	6,749	8	328,269
American shad	23	4,545	59,627	108,670	173				1		2	64	173,105
Striped bass			54,741	53,436					170	612	13,631	18,045	140,634
American eel			10,125	15,465	7,719	1,125	3,325	15,748	23,461	33,526	7,378	1,308	119,180
White perch	7,808	42,628	40,849	3,242	17	379	345	2,595	1,947	4,134	4,814	5,239	113,997
Atlantic menhaden			6,780	12,411	4,427	5,631	5,721	6,850	2,836	2,820	504		47,980
Black sea bass	2,854				11,631	5,779	4,600	94	133	15,263			40,354
Spot					26	1,118	14,739	7,315	8,178	912			32,288
Bluefish				2,046	7,155	2,888	966	2,417	4,518	8,256	702		28,948
Carp	46	53	4,823	11,233	35	15	25			91	46	42	16,409
Alewife		1,331	5,381	5,757	555	420				24	26		13,494
Summer flounder			1,956	5,926	244	730	996	923	599	143	24	8	11,549
Atlantic croaker					167	1,292	1,247	1,162	2,571	4,278	401		11,118
Tuna						490	2,107	4,255	1,558	1,438			9,848
Catfishes	185	176	1,842	267		19	97	149			55	45	2,835
Atlantic mackerel			673	363		13			13				1,062
Black drum	25			466	538								1,029
Hakes					8	16	2			357	457		840
Gizzard shad			631	97	35								763
Butterfish				76	91			18	77	308	83		653
Kingfish				67	486	32			2	60			647
Toadfish				1	370	60		141					572
Windowpane flounder		161	108	40		1				85	68		463
Sharks					28	37	37	133	10	37			282
Tautog				8	15	5			14	50	52	107	251
Dolphin								87	138				225
Conger eel	50												50
Sheepshead	27									15			42
Northern puffer									10				10
Scup									6				6
Mullet	1												1
TOTALS	11,019	48,894	202,966	329,570	143,297	56,929	43,198	53,833	60,354	86,987	34,992	24,866	1,096,904
PERCENTAGES	1.0 %	4.5 %	18.5 %	30.0 %	13.1 %	5.2 %	3.9 %	4.9 %	5.5 %	7.9 %	3.2 %	2.3 %	

Table 8. The 2000 reported commercial finfish landings in pounds, from Delaware waters, by species.
All gear combined, taken from the Delaware Bay

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Weakfish			3,037	84,653	109,363	36,064	8,717	10,994	12,521	10,135	6,251	8	281,743
Striped bass			46,995	43,414					35	291	8,163	14,609	113,506
White perch	7,684	38,574	30,187	1,472	17	379	345	2,595	1,947	3,943	4,511	4,975	96,629
American eel			3,781	9,074	3,796	280	1,432	13,351	7,669	29,726	4,575	1,308	74,992
American shad	23	3	18,089	28,765	75				1			64	47,020
Atlantic menhaden			6,780	12,158	3,802	3,280	3,036	4,405	1,269	2,820	484		38,034
Spot					26	640	13,910	5,274	6,676	355			26,881
Bluefish				1,519	5,710	1,540	808	1,038	3,048	6,168	357		20,188
Atlantic croaker					167	1,257	1,137	1,069	1,981	2,886	55		8,552
Summer flounder			175	820	244	687	990	844	354	54	6		4,174
Carp	46	53	3,393	72		15	25			91	46	42	3,783
Catfishes	145	102	1,830	203		19	97	149			55	45	2,645
Black sea bass	200				447	259	452	16	10	74			1,458
Hakes					8	16	2			357	456		839
Butterfish				43	91			18	77	308	81		618
Kingfish				65	486	32			2				585
Toadfish				1	370	60		141					572
Black drum	25				538								563
Alewife		296	179	16							26		517
Windowpane flounder		161	108	38		1				85	68		461
Sharks					28	37	37	133					235
Gizzard shad			191										191
Tautog					15						52		67
Atlantic mackerel			30			2			13				45
Sheepshead	27									15			42
Scup									6				6
Mullet	1												1
TOTALS	8,151	39,189	114,775	182,313	125,183	44,568	30,988	40,027	35,609	57,308	25,186	21,051	724,347
PERCENTAGES	1.1 %	5.4 %	15.8 %	25.2 %	17.3 %	6.2 %	4.3 %	5.5 %	4.9 %	7.9 %	3.5 %	2.9 %	

Table 9. The 2000 reported commercial finfish landings in pounds, from Delaware waters, by species.
All gear combined, taken from the Delaware River

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
American eel				1,613	1,670	845	93	1,312	12,592	1,520	2,170		21,815
Carp			1,430	11,161	35								12,626
American shad			2,236	4,533	98								6,867
Striped bass			990	4,727									5,717
Gizzard shad			440	97	35								572
White perch			65	79							303	22	469
Atlantic menhaden				153									153
Catfishes			12	64									76
TOTALS	0	0	5,173	22,427	1,838	845	93	1,312	12,592	1,520	2,473	22	48,295
PERCENTAGES	0.0 %	0.0 %	10.7 %	46.4 %	3.8 %	1.7 %	0.2 %	2.7 %	26.1 %	3.1 %	5.1 %	< 0.1 %	

Table 10. The 2000 reported commercial finfish landings in pounds, from Delaware waters, by species.
All gear combined, taken from the Nanticoke River

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
White perch	124	4,009	10,586	1,691								120	16,530
Alewife		1,035	4,662	5,741									11,438
Striped bass			650										650
Catfishes	40	74											114
American shad		1	30										31
TOTALS	164	5,119	15,928	7,432	0	0	0	0	0	0	0	120	28,763
PERCENTAGES	0.6 %	17.8 %	55.4 %	25.8 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.4 %	

Table 11. The 2000 reported commercial finfish landings in pounds, from Delaware waters, by species.
All gear combined, taken from the Atlantic Ocean

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
American shad		4,541	39,267	75,372							2		119,182
Weakfish			12,393	25,243		14	75	97	237	960	498		39,517
Black sea bass	2,654				11,184	5,520	4,148	78	99	15,184			38,867
Striped bass			5,657	4,634						22	3,169	2,730	16,212
Tuna						490	2,107	4,255	1,558	1,438			9,848
Summer flounder			1,781	5,106		43		78	130	73			7,211
Bluefish				487	538	502	55	44	85	805	272		2,788
Atlantic croaker								68	388	1,139	346		1,941
Atlantic mackerel			643	363		11							1,017
Black drum				466									466
Dolphin								87	138				225
Kingfish				2						60			62
Conger eel	50												50
Butterfish				33							2		35
Tautog				8		5				19			32
White perch			11										11
Windowpane flounder				2									2
Hakes											1		1
TOTALS	2,704	4,541	59,752	111,716	11,722	6,585	6,385	4,707	2,635	19,700	4,290	2,730	237,467
PERCENTAGES	1.1 %	1.9 %	25.2 %	47.0 %	4.9 %	2.8 %	2.7 %	2.0 %	1.1 %	8.3 %	1.8 %	1.1 %	

Table 12. The 2000 reported commercial finfish landings in pounds, from Delaware waters, by species.
All gear combined, taken from the Indian River and Bay

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
American eel			3,923	3,673	2,253		1,800	1,085	2,400	1,180	633		16,947
Atlantic menhaden				100	625	1,540	1,600	2,145	1,567		20		7,597
Bluefish				40	907	640	21	796	1,239	1,283	73		4,999
Weakfish				103	214	687	145	462	1,179	2,140			4,930
Striped bass			449	661					135	299	2,299	706	4,549
Spot						469	171	1,491	1,360	156			3,647
Alewife			540		555	420				24			1,539
Atlantic croaker						35	110		202	253			600
White perch		45								191		122	358
Summer flounder							6		115	16	18	8	163
Tautog									14	31		107	152
Sharks									10	37			47
Black sea bass									24	5			29
Northern puffer									10				10
American shad			5										5
TOTALS	0	45	4,917	4,577	4,554	3,791	3,853	5,979	8,255	5,615	3,043	943	45,572
PERCENTAGES	0.0 %	< 0.1 %	10.8 %	10.0 %	10.0 %	8.3 %	8.5 %	13.1 %	18.1 %	12.3 %	6.7 %	2.1 %	

Table 13. The 2000 reported commercial finfish landings in pounds, from Delaware waters, by species.
All gear combined, taken from the Rehoboth Bay

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
American eel			2,421	1,105					800	1,100			5,426
Atlantic menhaden						811	1,085	300					2,196
Weakfish						114	54	393	175	1,343			2,079
Spot						9	658	550	142	401			1,760
Bluefish						206	82	539	146				973
Atlantic croaker								25					25
Summer flounder								1					1
TOTALS	0	0	2,421	1,105	0	1,140	1,879	1,808	1,263	2,844	0	0	12,460
PERCENTAGES	0.0 %	0.0 %	19.4 %	8.9 %	0.0 %	9.1 %	15.1 %	14.5 %	10.1 %	22.8 %	0.0 %	0.0 %	

Table 14. The 2000 reported commercial finfish landings, in pounds, in Delaware waters, by fishing area for all species.

ALL GEAR TYPES COMBINED

Species	DELAWARE RIVER	DELAWARE BAY	ATLANTIC OCEAN	INDIAN RIVER & BAY	REHOBOTH BAY	NANTICOKE RIVER	TOTAL
Weakfish	0	281,743	39,517	4,930	2,079	0	328,269
American shad	6,867	47,020	119,182	5	0	31	173,105
Striped bass	5,717	113,506	16,212	4,549	0	650	140,634
American eel	21,815	74,992	0	16,947	5,426	0	119,180
White perch	469	96,629	11	358	0	16,530	113,997
Atlantic menhaden	153	38,034	0	7,597	2,196	0	47,980
Black sea bass	0	1,458	38,867	29	0	0	40,354
Spot	0	26,881	0	3,647	1,760	0	32,288
Bluefish	0	20,188	2,788	4,999	973	0	28,948
Carp	12,626	3,783	0	0	0	0	16,409
Alewife	0	517	0	1,539	0	11,438	13,494
Summer flounder	0	4,174	7,211	163	1	0	11,549
Atlantic croaker	0	8,552	1,941	600	25	0	11,118
Tuna	0	0	9,848	0	0	0	9,848
Catfishes	76	2,645	0	0	0	114	2,835
Atlantic mackerel	0	45	1,017	0	0	0	1,062
Black drum	0	563	466	0	0	0	1,029
Hakes	0	839	1	0	0	0	840
Gizzard shad	572	191	0	0	0	0	763
Butterfish	0	618	35	0	0	0	653
Kingfish	0	585	62	0	0	0	647
Toadfish	0	572	0	0	0	0	572
Windowpane flounder	0	461	2	0	0	0	463
Sharks	0	235	0	47	0	0	282
Tautog	0	67	32	152	0	0	251
Dolphin	0	0	225	0	0	0	225
Conger eel	0	0	50	0	0	0	50
Sheepshead	0	42	0	0	0	0	42
Northern puffer	0	0	0	10	0	0	10
Scup	0	6	0	0	0	0	6
Mullet	0	1	0	0	0	0	1
TOTALS	48,295	724,347	237,467	45,572	12,460	28,763	1,096,904
PERCENTAGES	4.4 %	66.0 %	21.6 %	4.2 %	1.1 %	2.6 %	

Table 15. Total reported commercial gill net effort in 2000 in Delaware, all species, by location, along with the number of different fishermen. The number of fishermen is determined by the number of fishermen who reported commercial landings and does not include fishermen who fished but caught no fish. The number of man-days is based on the number of days when commercial landings occurred, not necessarily the total number of days of fishing effort. An individual fisherman is multiple counted if he reports landings from multiple locations or uses different gear types during the same month.

		Delaware River		Delaware Bay		Atlantic Ocean		Indian River		Rehoboth Bay		Nanticoke River		MONTHLY TOTALS	
MONTH		Anchor	Drift	Anchor	Drift	Anchor	Drift	Anchor	Drift	Anchor	Drift	Anchor	Drift	Anchor	Drift
	# Fishermen			7	2								1	7	3
JANUARY	# Man-days			43	3								1	43	4
	Lbs. Landed			7,315	636								164	7,315	800
	Net Yards			13,850	900								300	13,850	1,200
	# Fishermen			10	2	4						1	3	15	5
FEBRUARY	# Man-days			102	17	15						5	16	122	33
	Lbs. Landed			34,500	4,689	4,541						1,324	3,795	40,365	8,484
	Net Yards			39,400	9,000	10,500						3,900	12,200	53,800	21,200
	# Fishermen		5	37	7	6	1	2					4	45	17
MARCH	# Man-days		25	340	19	95	1	21					39	456	84
	Lbs. Landed		3,226	101,111	4,254	59,557	195	994					15,639	161,662	23,314
	Net Yards		10,233	163,485	8,300	84,200	150	2,632					28,590	250,317	47,273
	# Fishermen		9	49	9	8		2					1	59	19
APRIL	# Man-days		55	548	53	105		27					7	680	115
	Lbs. Landed		9,612	165,300	7,736	111,716		904					7,432	277,920	24,780
	Net Yards		27,200	346,850	25,250	100,400		3,063					4,900	450,313	57,350
	# Fishermen		2	1	23			2						3	25
MAY	# Man-days		8	1	144			18						19	152
	Lbs. Landed		168	93	114,146			2,056						2,149	114,314
	Net Yards		1,600	1,000	112,925			3,050						4,050	114,525
	# Fishermen				24			2	2		1			2	27
JUNE	# Man-days				85			15	6		3			15	94
	Lbs. Landed				31,089			1,642	1,677		1,118			1,642	33,884
	Net Yards				65,450			3,700	3,400		1,800			3,700	70,650
	# Fishermen				11				1		1			0	13
JULY	# Man-days				73				3		6			0	82
	Lbs. Landed				20,395				1,848		1,879			0	24,122
	Net Yards				51,325				1,800		3,600			0	56,725

Table 15. - Continued.

All Species - Combined

MONTH		Delaware River Anchor	Delaware River Drift	Delaware Bay Anchor	Delaware Bay Drift	Atlantic Ocean Anchor	Atlantic Ocean Drift	Indian River Anchor	Indian River Drift	Rehoboth Bay Anchor	Rehoboth Bay Drift	Nanticoke River Anchor	Nanticoke River Drift	MONTHLY TOTALS Anchor	MONTHLY TOTALS Drift
	# Fishermen				13			1	3		2			1	18
AUGUST	# Man-days				89			5	16		7			5	112
	Lbs. Landed				17,172			489	4,288		1,671			489	23,131
	Net Yards				60,400			1,000	9,100		1,800			1,000	71,300
	# Fishermen				13			1	2		2			1	17
SEPTEMBER	# Man-days				81			4	18		4			4	103
	Lbs. Landed				18,444			352	4,210		463			352	23,117
	Net Yards				51,800			264	10,200		1,300			264	63,300
	# Fishermen			4	9		1	2	3		1			6	14
OCTOBER	# Man-days			64	43		2	5	15		6			69	66
	Lbs. Landed			11,319	10,119		829	119	3,475		1,744			11,438	16,167
	Net Yards			44,500	22,100		1,600	450	9,200		1,800			44,950	34,700
	# Fishermen			18	9		5	1	4					19	18
NOVEMBER	# Man-days			88	13		7	3	7					91	27
	Lbs. Landed			12,321	4,412		2,718	73	1,310					12,394	8,440
	Net Yards			50,158	3,750		4,150	300	1,800					50,458	9,700
	# Fishermen			31	9		10	2	1				1	33	21
DECEMBER	# Man-days			130	20		11	6	1				1	136	33
	Lbs. Landed			15,674	3,361		2,354	89	8				120	15,763	5,843
	Net Yards			49,273	6,400		2,800	1,000	300				400	50,273	9,900
	# Fishermen	0	11	68	42	8	12	3	8	0	4	1	6	76	59
	# Man-Days	0	88	1,316	640	215	21	104	66	0	26	5	64	1,640	905
TOTALS	Lbs. Landed	0	13,006	347,632	236,453	175,814	6,096	6,718	16,816	0	6,875	1,324	27,150	531,488	306,396
	Net Yards	0	39,033	708,516	417,600	195,100	8,700	15,459	35,800	0	10,300	3,900	46,390	922,975	557,823
	Lbs/Man-day	-	147.80	264.16	369.46	817.74	290.29	64.60	254.79	-	264.42	264.80	424.22	324.08	338.56
	Lbs/Net Yard	-	0.333	0.491	0.566	0.901	0.701	0.435	0.470	-	0.667	0.339	0.585	0.576	0.549

Table 16. Delaware annual commercial gill net landings (in pounds) for nine selected species, from 1992-2000, statewide.

	AMERICAN SHAD			ATLANTIC CROAKER			ATLANTIC MENHADEN		
Year	Anchor Net	Drift Net	Total	Anchor Net	Drift Net	Total	Anchor Net	Drift Net	Total
1992	262,411	20,474	282,885	360	284	644	56,985	48,533	105,518
1993	286,996	22,457	309,453	1,751	127	1,878	112,286	51,400	163,686
1994	221,769	19,149	240,918	1,877	252	2,129	36,589	42,083	78,672
1995	192,022	13,666	205,688	8,608	1,280	9,888	32,296	69,016	101,312
1996	263,058	12,043	275,101	1,816	3,516	5,332	43,645	56,338	99,983
1997	160,581	11,993	172,574	1,714	921	2,635	5,576	50,157	55,733
1998	206,380	10,934	217,314	7	3,726	3,733	34,862	23,186	58,048
1999	221,219	7,304	228,523	1,269	3,244	4,513	34,868	23,953	58,821
2000	164,514	8,581	173,095	1,732	2,321	4,053	21,243	26,722	47,965
Mean	219,883	14,067	233,950	2,126	1,741	3,867	42,039	43,488	85,526
% Change									
00->1999	-25.6%	17.5%	-24.3%	36.5%	-28.5%	-10.2%	-39.1%	11.6%	-18.5%
00->Mean	-25.2%	-39.0%	-26.0%	-18.5%	33.3%	4.8%	-49.5%	-38.6%	-43.9%

	BLUEFISH			SPOT			STRIPED BASS		
Year	Anchor Net	Drift Net	Total	Anchor Net	Drift Net	Total	Anchor Net	Drift Net	Total
1992	69,448	22,780	92,228	949	110,833	111,782	14,733	3,062	17,795
1993	13,388	9,465	22,853	180	21,628	21,808	23,225	4,807	28,032
1994	14,810	16,576	31,386	439	99,832	100,271	27,988	5,909	33,897
1995	11,798	16,113	27,911	1,212	59,852	61,064	31,925	6,274	38,199
1996	37,954	79,209	117,163	147	79,017	79,164	106,981	10,580	117,561
1997	5,148	15,584	20,732	43	35,528	35,571	143,950	16,545	160,495
1998	10,215	11,670	21,885	115	139,962	140,077	132,613	23,682	156,295
1999	4,315	9,327	13,642	118	46,913	47,031	166,104	14,858	180,962
2000	6,865	16,872	23,737	301	31,635	31,936	111,907	23,927	135,834
Mean	19,327	21,955	41,282	389	69,467	69,856	84,381	12,183	96,563
% Change									
00->1999	59.1%	80.9%	74.0%	155.1%	-32.6%	-32.1%	-32.6%	61.0%	-24.9%
00->Mean	-64.5%	-23.2%	-42.5%	-22.7%	-54.5%	-54.3%	32.6%	96.4%	40.7%

	SUMMER FLOUNDER			WEAKFISH			WHITE PERCH		
Year	Anchor Net	Drift Net	Total	Anchor Net	Drift Net	Total	Anchor Net	Drift Net	Total
1992	6,883	220	7,103	145,560	185,450	331,010	58,000	2,727	60,727
1993	5,225	251	5,476	85,775	80,115	165,890	75,046	1,245	76,291
1994	3,684	7	3,691	52,595	175,192	227,787	56,524	979	57,503
1995	1,333	74	1,407	44,668	155,775	200,443	62,090	1,558	63,648
1996	3,835	151	3,986	59,640	177,147	236,787	62,984	2,792	65,776
1997	3,162	19	3,181	111,828	342,497	454,325	69,856	4,614	74,470
1998	8,408	178	8,586	196,409	233,412	429,821	31,685	4,087	35,772
1999	4,797	42	4,839	148,694	208,648	357,342	29,539	18,092	47,631
2000	7,878	92	7,970	134,138	150,960	285,098	77,219	31,806	109,025
Mean	5,023	115	5,138	108,812	189,911	298,723	58,105	7,544	65,649
% Change									
00->1999	64.2%	119.0%	64.7%	-9.8%	-27.6%	-20.2%	161.4%	75.8%	128.9%
00->Mean	56.8%	-19.9%	55.1%	23.3%	-20.5%	-4.6%	32.9%	321.6%	66.1%

Table 17. Delaware annual commercial gill net total yardage deployed for selected species, from 1992-2000, statewide. The yards of gill net are accumulated only in conjunction with landings for each respective species, and effort from all trips where the tended nets were empty is not included.

	AMERICAN SHAD			ATLANTIC CROAKER			ATLANTIC MENHADEN		
Year	Anchor Net	Drift Net	Total	Anchor Net	Drift Net	Total	Anchor Net	Drift Net	Total
1992	1,270,410	70,850	1,341,260	2,000	62,000	64,000	84,050	152,160	236,210
1993	973,680	62,362	1,036,042	19,500	8,050	27,550	101,484	92,225	193,709
1994	789,235	73,390	862,625	25,100	19,460	44,560	76,575	116,435	193,010
1995	811,072	70,691	881,763	40,200	23,350	63,550	66,419	170,476	236,895
1996	693,130	77,702	770,832	11,700	38,300	50,000	50,115	138,787	188,902
1997	533,620	56,600	590,220	23,050	16,500	39,550	14,040	89,010	103,050
1998	541,051	57,716	598,767	3,600	81,695	85,295	65,299	71,141	136,440
1999	487,450	58,840	546,290	11,400	64,820	76,220	71,955	99,720	171,675
2000	420,663	50,433	471,096	22,800	50,200	73,000	46,383	93,325	139,708
Mean	724,479	64,287	788,766	17,706	40,486	58,192	64,036	113,698	177,733
% Change									
00->1999	-13.7%	-14.3%	-13.8%	100.0%	-22.6%	-4.2%	-35.5%	-6.4%	-18.6%
00->Mean	-41.9%	-21.6%	-40.3%	28.8%	24.0%	25.4%	-27.6%	-17.9%	-21.4%

	BLUEFISH			SPOT			STRIPED BASS		
Year	Anchor Net	Drift Net	Total	Anchor Net	Drift Net	Total	Anchor Net	Drift Net	Total
1992	324,240	587,310	911,550	28,150	503,015	531,165	384,710	38,500	423,210
1993	147,549	216,145	363,694	7,200	163,875	171,075	365,530	44,917	410,447
1994	189,870	368,840	558,710	17,050	260,410	277,460	355,115	62,620	417,735
1995	115,330	280,195	395,525	11,550	268,670	280,220	437,870	55,050	492,920
1996	144,175	532,665	676,840	4,795	268,470	273,265	474,765	52,200	526,965
1997	84,689	313,610	398,299	839	239,410	240,249	543,690	52,495	596,185
1998	204,126	317,994	522,120	9,900	337,430	347,330	470,738	54,855	525,593
1999	63,662	231,100	294,762	4,830	220,310	225,140	321,977	54,350	376,327
2000	213,794	305,750	519,544	10,000	232,725	242,725	327,766	57,080	384,846
Mean	165,271	350,401	515,672	10,479	277,146	287,625	409,129	52,452	461,581
% Change									
00->1999	235.8%	32.3%	76.3%	107.0%	5.6%	7.8%	1.8%	5.0%	2.3%
00->Mean	29.4%	-12.7%	0.8%	-4.6%	-16.0%	-15.6%	-19.9%	8.8%	-16.6%

	SUMMER FLOUNDER			WEAKFISH			WHITE PERCH		
Year	Anchor Net	Drift Net	Total	Anchor Net	Drift Net	Total	Anchor Net	Drift Net	Total
1992	568,213	59,235	627,448	993,682	800,940	1,794,622	318,676	24,660	343,336
1993	474,527	22,750	497,277	611,806	395,750	1,007,556	331,733	23,692	355,425
1994	325,390	700	326,090	539,840	544,915	1,084,755	270,876	15,580	286,456
1995	174,490	8,560	183,050	549,562	435,935	985,497	263,050	17,255	280,305
1996	286,070	16,925	302,995	450,555	619,565	1,070,120	292,625	28,870	321,495
1997	276,860	6,550	283,410	596,679	559,710	1,156,389	295,330	32,550	327,880
1998	334,276	11,250	345,526	677,390	568,553	1,245,943	229,290	25,180	254,470
1999	238,190	3,550	241,740	426,235	432,975	859,210	175,760	56,625	232,385
2000	228,940	9,250	238,190	560,943	402,145	963,088	197,135	101,095	298,230
Mean	322,995	15,419	338,414	600,744	528,943	1,129,687	263,831	36,167	299,998
% Change									
00->1999	-3.9%	160.6%	-1.5%	31.6%	-7.1%	12.1%	12.2%	78.5%	28.3%
00->Mean	-29.1%	-40.0%	-29.6%	-6.6%	-24.0%	-14.7%	-25.3%	179.5%	-0.6%

Table 18. Delaware annual commercial gill net catch per unit effort (CPUE) for nine species, from 1992-2000, statewide, determined by the pounds landed per yard of gill net deployed in pursuit of each species. The yards of gill net are accumulated only in conjunction with landings for each respective species.

	AMERICAN SHAD			ATLANTIC CROAKER			ATLANTIC MENHADEN		
Year	Anchor Net	Drift Net	Total	Anchor Net	Drift Net	Total	Anchor Net	Drift Net	Total
1992	0.207	0.289	0.211	0.180	0.005	0.010	0.678	0.319	0.447
1993	0.295	0.360	0.299	0.090	0.016	0.068	1.106	0.557	0.845
1994	0.281	0.261	0.279	0.075	0.013	0.048	0.478	0.361	0.408
1995	0.237	0.193	0.233	0.214	0.055	0.156	0.486	0.405	0.428
1996	0.380	0.155	0.357	0.155	0.092	0.107	0.871	0.406	0.529
1997	0.301	0.212	0.292	0.074	0.056	0.067	0.397	0.563	0.541
1998	0.381	0.189	0.363	0.002	0.046	0.044	0.534	0.326	0.425
1999	0.454	0.124	0.418	0.111	0.050	0.059	0.485	0.240	0.343
2000	0.391	0.170	0.367	0.076	0.046	0.056	0.458	0.286	0.343
Mean	0.304	0.219	0.297	0.120	0.043	0.066	0.656	0.382	0.481
% Change									
00->1999	-13.8%	37.1%	-12.2%	-31.8%	-7.6%	-6.2%	-5.5%	19.2%	0.2%
00->Mean	28.9%	-22.2%	23.9%	-36.7%	7.5%	-16.5%	-30.2%	-25.1%	-28.7%

	BLUEFISH			SPOT			STRIPED BASS		
Year	Anchor Net	Drift Net	Total	Anchor Net	Drift Net	Total	Anchor Net	Drift Net	Total
1992	0.214	0.039	0.101	0.034	0.220	0.210	0.038	0.080	0.042
1993	0.091	0.044	0.063	0.025	0.132	0.127	0.064	0.107	0.068
1994	0.078	0.045	0.056	0.026	0.383	0.361	0.079	0.094	0.081
1995	0.102	0.058	0.071	0.105	0.223	0.218	0.073	0.114	0.077
1996	0.263	0.149	0.173	0.031	0.294	0.290	0.225	0.203	0.223
1997	0.061	0.050	0.052	0.051	0.148	0.148	0.265	0.315	0.269
1998	0.050	0.037	0.042	0.012	0.415	0.403	0.282	0.432	0.297
1999	0.068	0.040	0.046	0.024	0.213	0.209	0.516	0.273	0.481
2000	0.032	0.055	0.046	0.030	0.136	0.132	0.341	0.419	0.353
Mean	0.117	0.063	0.080	0.037	0.251	0.243	0.206	0.232	0.209
% Change									
00->1999	-52.6%	36.7%	-1.3%	23.2%	-36.2%	-37.0%	-33.8%	53.3%	-26.6%
00->Mean	-72.5%	-11.9%	-42.9%	-19.0%	-45.8%	-45.8%	65.5%	80.5%	68.7%

	SUMMER FLOUNDER			WEAKFISH			WHITE PERCH		
Year	Anchor Net	Drift Net	Total	Anchor Net	Drift Net	Total	Anchor Net	Drift Net	Total
1992	0.012	0.004	0.011	0.146	0.232	0.184	0.182	0.111	0.177
1993	0.011	0.011	0.011	0.140	0.202	0.165	0.226	0.053	0.215
1994	0.011	0.010	0.011	0.097	0.322	0.210	0.209	0.063	0.201
1995	0.008	0.009	0.008	0.081	0.357	0.203	0.236	0.090	0.227
1996	0.013	0.009	0.013	0.132	0.286	0.221	0.215	0.097	0.205
1997	0.011	0.003	0.011	0.187	0.612	0.393	0.237	0.142	0.227
1998	0.025	0.016	0.025	0.290	0.411	0.345	0.138	0.162	0.141
1999	0.020	0.012	0.020	0.349	0.482	0.416	0.168	0.320	0.205
2000	0.034	0.010	0.033	0.239	0.375	0.296	0.392	0.315	0.366
Mean	0.016	0.007	0.015	0.181	0.359	0.264	0.220	0.209	0.219
% Change									
00->1999	70.9%	-15.9%	67.2%	-31.5%	-22.1%	-28.8%	133.1%	-1.5%	78.4%
00->Mean	121.3%	33.5%	120.4%	32.0%	4.6%	11.9%	77.9%	50.8%	67.1%

Table 19. Delaware annual commercial gill net total man-days of effort for selected species, from 1992-2000, statewide. Fishing effort, in man-days, reflects the days when the respective fish was landed, which may not necessarily indicate the total fishing effort when they failed to land fish.

	AMERICAN SHAD			ATLANTIC CROAKER			ATLANTIC MENHADEN		
Year	Anchor Net	Drift Net	Total	Anchor Net	Drift Net	Total	Anchor Net	Drift Net	Total
1992	1,371	167	1,538	2	68	70	153	229	382
1993	1,134	165	1,299	22	15	37	163	165	328
1994	916	179	1,095	35	27	62	151	187	338
1995	971	153	1,124	45	31	76	170	330	500
1996	963	149	1,112	16	48	64	120	213	333
1997	770	147	917	30	18	48	50	182	232
1998	791	137	928	4	110	114	144	134	278
1999	753	123	876	28	106	134	109	182	291
2000	627	111	738	24	76	100	117	179	296
Mean	922	148	1,070	23	55	78	131	200	331
% Change									
00->1999	-16.7%	-9.8%	-15.8%	-14.3%	-28.3%	-25.4%	7.3%	-1.6%	1.7%
00->Mean	-32.0%	-24.9%	-31.0%	4.9%	37.1%	27.7%	-10.5%	-10.5%	-10.5%

	BLUEFISH			SPOT			STRIPED BASS		
Year	Anchor Net	Drift Net	Total	Anchor Net	Drift Net	Total	Anchor Net	Drift Net	Total
1992	388	745	1,133	36	631	667	465	80	545
1993	194	273	467	18	203	221	461	104	565
1994	319	551	870	37	370	407	482	118	600
1995	206	429	635	34	371	405	526	124	650
1996	236	715	951	13	360	373	975	126	1,101
1997	139	411	550	4	318	322	1,031	131	1,162
1998	279	424	703	12	452	464	965	170	1,135
1999	115	333	448	8	318	326	827	112	939
2000	296	433	729	14	334	348	681	144	825
Mean	241	479	721	20	373	393	713	123	836
% Change									
00->1999	157.4%	30.0%	62.7%	75.0%	5.0%	6.7%	-17.7%	28.6%	-12.1%
00->Mean	22.7%	-9.7%	1.2%	-28.4%	-10.5%	-11.4%	-4.4%	16.9%	-1.3%

	SUMMER FLOUNDER			WEAKFISH			WHITE PERCH		
Year	Anchor Net	Drift Net	Total	Anchor Net	Drift Net	Total	Anchor Net	Drift Net	Total
1992	612	75	687	1,126	1,024	2,150	535	64	599
1993	514	26	540	699	510	1,209	546	61	607
1994	368	2	370	753	795	1,548	545	38	583
1995	203	10	213	714	643	1,357	454	42	496
1996	346	22	368	596	837	1,433	487	53	540
1997	351	7	358	845	778	1,623	484	85	569
1998	452	14	466	1,003	775	1,778	435	59	494
1999	319	8	327	622	645	1,267	359	113	472
2000	304	19	323	783	568	1,351	419	165	584
Mean	385	20	406	793	731	1,524	474	76	549
% Change									
00->1999	-4.7%	137.5%	-1.2%	25.9%	-11.9%	6.6%	16.7%	46.0%	23.7%
00->Mean	-21.1%	-6.6%	-20.4%	-1.3%	-22.3%	-11.4%	-11.6%	118.4%	6.3%

Table 20. Comparison of annual commercial fishing effort from all commercial gear from 1990-2000. Fishing effort, in man-days, reflects the days when the respective fish was landed, which may not necessarily indicate the total fishing effort when they failed to land fish. Since the number of fyke nets, fish pots, and fishing rods can vary per trip, defined fishing effort pertains to the number of successful fishing days for each type of gear.

American shad

	Gill Net		Hook & Line		Fyke Net		Fish Pot/Trap		(*) Other Gears		Total Gear	
Year	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-Day	Man Days	Average Lbs/ Man-Day
1990	1,431	344.1	6	87.5							1,437	343.0
1991	1,804	291.9									1,804	291.9
1992	1,538	183.9			8	16.6			15	58.5	1,561	181.9
1993	1,299	238.2	1	4.0	8	5.3					1,308	236.6
1994	1,095	220.0									1,095	220.0
1995	1,124	183.0			1	5.0					1,125	182.8
1996	1,112	247.4			12	19.9					1,124	245.0
1997	917	188.2									917	188.2
1998	928	234.2									928	234.2
1999	876	260.9	1	12.0	6	4.3					883	258.8
2000	738	234.5			6	1.7					744	232.7
Mean	1,169	242.9	3	67.6	7	11.1			15	58.5	1,175	241.9

Atlantic croaker

	Gill Net		Hook & Line		Fyke Net		Fish Pot/Trap		(*) Other Gears		Total Gear	
Year	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-Day	Man Days	Average Lbs/ Man-Day
1990	4	10.5									4	10.5
1991	48	13.9	48	9.0	2	6.0					98	11.3
1992	70	9.2	10	4.3							80	8.6
1993	37	50.8	58	9.6							95	25.6
1994	62	34.3	33	27.7							95	32.0
1995	76	130.1	174	12.7							250	48.4
1996	64	83.3	205	21.2							269	36.0
1997	48	54.9	246	30.1			8	59.3			302	34.8
1998	114	32.7	353	18.7			2	18.5			469	22.1
1999	134	33.7	379	27.8			1	11.0			514	29.3
2000	100	40.5	308	22.9	1	14.0					409	27.2
Mean	69	46.9	181	22.1	2	8.7	4	47.5			235	29.5

Atlantic mackerel

	Gill Net		Hook & Line		Fyke Net		Fish Pot/Trap		(*) Other Gears		Total Gear	
Year	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-Day	Man Days	Average Lbs/ Man-Day
1990	18	121.9	5	705.2							23	248.7
1991	52	11.5	9	51.3							61	17.4
1992	4	40.8									4	40.8
1993	2	27.0									2	27.0
1994	4	7.5									4	7.5
1995	6	155.5	9	56.6							15	96.1
1996			2	155.0							2	155.0
1997	5	42.0	7	55.6							12	49.9
1998	12	227.9	3	209.0							15	224.1
1999	18	21.6									18	21.6
2000	39	26.9	1	11.0							40	26.6
Mean	16	52.2	5	162.1							18	72.4

Table 20. - Continued.

Atlantic menhaden

	Gill Net		Hook & Line		Fyke Net		Fish Pot/Trap		(*) Other Gears		Total Gear	
Year	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-Day	Man Days	Average Lbs/ Man-Day
1990	569	293.7									569	293.7
1991	761	364.2			12	135.5					773	360.6
1992	382	276.2							1	200.0	383	276.0
1993	328	499.0							1	360.0	329	498.6
1994	338	232.8									338	232.8
1995	500	202.6			9	8.4					509	199.2
1996	333	300.2			2	40.0					335	298.7
1997	232	240.2									232	240.2
1998	278	208.8									278	208.8
1999	291	202.1			13	1,517.7					304	258.4
2000	296	162.0							2	7.5	298	161.0
Mean	392	281.8			9	597.6			1	143.8	395	284.3

Black drum

	Gill Net		Hook & Line		Fyke Net		Fish Pot/Trap		(*) Other Gears		Total Gear	
Year	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-Day	Man Days	Average Lbs/ Man-Day
1990	32	134.9									32	134.9
1991	11	50.2	1	3.0							12	46.3
1992	7	82.0									7	82.0
1993	46	167.0	1	1.0							47	163.5
1994	13	95.3	2	112.0							15	97.5
1995	57	162.3	8	3.3	2	3.0					67	138.6
1996	13	193.0									13	193.0
1997	18	309.5	1	9.0							19	293.7
1998	22	375.6									22	375.6
1999	3	49.7	1	125.0							4	68.5
2000	19	54.2									19	54.2
Mean	22	170.7	2	27.7	2	3.0					23	161.6

Black sea bass

	Gill Net		Hook & Line		Fyke Net		Fish Pot/Trap		(*) Other Gears		Total Gear	
Year	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-Day	Man Days	Average Lbs/ Man-Day
1990	18	9.5	73	24.8			78	1,902.6			169	889.8
1991	10	7.6	54	40.2			89	2,115.7			153	1,245.4
1992	1	4.0	122	68.3			81	2,210.7			204	918.6
1993	3	8.7	109	19.3			33	2,535.3			145	591.7
1994	3	16.0	72	12.8			55	1,224.1			130	525.3
1995	13	14.4	245	27.4			88	1,650.6			346	439.7
1996			115	42.6			105	1,535.7			220	755.2
1997			105	74.1			111	1,340.0			216	724.6
1998	1	4.0	46	52.0			92	824.9			139	563.2
1999			78	37.9			114	974.3			192	593.9
2000	1	5.0	44	46.5			29	1,320.8			74	545.3
Mean	6	10.4	97	39.6			80	1,539.7			181	699.1

Table 20. - Continued.

Bluefish

Year	Gill Net Man Days	Gill Net Average Lbs/ Man-day	Hook & Line Man Days	Hook & Line Average Lbs/ Man-day	Fyke Net Man Days	Fyke Net Average Lbs/ Man-day	Fish Pot/Trap Man Days	Fish Pot/Trap Average Lbs/ Man-day	(*) Other Gears Man Days	(*) Other Gears Average Lbs/ Man-Day	Total Gear Man Days	Total Gear Average Lbs/ Man-Day
1990	1,240	113.9	315	24.0							1,555	95.7
1991	1,726	39.8	107	13.9	17	18.3					1,850	38.1
1992	1,133	81.4	190	13.6	10	26.4			1	20.0	1,334	71.3
1993	467	48.9	175	18.6	1	17.0					643	40.6
1994	870	36.1	260	13.8							1,130	30.9
1995	635	44.0	913	11.2	4	2.3					1,552	24.6
1996	951	123.2	683	13.2	4	38.8					1,638	77.1
1997	550	37.7	432	13.8							982	27.2
1998	703	31.1	536	11.2			1	2.0			1,240	22.5
1999	448	30.5	422	10.3	17	17.9					887	20.6
2000	729	32.6	409	12.4	6	20.3			2	2.5	1,146	25.3
Mean	859	61.5	404	13.3	8	20.1	1	2.0	2	8.3	1,269	46.0

Butterfish

Year	Gill Net Man Days	Gill Net Average Lbs/ Man-day	Hook & Line Man Days	Hook & Line Average Lbs/ Man-day	Fyke Net Man Days	Fyke Net Average Lbs/ Man-day	Fish Pot/Trap Man Days	Fish Pot/Trap Average Lbs/ Man-day	(*) Other Gears Man Days	(*) Other Gears Average Lbs/ Man-Day	Total Gear Man Days	Total Gear Average Lbs/ Man-Day
1990	141	12.7									141	12.7
1991	435	13.5									435	13.5
1992	111	7.2									111	7.2
1993	85	18.2									85	18.2
1994	91	5.5									91	5.5
1995	86	6.4			1	1.0					87	6.4
1996	40	7.9									40	7.9
1997	90	10.2									90	10.2
1998	191	22.0									191	22.0
1999	57	11.8			10	3.9					67	10.6
2000	93	7.0									93	7.0
Mean	129	12.5			6	3.6					130	12.5

Carp

Year	Gill Net Man Days	Gill Net Average Lbs/ Man-day	Hook & Line Man Days	Hook & Line Average Lbs/ Man-day	Fyke Net Man Days	Fyke Net Average Lbs/ Man-day	Fish Pot/Trap Man Days	Fish Pot/Trap Average Lbs/ Man-day	(*) Other Gears Man Days	(*) Other Gears Average Lbs/ Man-Day	Total Gear Man Days	Total Gear Average Lbs/ Man-Day
1990	90	159.4									90	159.4
1991	126	310.4									126	310.4
1992	195	543.3					3	258.3			198	539.0
1993	112	285.5									112	285.5
1994	81	264.3	1	10.0							82	261.2
1995	66	423.5	13	11.8	23	70.9			20	630.1	122	347.0
1996	51	321.5	1	4.0	9	32.6			24	826.0	85	429.6
1997	52	191.8							36	682.2	88	392.4
1998	16	37.2			1	28.0			65	705.2	82	566.6
1999	43	356.5			5	32.0			28	726.3	76	471.4
2000	28	16.3							10	1,595.4	38	431.8
Mean	78	329.6	5	11.1	10	55.6	3	258.3	31	760.2	100	387.3

Table 20. - Continued.

Catfish

	Gill Net		Hook & Line		Fyke Net		Fish Pot/Trap		(*) Other Gears		Total Gear	
Year	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-Day	Man Days	Average Lbs/ Man-Day
1990	62	17.4	12	7.8	2	55.0	33	657.2			109	210.7
1991	47	62.6					23	232.9			70	118.5
1992	83	25.1	12	57.1	3	7.7	32	107.8	27	20.6	157	43.3
1993	81	23.5	2	5.0	15	28.7	19	153.1			117	44.9
1994	57	17.7	7	42.6			22	262.8			86	82.4
1995	55	13.5	50	19.5	7	94.1	6	256.7	5	18.2	123	32.6
1996	32	16.9	32	18.9	19	51.5	3	449.3	8	11.8	94	37.9
1997	53	31.8	19	14.0	2	208.5			13	13.8	87	29.3
1998	15	16.0	4	31.3	1	28.0	60	149.0	11	14.2	91	104.3
1999	17	106.8	11	7.0	21	272.7			6	198.8	55	160.2
2000	32	21.5	16	15.5	7	248.1	1	127.0	2	17.5	58	48.9
Mean	49	27.6	17	20.5	9	131.3	22	257.0	10	32.0	95	78.0

Goosefish

	Gill Net		Hook & Line		Fyke Net		Fish Pot/Trap		(*) Other Gears		Total Gear	
Year	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-Day	Man Days	Average Lbs/ Man-Day
1996	11	1,686.8									11	1,686.8
1997	1	4.0									1	4.0
1998	2	17.0									2	17.0
1999											0	0
2000											0	0
Mean	5	1,328.1									3	1,328.1

Hakes

	Gill Net		Hook & Line		Fyke Net		Fish Pot/Trap		(*) Other Gears		Total Gear	
Year	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-Day	Man Days	Average Lbs/ Man-Day
1990	57	17.5									57	17.5
1991	41	18.8									41	18.8
1992	117	25.4			8	18.1					125	24.9
1993	48	24.9	1	1.0							49	24.4
1994	89	32.7	20	5.9							109	27.8
1995	8	7.6	15	27.1	1	1.0					24	19.5
1996	61	16.9	3	12.7			2	18.5			66	16.8
1997	83	14.7	7	29.3			16	13.5			106	15.5
1998	99	8.6	5	6.8			31	27.7			135	13.0
1999	30	13.3	15	6.9	13	10.2	1	7.0			59	10.9
2000	48	11.6	4	6.5	5	51.6					57	14.7
Mean	62	19.0	9	13.3	7	19.9	13	22.4			75	18.8

Table 20. - Continued.

Kingfishes

	Gill Net		Hook & Line		Fyke Net		Fish Pot/Trap		(*) Other Gears		Total Gear	
Year	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-Day	Man Days	Average Lbs/ Man-Day
1996	129	15.7	17	4.7							146	14.4
1997	144	16.0	8	1.9							152	15.2
1998	64	11.8	13	1.8							77	10.1
1999	35	11.1	1	1.0							36	10.8
2000	51	12.6	1	2.0							52	12.4
Mean	85	14.4	8	3.1							93	13.5

River herring

	Gill Net		Hook & Line		Fyke Net		Fish Pot/Trap		(*) Other Gears		Total Gear	
Year	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-Day	Man Days	Average Lbs/ Man-Day
1990	167	103.4									167	103.4
1991	312	89.2									312	89.2
1992	174	329.0			8	10.8			12	12.4	194	296.3
1993	140	132.1			4	15.8					144	128.9
1994	87	191.9									87	191.9
1995	61	319.4	1	15.0	10	5.0					72	271.5
1996	87	236.8									87	236.8
1997	81	168.4									81	168.4
1998	100	176.5									100	176.5
1999	53	114.8			11	11.6					64	97.1
2000	101	133.6									101	133.6
Mean	124	167.6	1	15.0	8	9.9			12	12.4	128	162.5

Scup

	Gill Net		Hook & Line		Fyke Net		Fish Pot/Trap		(*) Other Gears		Total Gear	
Year	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-Day	Man Days	Average Lbs/ Man-Day
1996	1	2.0					4	9.3			5	7.8
1997			3	17.7							3	17.7
1998	1	2.0									1	2.0
1999			2	8.5							2	8.5
2000			1	6.0							1	6.0
Mean	1	2.0	2	12.7			4	9.3			2	9.8

Table 20. - Continued.

Sharks

	Gill Net		Hook & Line		Fyke Net		Fish Pot/Trap		(*) Other Gears		Total Gear	
Year	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-Day	Man Days	Average Lbs/ Man-Day
1990	121	53.1	107	51.3							228	52.3
1991	190	51.3	150	49.9	6	28.3					346	50.3
1992	128	33.2	74	45.5							202	37.7
1993	64	37.2	127	20.0							191	25.8
1994	126	59.2	95	18.9							221	41.9
1995	135	528.9	412	17.5							547	143.7
1996	61	765.0	234	18.6			11	4.3			306	166.8
1997	63	163.5	170	15.3							233	55.4
1998	30	19.2	104	14.2							134	15.3
1999	7	8.3	35	11.4	1	1.0					43	10.7
2000	9	12.9	9	18.4							18	15.7
Mean	85	170.6	138	24.3	4	24.4	11	4.3			224	79.6

Spot

	Gill Net		Hook & Line		Fyke Net		Fish Pot/Trap		(*) Other Gears		Total Gear	
Year	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-Day	Man Days	Average Lbs/ Man-Day
1990	372	63.5	26	9.6							398	60.0
1991	1,018	255.8	61	13.1	18	73.5					1,097	239.3
1992	667	167.6	67	17.7							734	153.9
1993	221	98.7	6	9.0							227	96.3
1994	407	246.4	32	5.1							439	228.8
1995	405	150.8	106	11.8	3	1.7					514	121.3
1996	373	212.2	32	55.0	1	5.0					406	199.3
1997	322	110.5	12	4.8			3	19.0			337	105.9
1998	464	301.9	29	9.9							493	284.7
1999	326	144.3	15	11.7	12	3.3	6	21.5	7	56.4	366	130.5
2000	348	91.8	23	15.2					1	2.0	372	86.8
Mean	448	185.4	37	15.5	9	40.4	5	20.7	4	49.6	489	171.1

Striped bass

	Gill Net		Hook & Line		Fyke Net		Fish Pot/Trap		(*) Other Gears		Total Gear	
Year	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-Day	Man Days	Average Lbs/ Man-Day
1990	147	44.3									147	44.3
1991	548	38.5									548	38.5
1992	545	32.7									545	32.7
1993	565	49.6									565	49.6
1994	600	56.5									600	56.5
1995	650	58.8									650	58.8
1996	1,101	106.8	99	29.2							1,200	100.4
1997	1,162	138.1	155	35.4							1,317	126.0
1998	1,135	137.7	188	36.8							1,323	123.4
1999	939	192.7	171	35.9							1,110	168.6
2000	825	164.6	100	48.0							925	152.0
Mean	747	109.1	143	36.8							812	103.3

Table 20. - Continued.

Summer flounder

	Gill Net		Hook & Line		Fyke Net		Fish Pot/Trap		(*) Other Gears		Total Gear	
Year	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-Day	Man Days	Average Lbs/ Man-Day
1990	245	5.1	119	5.2					2	30.5	366	5.3
1991	561	6.1	121	7.0	15	10.6					697	6.4
1992	687	10.3	380	14.9	5	2.4			1	2.0	1,073	11.9
1993	540	10.1	307	6.8	3	3.3	4	9.3			854	8.9
1994	370	10.0	119	4.7							489	8.7
1995	213	6.6	421	6.9	3	2.3					637	6.8
1996	368	10.8	555	6.8			18	6.9			941	8.4
1997	358	8.9	340	6.3							698	7.6
1998	466	18.4	369	6.9			2	30.5			837	13.4
1999	327	14.8	207	6.6	31	38.5					565	13.1
2000	323	24.7	343	10.4			1	1.0			667	17.3
Mean	405	11.4	298	8.0	11	24.2	6	9.0	2	21.0	711	10.1

Tautog

	Gill Net		Hook & Line		Fyke Net		Fish Pot/Trap		(*) Other Gears		Total Gear	
Year	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-Day	Man Days	Average Lbs/ Man-Day
1990	31	4.3	10	32.9							41	11.3
1991	12	5.2	27	43.9							39	31.9
1992	11	4.2	17	54.5			5	9.6			33	30.9
1993	4	4.3	8	16.6							12	12.5
1994	2	3.0	17	21.9							19	19.9
1995	3	4.7	29	21.6							32	20.0
1996	6	8.5	49	25.6			11	26.6			66	24.2
1997	2	4.0	7	21.4			45	19.4	1	18.0	55	19.0
1998	9	5.4	14	24.1			45	25.7			68	22.7
1999	5	4.4	9	17.1			3	12.0			17	12.5
2000	2	4.0	9	26.4			1	5.0			12	20.9
Mean	8	4.8	18	29.1			18	21.9	1	18.0	36	21.7

Tunas

	Gill Net		Hook & Line		Fyke Net		Fish Pot/Trap		(*) Other Gears		Total Gear	
Year	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-Day	Man Days	Average Lbs/ Man-Day
1990			5	173.6							5	173.6
1991			72	273.4							72	273.4
1992			32	123.3							32	123.3
1993			10	156.6							10	156.6
1994			13	265.7							13	265.7
1995			100	274.0							100	274.0
1996			43	164.5							43	164.5
1997			40	167.1							40	167.1
1998			16	127.6							16	127.6
1999			33	204.1							33	204.1
2000			61	161.4							61	161.4
Mean			39	210.1							39	210.1

Table 20. - Continued.

Weakfish

	Gill Net		Hook & Line		Fyke Net		Fish Pot/Trap		(*) Other Gears		Total Gear	
Year	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-Day	Man Days	Average Lbs/ Man-Day
1990	2,774	221.2	413	27.3					1	20.0	3,188	196.0
1991	3,048	155.5	667	43.1	20	24.2					3,735	134.7
1992	2,150	154.0	573	53.9	16	8.1			3	6.3	2,742	132.0
1993	1,209	137.2	765	38.3	4	3.3					1,978	98.7
1994	1,548	147.1	884	39.0							2,432	107.8
1995	1,357	147.7	2,738	33.0	9	2.7	1	200.0			4,105	70.9
1996	1,433	165.2	2,052	39.0	4	30.0	18	22.7			3,507	90.5
1997	1,623	279.9	1,684	62.0			2	83.5			3,309	168.9
1998	1,778	241.7	1,694	72.7							3,472	159.3
1999	1,267	282.0	1,393	59.5	22	31.1	7	7.9	8	29.0	2,697	163.6
2000	1,351	211.0	1,009	41.3	14	99.3	3	45.3			2,377	138.1
Mean	1,776	193.3	1,261	47.4	13	32.0	6	31.2	4	22.6	3,049	132.3

White perch

	Gill Net		Hook & Line		Fyke Net		Fish Pot/Trap		(*) Other Gears		Total Gear	
Year	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-day	Man Days	Average Lbs/ Man-Day	Man Days	Average Lbs/ Man-Day
1990	452	48.9	36	10.1					19	151.0	507	49.9
1991	640	70.6	28	14.4	3	26.0			1	60.0	672	68.0
1992	599	101.4	6	9.0	25	46.9	1	2.0	58	140.5	689	101.7
1993	607	125.7	20	22.2	46	270.4			8	28.9	681	131.3
1994	583	98.6	43	23.2	61	369.8	5	3.4			692	117.2
1995	496	128.3	256	23.3	88	111.6	18	25.5	12	21.0	870	92.1
1996	540	121.8	131	27.4	91	44.0	4	26.0	6	34.3	772	95.5
1997	569	130.9	70	24.1	27	43.9	9	13.3	12	45.6	687	113.5
1998	494	72.4	49	21.5	20	81.6	6	28.5	37	33.5	606	65.8
1999	472	100.9	67	18.7	55	72.1	34	21.7	9	13.9	637	84.3
2000	584	186.7	57	35.6	31	67.1	2	386.5	3	29.7	677	168.4
Mean	549	109.0	69	23.4	45	131.8	10	30.2	17	83.4	681	100.3

* Note: Other commercial gears include: haul seine, bag net, and hoop net.

Table 21. Annual number of commercial foodfish licenses and gear type permits issued in Delaware, 1995-2000. The food fish license is required to sell finfish.

License	Residency	1995	1996	1997	1998	1999	2000
FOOD FISH SELLER	Resident	333	292	261	255	251	246
	Non-resident	5	5	5	5	5	5
	Total Issued	338	297	266	260	256	251

Permitted Gear	Residency	1995	1996	1997	1998	1999	2000
BAG NET	Resident	0	0	2	1	4	0
	Non-resident	0	0	0	0	0	0
	Total Issued	0	0	2	1	4	0
EEL POT	Resident	89	92	123	107	112	100
	Non-resident	1	2	1	0	1	0
	Total Issued	90	94	124	107	113	100
FISH POT	Resident	10	20	24	73	56	51
	Non-resident	0	0	0	1	1	0
	Total Issued	10	20	24	74	57	51
FYKE NET	Resident	21	22	21	20	23	23
	Non-resident	0	0	0	0	0	0
	Total Issued	21	22	21	20	23	23
GILL NET	Resident	118	115	115	112	106	103
	Non-resident	5	5	6	5	5	5
	Total Issued	123	120	121	117	111	108
HAUL SEINE	Resident	1	4	7	5	8	11
	Non-resident	0	0	0	0	0	0
	Total Issued	1	4	7	5	8	11
HOOK & LINE	Resident	221	286	193	181	172	169
	Non-resident	0	5	0	0	0	0
	Total Issued	221	291	193	181	172	169
HOOP NET	Resident	1	3	4	3	1	7
	Non-resident	0	0	0	0	0	0
	Total Issued	1	3	4	3	1	7

Table 22. The 2000 estimated commercial finfish exvessel (dockside) cash value, in dollars, for all species landed in Delaware waters. The Delaware market price structure for each species was obtained from the National Marine Fisheries Service (NMFS), and represents the value of the catch sold in Delaware.

All gear combined from all Delaware waters

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Alewife		106	592	461	44	42				2	3		$1,250
American eel			10,125	24,744	15,438	1,969	6,650	31,496	46,922	41,908	11,067	1,308	$191,626
American shad	12	1,364	15,503	30,428	87				1		2	32	$47,427
Atlantic croaker					84	543	624	407	1,234	1,369	140		$4,400
Atlantic mackerel			121	94									$216
Atlantic menhaden			610	2,855	487	619	629	891	312	310	60		$6,774
Black drum	29			117	135								$280
Black sea bass	5,651				14,539	5,779	6,900	165	233	22,437			$55,703
Bluefish				532	3,578	2,541	725	1,233	1,988	1,651	140		$12,388
Butterfish				41	32			11	35	142	42		$302
Carp	12	13	434	2,471	5	2	4			21	11	10	$2,982
Catfishes	83	62	626	85		7	48	37			24	20	$993
Conger eel	25												$25
Dolphin								174	276				$450
Gizzard shad			63	10	4								$76
Hakes					2	4	< 1			75	55		$135
Kingfish				27	233	10			< 1	9			$280
Mullet	1												$1
Northern puffer									20				$20
Scup									2				$2
Sharks					51	52	65	146	11				$325
Sheepshead	15									8			$23
Spot					17	727	8,843	3,658	3,108	392			$16,744
Striped bass			66,236	122,368					286	948	20,992	30,315	$241,144
Summer flounder			4,616	12,859	407	1,460	1,992	1,846	1,198	237	28	10	$24,655
Tautog				16	16	5			13	56	62	118	$284
Toadfish				3	925	150		353					$1,430
Tuna						975	4,741	12,127	4,674	3,955			$26,471
Weakfish			16,664	117,699	84,374	42,780	9,890	15,888	15,523	10,205	4,049	5	$317,077
White perch	6,324	23,872	20,425	1,264	6	250	252	1,946	1,460	3,101	3,611	4,296	$66,807
Windowpane flounder		58	39	14		< 1				21	17		$150
TOTALS	$12,151	$25,474	$136,055	$316,087	$120,462	$57,915	$41,362	$70,376	$77,295	$86,845	$40,303	$36,113	$1,020,438
PERCENTAGES	1.2 %	2.5 %	13.3 %	31.0 %	11.8 %	5.7 %	4.1 %	6.9 %	7.6 %	8.5 %	3.9 %	3.5 %	

Table 23. The 2000 estimated commercial finfish exvessel (dockside) cash value, in dollars, by fishing area for all species. The Delaware market price structure for each species was obtained from the National Marine Fisheries Service (NMFS), and represents the value of the catch sold in Delaware.

ALL GEAR TYPES COMBINED

Species	DELAWARE RIVER	DELAWARE BAY	ATLANTIC OCEAN	INDIAN RIVER & BAY	REHOBOTH BAY	NANTICOKE RIVER	TOTAL
Alewife	0	47	0	148	0	1,055	$1,250
American eel	40,549	116,613	0	27,300	7,164	0	$191,626
American shad	1,900	12,840	32,678	1	0	8	$47,427
Atlantic croaker	0	3,448	696	248	9	0	$4,400
Atlantic mackerel	0	5	210	0	0	0	$216
Atlantic menhaden	35	5,600	0	891	248	0	$6,774
Black drum	0	163	117	0	0	0	$280
Black sea bass	0	2,046	53,607	49	0	0	$55,703
Bluefish	0	8,387	1,154	2,265	582	0	$12,388
Butterfish	0	283	19	0	0	0	$302
Carp	2,589	393	0	0	0	0	$2,982
Catfishes	25	924	0	0	0	44	$993
Conger eel	0	0	25	0	0	0	$25
Dolphin	0	0	450	0	0	0	$450
Gizzard shad	57	19	0	0	0	0	$76
Hakes	0	135	0	0	0	0	$135
Kingfish	0	270	10	0	0	0	$280
Mullet	0	1	0	0	0	0	$1
Northern puffer	0	0	0	20	0	0	$20
Scup	0	2	0	0	0	0	$2
Sharks	0	314	0	11	0	0	$325
Sheepshead	0	23	0	0	0	0	$23
Spot	0	14,105	0	1,737	902	0	$16,744
Striped bass	12,023	193,904	26,958	7,474	0	787	$241,144
Summer flounder	0	8,447	15,906	300	2	0	$24,655
Tautog	0	78	41	165	0	0	$284
Toadfish	0	1,430	0	0	0	0	$1,430
Tuna	0	0	26,471	0	0	0	$26,471
Weakfish	0	268,736	41,854	4,641	1,847	0	$317,077
White perch	309	57,828	6	268	0	8,396	$66,807
Windowpane flounder	0	149	1	0	0	0	$150
TOTALS	$57,485	$696,191	$200,201	$45,518	$10,753	$10,290	$1,020,438
PERCENTAGES	5.6 %	68.2 %	19.6 %	4.5 %	1.1 %	1.0 %	

Table 24. Comparison of 1999-2000 Delaware dockside (exvessel) value of all commercial finfish landings, by species, for all gears and fishing areas. Species are ranked by their 2000 value. The monthly dockside value is estimated by port agents from the National Marine Fisheries Service.

Species	1999	2000	Percent Change
Weakfish	$353,515	$317,077	-10.3
Striped bass	285,905	241,144	-15.7
American eel	230,822	191,626	-17.0
White perch	33,265	66,807	100.8
Black sea bass	180,843	55,703	-69.2
American shad	127,636	47,427	-62.8
Tuna	17,674	26,471	49.8
Summer flounder	15,651	24,655	57.5
Spot	22,537	16,744	-25.7
Bluefish	5,104	12,388	142.7
Atlantic menhaden	7,024	6,774	-3.6
Atlantic croaker	5,021	4,400	-12.4
Carp	6,927	2,982	-57.0
Toadfish	5,035	1,430	-71.6
Alewife	446	1,250	180.3
Catfishes	3,705	993	-73.2
Dolphin	1,165	450	-61.4
Sharks	624	325	-47.9
Butterfish	321	302	-5.9
Tautog	254	284	11.8
Black drum	105	280	166.7
Kingfish	169	280	65.7
Atlantic mackerel	100	216	116.0
Windowpane	175	150	-14.3
Hakes	113	135	19.5
Gizzard shad	182	76	-58.2
Conger eel	276	25	-90.9
Sheepshead	0	23	-
Northern puffer	0	20	-
Scup	26	2	-92.3
Mullet	0	1	-
Ocean pout	13	0	-
Red drum	6	0	-
Triggerfish	24	0	-
Annual Totals	**$1,304,661**	**$1,020,438**	**-21.8**

Table 25. Commercial fishing effort, in trips by month, fishing area, and gear type, 2000.

JANUARY	Delaware River	Delaware Bay	Atlantic Ocean	Indian River Bay	Rehoboth Bay	Nanticoke River	Total Trips
Fish Pot			4				4
Gill Net- Anchored		43					43
Gill Net- Drifted		3				1	4
Hook & Line		1					1
TOTALS	0	47	4	0	0	1	52

FEBRUARY	Delaware River	Delaware Bay	Atlantic Ocean	Indian River Bay	Rehoboth Bay	Nanticoke River	Total Trips
Fyke Net				2			2
Gill Net- Anchored		102	15			5	122
Gill Net- Drifted		17				16	33
TOTALS	0	119	15	2	0	21	157

MARCH	Delaware River	Delaware Bay	Atlantic Ocean	Indian River Bay	Rehoboth Bay	Nanticoke River	Total Trips
Haul Seine	1	6					7
Fyke Net		13					13
Gill Net- Anchored		353	95	25			473
Gill Net- Drifted	25	20	1			42	88
Hook & Line						4	4
Eel Pot	1	49		26	15		91
TOTALS	27	441	96	51	15	46	676

Table 25. - Continued.

APRIL	Delaware River	Delaware Bay	Atlantic Ocean	Indian River Bay	Rehoboth Bay	Nanticoke River	Total Trips
Haul Seine	3						3
Fyke Net	1						1
Gill Net- Anchored		566	106	28			700
Gill Net- Drifted	55	56				7	118
Hook & Line	1	13					14
Eel Pot	23	107		44	21		195
TOTALS	83	742	106	72	21	7	1,031

MAY	Delaware River	Delaware Bay	Atlantic Ocean	Indian River Bay	Rehoboth Bay	Nanticoke River	Total Trips
Fish Pot		9	7				16
Gill Net- Anchored		1		18			19
Gill Net- Drifted	8	144					152
Hook & Line		129	5	12			146
Eel Pot	15	50		20			86
TOTALS	23	333	12	50	0	0	419

JUNE	Delaware River	Delaware Bay	Atlantic Ocean	Indian River Bay	Rehoboth Bay	Nanticoke River	Total Trips
Hoop Net					2		2
Fish Pot		2	7				9
Gill Net- Anchored				15			15
Gill Net- Drifted		85		6	3		94
Hook & Line		234	12	9			255
Eel Pot	13	17		9			39
TOTALS	13	338	19	30	5	0	414

Table 25. - Continued.

JULY	Delaware River	Delaware Bay	Atlantic Ocean	Indian River Bay	Rehoboth Bay	Nanticoke River	Total Trips
Fish Pot			3				3
Gill Net- Drifted		73		3	6		82
Hook & Line		191	17	6			214
Eel Pot	3	15		7			26
TOTALS	3	279	20	16	6	0	325

AUGUST	Delaware River	Delaware Bay	Atlantic Ocean	Indian River Bay	Rehoboth Bay	Nanticoke River	Total Trips
Fish Pot		5			3		8
Gill Net- Anchored				5			5
Gill Net- Drifted		89		16	7		112
Hook & Line		233	34	3			270
Eel Pot	11	80		7			98
TOTALS	11	407	34	30	10	0	493

SEPTEMBER	Delaware River	Delaware Bay	Atlantic Ocean	Indian River Bay	Rehoboth Bay	Nanticoke River	Total Trips
Fish Pot		1					1
Gill Net- Anchored				4			4
Gill Net- Drifted		81		18	4		103
Hook & Line		181	30	29			240
Eel Pot	46	48		10	12		117
TOTALS	46	311	30	61	16	0	465

Table 25. - Continued.

OCTOBER	Delaware River	Delaware Bay	Atlantic Ocean	Indian River Bay	Rehoboth Bay	Nanticoke River	Total Trips
Fyke Net		5			1		6
Fish Pot		1	10				11
Gill Net- Anchored		65		5			70
Gill Net- Drifted		43	2	15	6		66
Hook & Line		98	36	25			159
Eel Pot	39	115		4			164
TOTALS	39	327	48	49	6	0	476

NOVEMBER	Delaware River	Delaware Bay	Atlantic Ocean	Indian River Bay	Rehoboth Bay	Nanticoke River	Total Trips
Fyke Net		10					10
Gill Net- Anchored		91		12			103
Gill Net- Drifted		15	11	7			33
Hook & Line	9	21	26	38			94
Eel Pot	20	25		4			49
TOTALS	29	162	37	61	0	0	289

DECEMBER	Delaware River	Delaware Bay	Atlantic Ocean	Indian River Bay	Rehoboth Bay	Nanticoke River	Total Trips
Gill Net- Anchored		135		12			147
Gill Net- Drifted		24	19	4		1	48
Hook & Line	1	12	7	16			36
Eel Pot		15					15
TOTALS	1	186	26	32	0	1	246

Table 25. - Continued.

ANNUAL (COMBINED MONTHS)	Delaware River	Delaware Bay	Atlantic Ocean	Indian River Bay	Rehoboth Bay	Nanticoke River	Total Trips
Haul Seine	4	6	0	0	0	0	10
Hoop Net	0	0	0	0	2	0	2
Fyke Net	1	28	0	2	0	0	32
Fish Pot	0	18	31	0	3	0	52
Gill Net- Anchored	0	1,356	216	124	0	5	1,701
Gill Net- Drifted	88	650	33	69	26	67	933
Hook & Line	11	1,113	167	138	0	4	1,433
Eel Pot	171	521	0	121	48	0	880
	275	3,692	447	454	79	76	5,043

ANNUAL (COMBINED GEAR)	Delaware River	Delaware Bay	Atlantic Ocean	Indian River Bay	Rehoboth Bay	Nanticoke River	Total Trips
JANUARY	0	47	4	0	0	1	52
FEBRUARY	0	119	15	2	0	21	157
MARCH	27	441	96	51	15	46	676
APRIL	83	742	106	72	21	7	1,031
MAY	23	333	12	50	0	0	419
JUNE	13	338	19	30	5	0	414
JULY	3	279	20	16	6	0	325
AUGUST	11	407	34	30	10	0	493
SEPTEMBER	46	311	30	61	16	0	465
OCTOBER	39	327	48	49	6	0	476
NOVEMBER	29	162	37	61	0	0	289
DECEMBER	1	186	26	32	0	1	246
	275	3,692	447	454	79	76	5,043

Figure 1. Total pounds of weakfish harvested in Delaware, based on self-reported commercial finfish logbook data, 1985-2000.

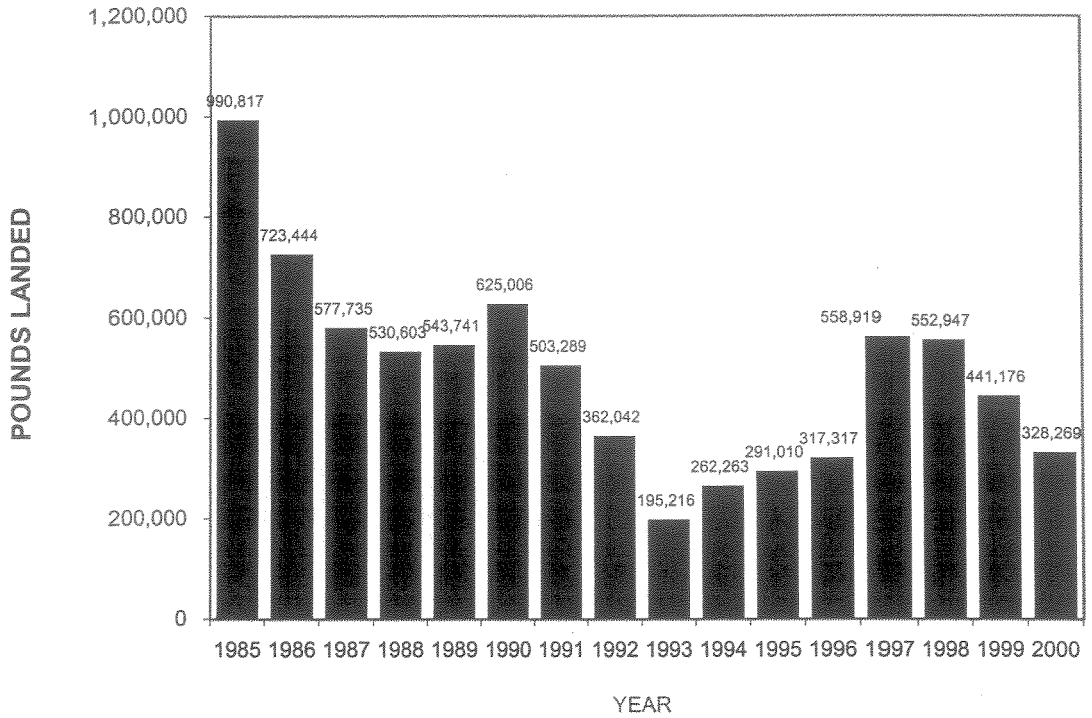


Figure 2. Total pounds of American shad harvested in Delaware, based on self-reported commercial finfish logbook data, 1985-2000.

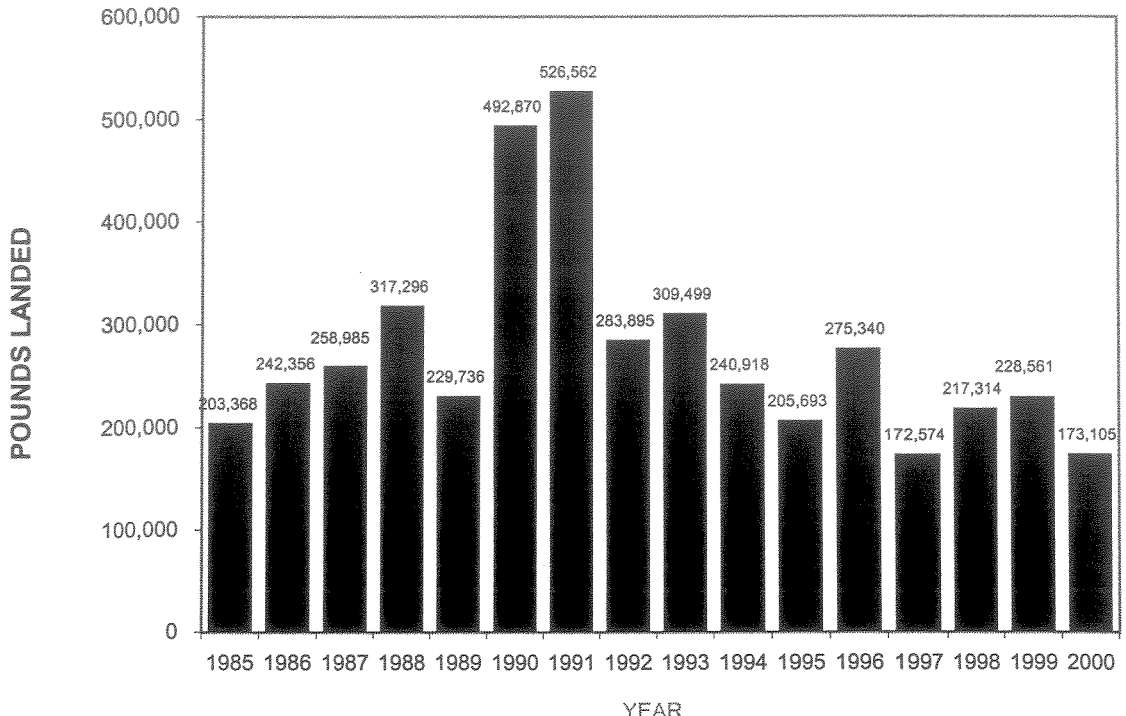


Figure 3. Total pounds of black sea bass harvested in Delaware, based on self-reported commercial finfish logbook data, 1985-2000.

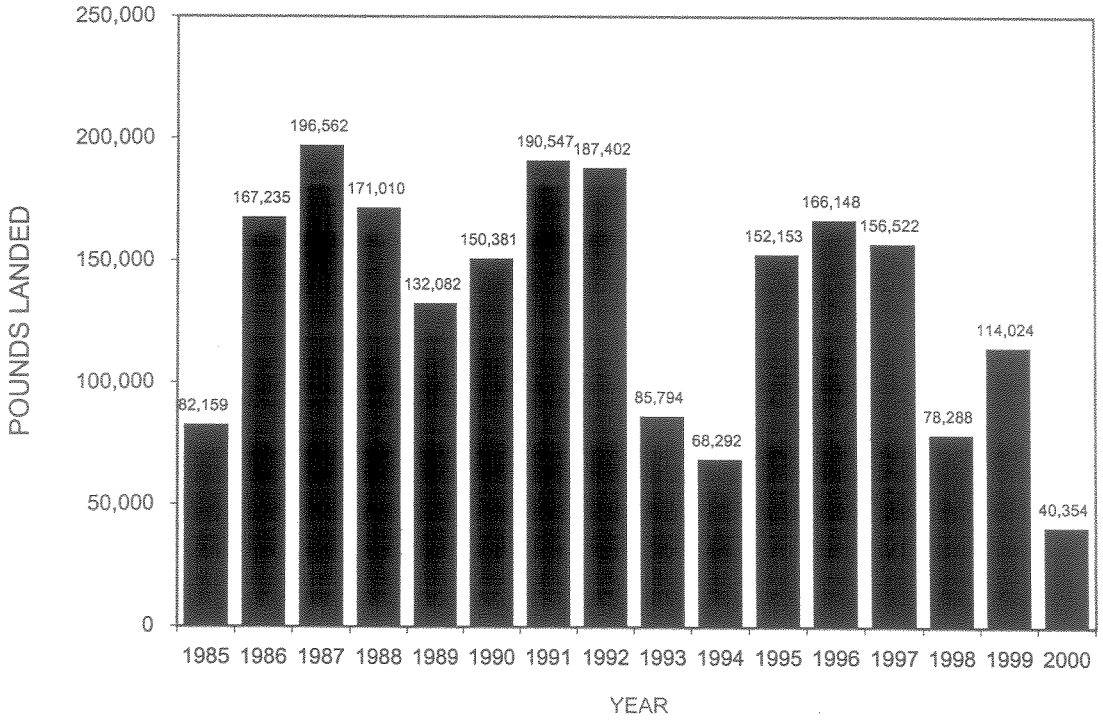


Figure 4. Total pounds of bluefish harvested in Delaware, based on self-reported commercial finfish logbook data, 1985-2000.

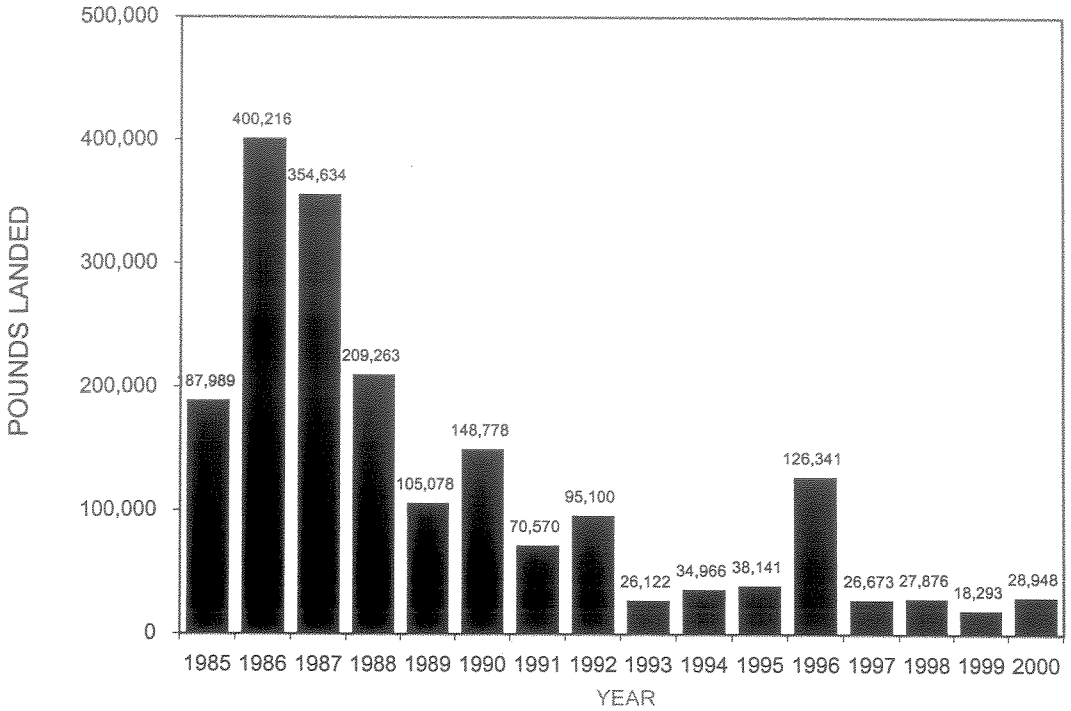


Figure 5. Total pounds of Atlantic menhaden harvested in Delaware, based on self-reported commercial finfish logbook data, 1985-2000.

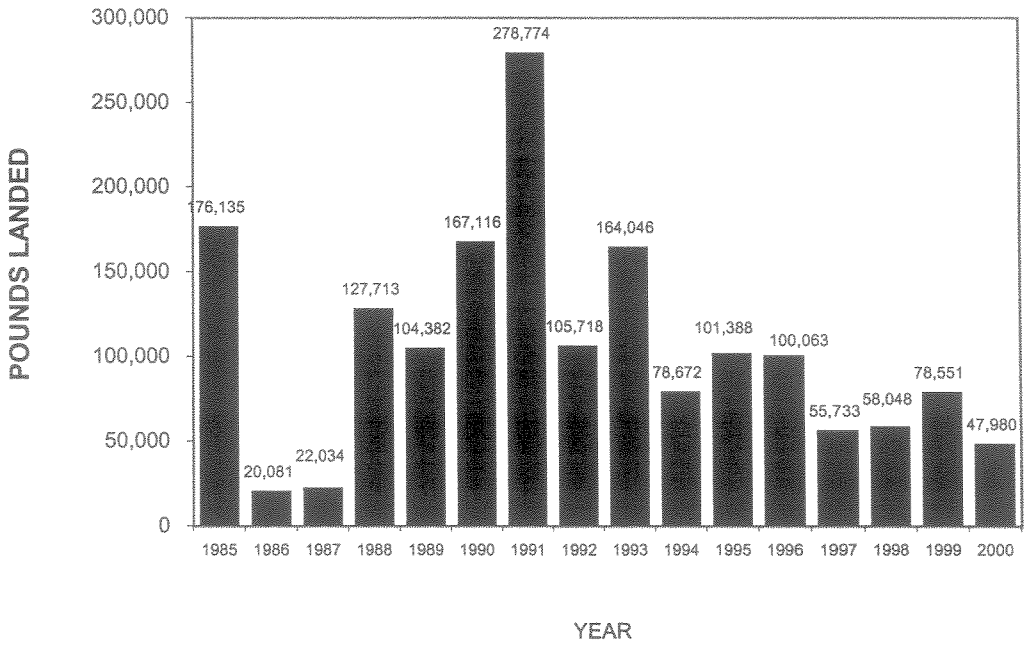


Figure 6. Total pounds of spot harvested in Delaware, based on self-reported commercial finfish logbook data, 1985-2000.

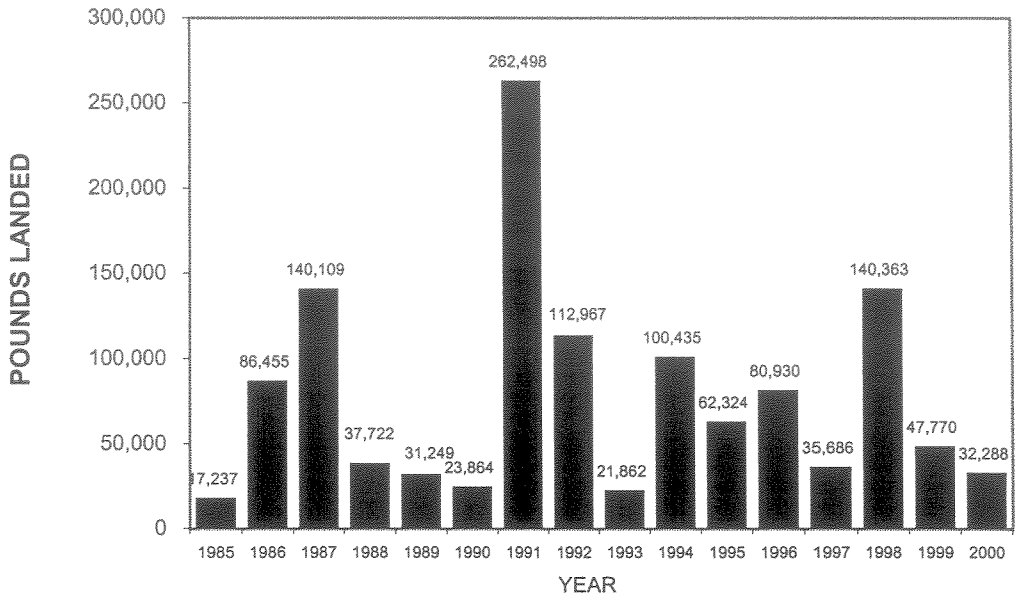


Figure 7. Total pounds of white perch harvested in Delaware, based on self-reported commercial finfish logbook data, 1985-2000.

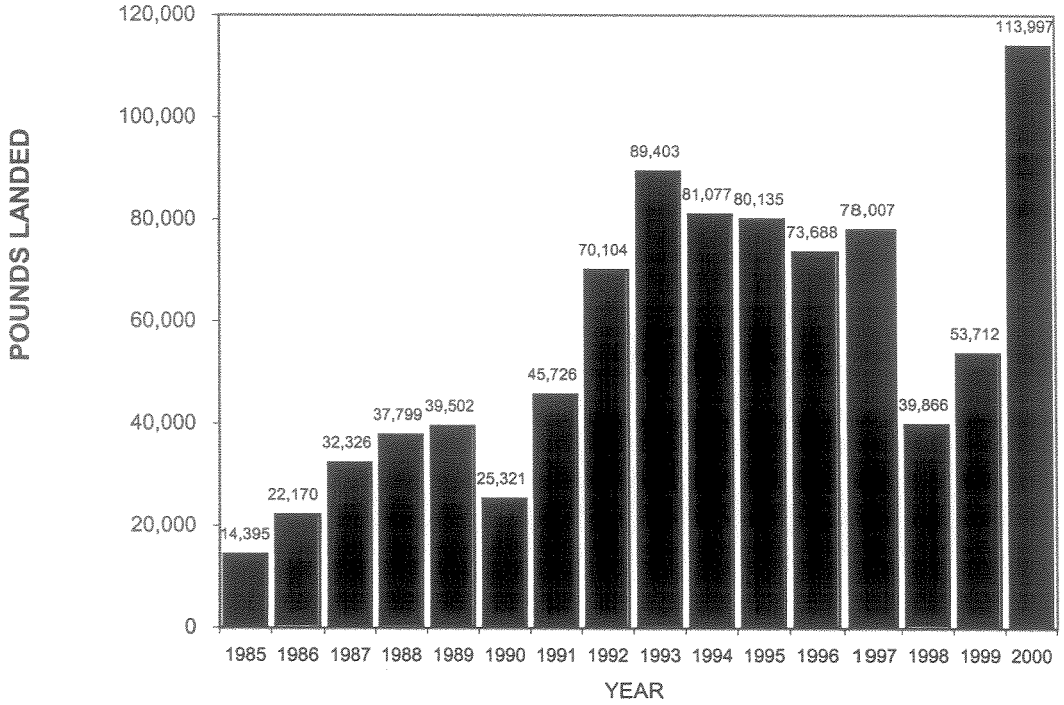


Figure 8. Total pounds of striped bass harvested in Delaware, based on self-reported commercial finfish logbook data, 1985-2000.

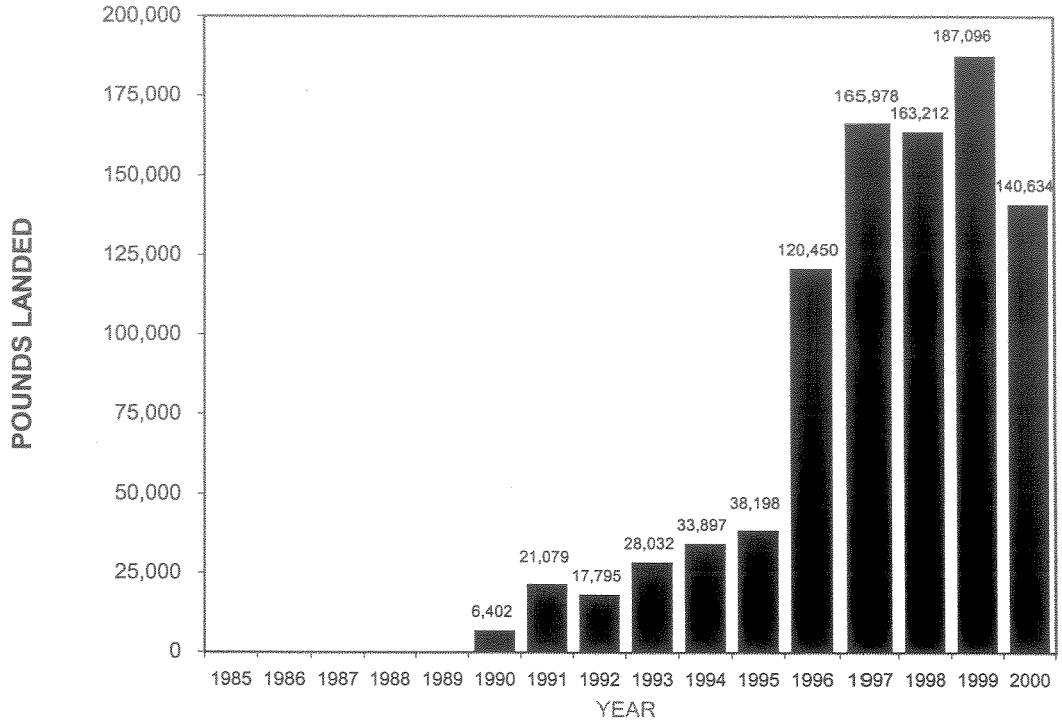


Figure 9. Total pounds of tautog harvested in Delaware, based on self-reported commercial finfish logbook data, 1985-2000.

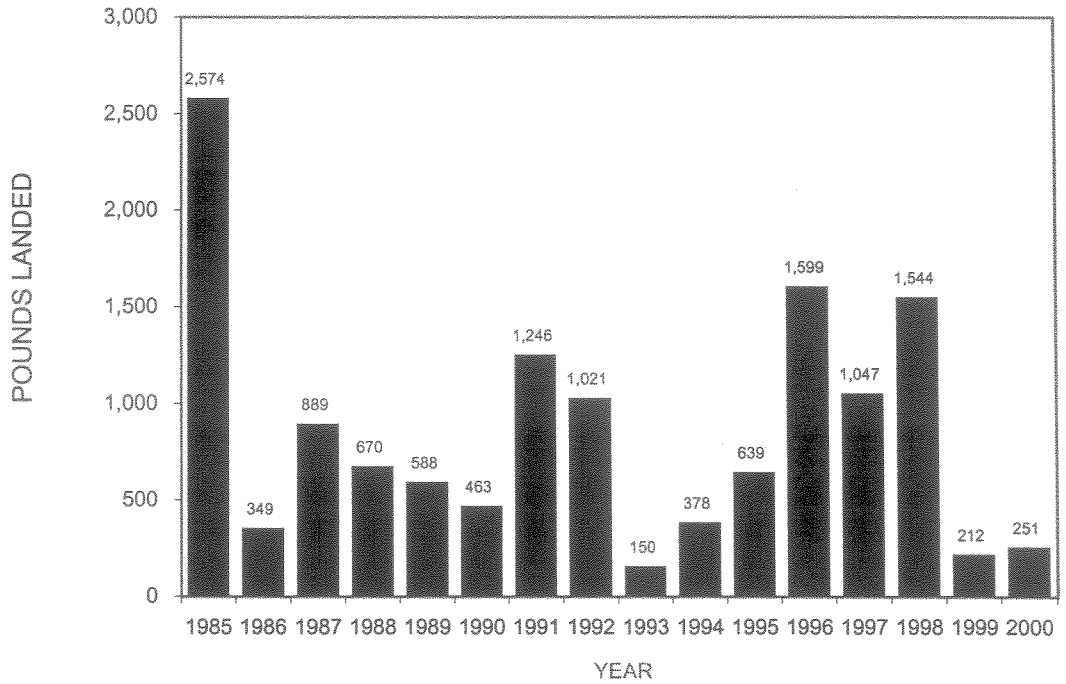


Figure 10. Total pounds of Atlantic croaker harvested in Delaware, based on self-reported commercial finfish logbook data, 1985-2000.

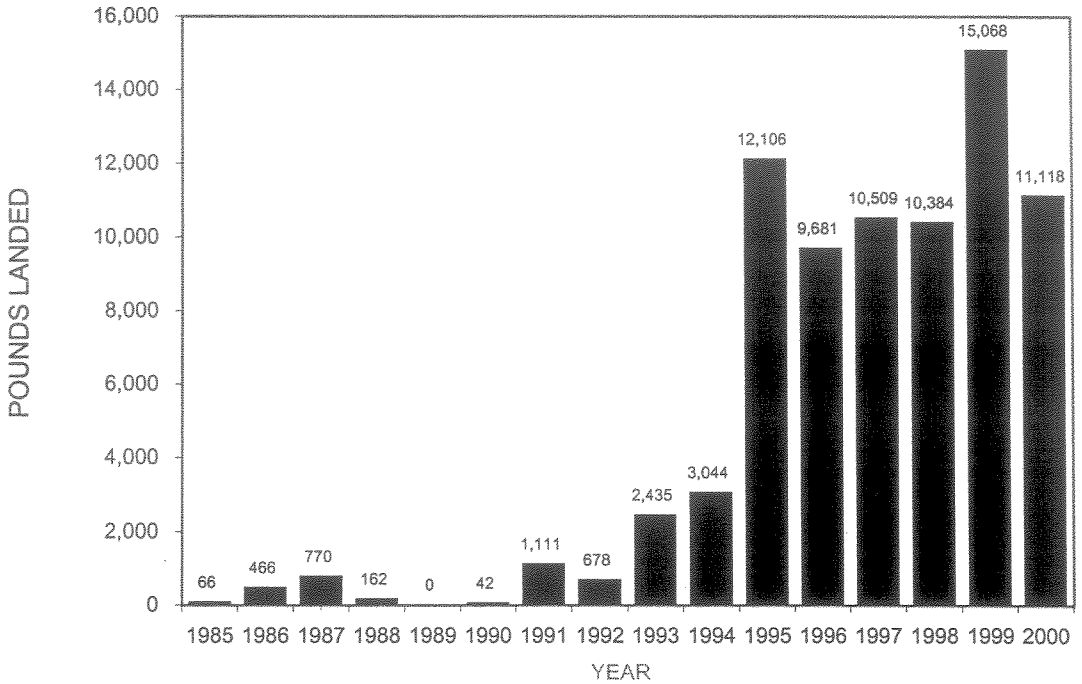


Figure 11. Total pounds of summer flounder harvested in Delaware, based on self-reported commercial finfish logbook data, 1985-2000.

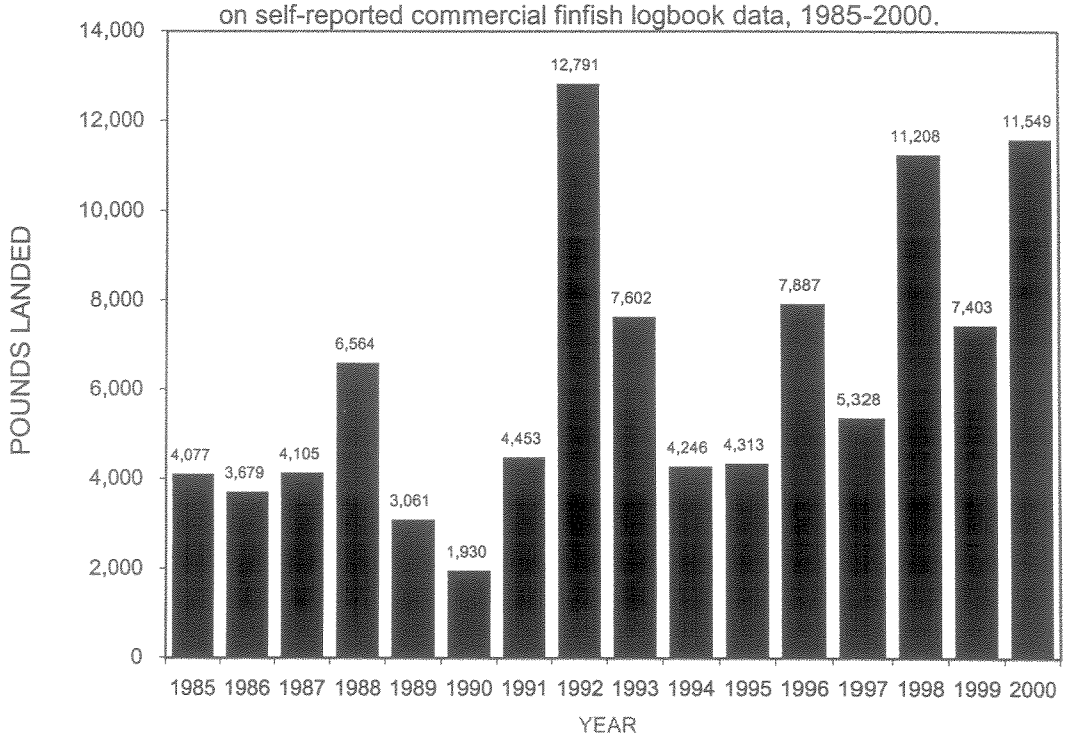


Figure 12. Total pounds of American eel harvested in Delaware, 1985-2000. Data prior to 1999 was collected by a NMFS survey. Since 1999, landings have been compiled from self-reported commercial logbook.

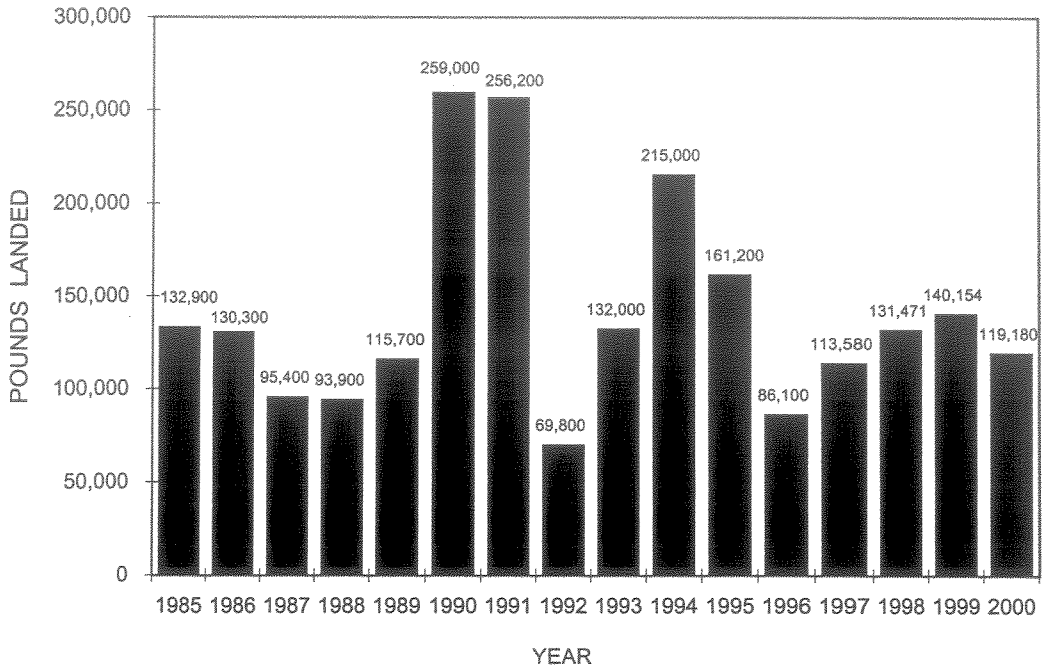
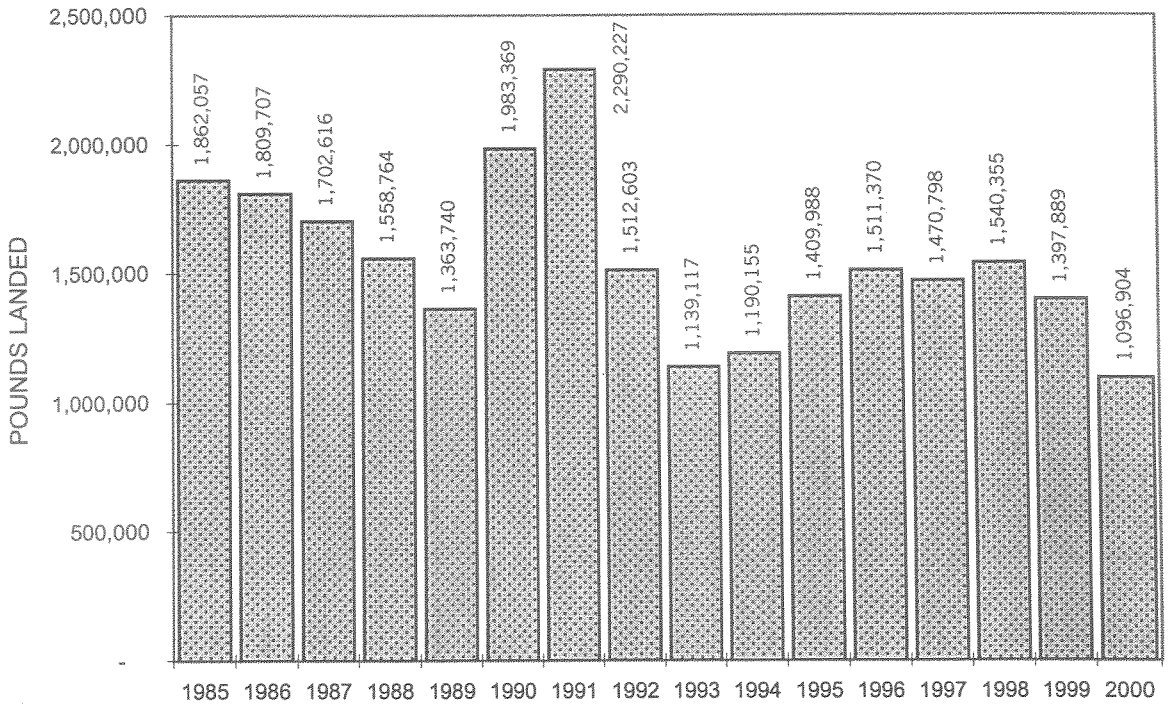
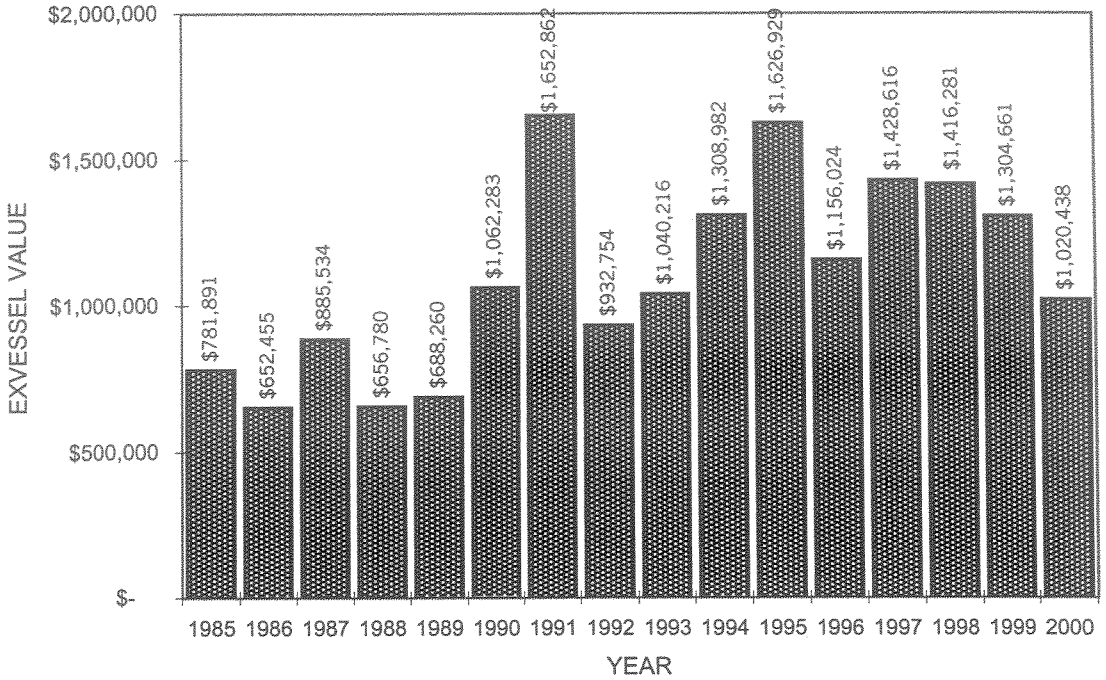


Figure 13. Total pounds of all * commercial finfish harvested in Delaware, based on updated, self-reported commercial logbook data, 1985-2000.



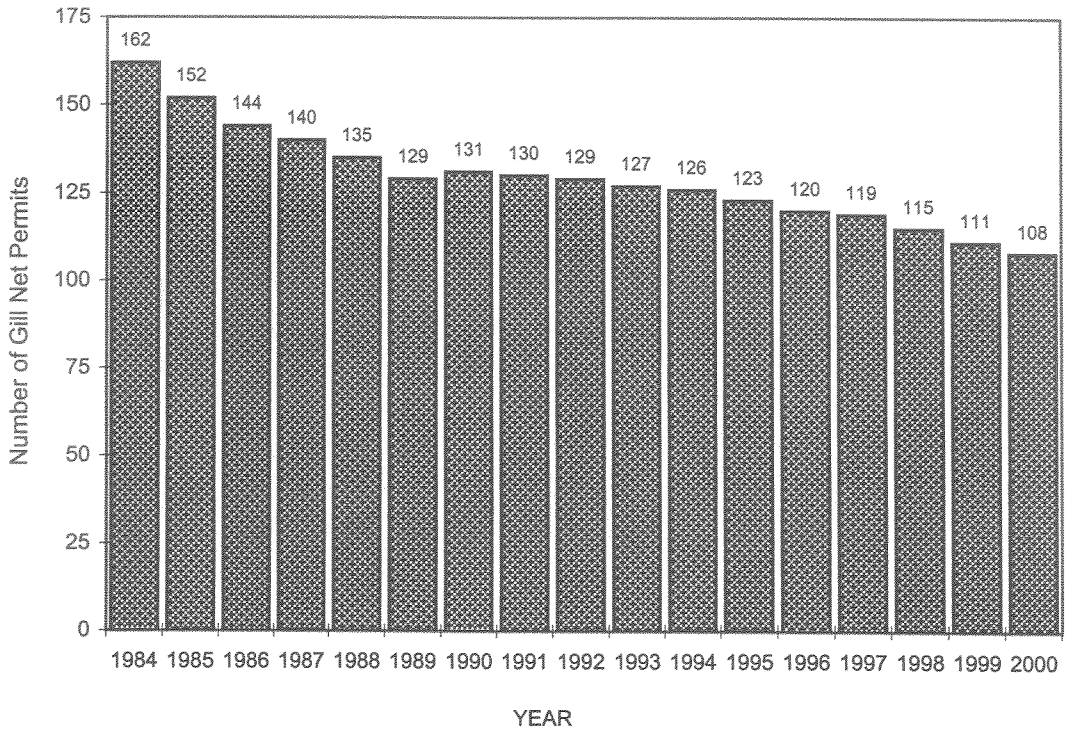
* *Including American eel landings, which were exempt from the mandatory reporting requirements until 1999.*

Figure 14. Total exvessel value of all * commercial finfish harvested in Delaware, 1985-2000, based on data from the National Marine Fisheries Service.



* *Including American eel landings, which were exempt from the mandatory reporting requirements until 1999.*

Figure 15. Annual number of Delaware commercial gill net permits issued.



Summary of Current Commercial Fish Regulations in Delaware as of February 10, 2000

Species	Commercial Minimum Size Limit	Commercial Season	Special Conditions / Comments
American Eel	6"	Open Year Round	
Bass, Black Sea	10"	Open Year Round	Quarterly Quotas in effect
Bass, Striped	20"-32"	Gill Net Mar 1-Apr 30 and Nov 15-Dec 31,HKL Sept 15-Dec31	Tags Required
Blue Crabs (Pot)	5" Hard; 3.5" Soft; 3" Peeler	March 1-Nov 30	Pot: DE River and Bay, Big Assawoman Bay
Blue Crabs (Dredge)	5" Hard; Mature Female-None	Dec 15-March 31	Dredge: DE Bay and Atlantic Ocean
Bluefish	None	Open Year Round	# and ####
Clams, Hard	1.5" Wide	Closed Sundays (area closures) ****	Tong: 2500, Dredge: No limit (DE Bay only)
Conchs, Channel	3 1/8" dia.at whorl or 6" long	Open Year Round	Dredge and/or Pot permit required
Conchs, Knobbed	2 3/4" dia at whorl or 5" long	Open Year Round	Dredge and/or Pot permit required
Croaker, Atlantic	8"	Open Year Round	# and ####
Drum, Black	None	Open Year Round	# and ####
Drum, Red	18-27"	Open Year Round	5/day, only 1>27"
Flounder, Summer	15.5" (gill net)	Open Year Round @@	200 pounds Trip limit
	15.5" (Comm HKL and other gear)	Gill net Open Year Round @@, H&L May 10-Oct 2	Comm HKL, fishpot, seine & fyke: limit of 8/day
Horseshoe Crabs	None	Closed May 1-June 30 ##	permit required for > 6/day**
Lobster	3 5/16" Carapace length*	Closed Sundays	50 pot limit
Mackerel, Spanish	14"	Open Year Round	# and ####
Oysters (dredge)	3"	CLOSED	
Sharks	None	Quota Based	See Tidal Finfish Regulation No. 25
Spot	None	Open Year Round	# and ####
Spotted Seatrout	12"	Open Year Round	# and ####
Sturgeon, Atlantic		CLOSED	
Tautog	14" (15" April, May, June)	Closed Sept 8-18	10/day (3/day in April, May and June)
Weakfish (Trout)	12" (14" Comm. HKL) @	#,####	# and ####
White Perch	8"	Open Year Round	# and ####
Scup	9"	Open Year Round	# and ####

* Carapace length measured from rear of eye socket to posterior edge of body shell.

** Commercial eelers may collect horseshoe crabs for own use as bait in eel pots only.

*** Oysters harvested during seed season must be planted on leased grounds.

**** See map in 2000 Fishing Guide.

More than 200 feet of fixed, anchored, or staked gill net is prohibited between May 10 and Sept 30, in all tidal waters of this State. Drift netting is prohibited from 0001hrs on Saturdays through 1600hrs on Sundays and legal holidays between May 10-Sept 30 (except as stated above); commercial gill nets shall be no less that 3 1/8 inch stretch from April 1- June 30.

Authorized persons may collect horseshoe crabs on Tuesdays and Thursdays from state owned lands east of State Road 89 (Port Mahon Rd) or from private lands on Mondays,Wednesdays and Fridays.

No fixed gill nets may be fished in the Delaware estuary north of Liston Point from Jan 1-May 31; no gill nets may be fished in the Nanticoke River and its tributaries or the C & D Canal and its tributaries having twine size larger than 0.28mm in diameter or with a stretch mesh > 5 1/2"

All gill nets are prohibited in the Delaware Bay and Atlantic Ocean in 2000 on May 1-9, 12-14, 19-21, 26-28, June 2-4, 9-11, 16-18 and June 24-30.

@ Weakfish minimum size is 14" for all commercial hook and line fishermen. Between May 1 and September 30, Comm HKL allowed only 4 days/week.

@@ Subject to closure if the commercial quota of 11,100 pounds is exceeded, 200 lb. trip limit in effect for commercial gill netters.

Fish shared/fishcom regs/summary

[THIS TABLE IS ONLY A SUMMARY, DEPARTMENT REGULATIONS AND LAWS PREVAIL]