

Mid-Atlantic

- Delaware
- Maryland
- New Jersey
- New York
- Virginia



Mid-Atlantic Summary

Management Context

The Mid-Atlantic region includes the states of New York, New Jersey, Delaware, Maryland, and Virginia. Federal fisheries in this region are managed by the Mid-Atlantic Fishery Management Council (MAFMC) and the National Marine Fisheries Service under one of eight fishery management plans (FMPs). Two of these FMPs are jointly managed with the New England Fishery Management Council (NEFMC). The MAFMC is the lead Council for the Dogfish FMP, while the NEFMC is the lead Council for the Monkfish FMP.

Mid-Atlantic Fishery Management Plans

1. Summer Flounder, Scup, and Black Sea Bass
2. Spiny Dogfish (with the NEFMC)
3. Atlantic Surfclam and Ocean Quahog
4. Atlantic Mackerel, Squid, and Butterfish
5. Bluefish
6. Tilefish
7. Monkfish (with the NEFMC)

Of the stocks covered in these fishery management plans, summer flounder, scup, and Atlantic butterfish are currently considered overfished. Stocks currently subject to overfishing include summer flounder and scup.

Currently, there is one limited access privilege program (LAPP) in the Mid-Atlantic region: the surfclam/ocean quahog individual fishing quota (IFQ) program. This LAPP was implemented in 1990 and had an ex-vessel value of \$49.0 million in 2007.

Commercial Fisheries

In 2006, landings by Mid-Atlantic fishermen (667 million pounds) had an ex-vessel value of \$362 million. Top revenue-makers were sea scallops, which accounted for \$120 million (33%) of landings revenue, and blue crab, which accounted for \$56 million (15%) of landings revenue. Overall, shellfish accounted for almost 74% of total landings revenue in the Mid-Atlantic in 2006.

Key Mid-Atlantic Commercial Species

Commercially-important species and species groups in the Mid-Atlantic include: striped bass, Atlantic surf clam, quahog clam, blue crab, summer flounder, American lobster, menhaden, Eastern oyster, sea scallops, and squid.

Economic Impacts

The Mid-Atlantic region's commercial fishing industry generated over a billion dollars in sales in New Jersey (\$2.1 billion), New York (\$1.9 billion) and Virginia (\$1.4



Barrels of blue crab, Chesapeake Bay, Maryland

billion). Most of the commercial fishing-related jobs in this region were also sustained in these states: New Jersey with 40,000 jobs, Virginia with 32,000 jobs, and New York with 42,000 jobs. Collectively, these three states contributed the most to commercial fisheries-related sales, income, and jobs in the region.

Landings Revenue

Overall, ex-vessel revenue increased less than 1% between 1997 and 2006; a 15% drop when adjusted for inflation. Finfish and other fishery products dropped 13% (-26% in real terms) and shellfish increased 6.7% (-9.8% in real terms). Virginia had the highest average landing revenue in the region with \$124 million nominally and \$131 million in real terms. New Jersey (\$119 million nominally, \$126 million in real terms), New York (\$63 million nominally, \$68 million in real terms), Maryland (\$56 million nominally, \$60 million in real terms), and Delaware (\$6.1 million nominally, \$6.5 in real terms) followed. New Jersey experienced the largest growth in ex-vessel landings revenue, increasing 37% between 1997 and 2006.

The ten key species and species groups comprised an average of 81% of ex-vessel value in the Mid-Atlantic region. Sea scallop and blue crab contributed more to total landings revenue than any other key species or group, accounting for 25% and 19%, respectively. Notably, sea scallop revenue increased 265% (209% in real terms) from 1997 to 2006 while blue crab revenue declined 30% (41% in real terms). Virginia and New Jersey experienced the largest increases in sea scallop revenues, increasing \$32 million and \$45 million, respectively. Despite the fact that Maryland's blue crab landings revenue declined almost 30% from 1997 to 2006 (40% in real terms), Maryland's contribution to regional blue crab landings revenue (52%) has been relatively stable over the time period.

In addition to sea scallops, landings revenue of summer flounder and striped bass also increased during this time period, 72% and 45%, respectively. Landings revenues from all other key species and species groups declined.

Commercial Fish Facts

Landings revenue

- On average, the ten key species or species groups accounted for 81% of total landings revenue.
- Shellfish accounted for approximately 74% of annual total landings revenue for the Mid-Atlantic. Sea scallop, blue crab, Atlantic surf clam, and quahog clam were the largest contributors.
- The largest annual increase in revenue from 1997-2006 was 120% for squid (2003-2004). The largest annual drop in revenue was 51% for American lobster (1999-2000).

Landings

- On average, the ten key species or species groups accounted for 83% of total landings annually.
- Finfish and other fishery products accounted for 73% of annual landings for the Region. Menhaden contributed the most to finfish landings, almost 80%.
- Average annual landings for menhaden was 445 million pounds, more than any other species or group. Blue crab was the species or group with the next highest average annual landings, roughly 69 million pounds.
- Squid landings increased 298% from 2003-2004, the largest annual increase in the 10 year period, only to fall 71% from 2004-2005, the largest annual decrease.

Prices

- Quahog clam (\$5.90), sea scallop (\$5.19), Eastern oyster (\$4.78), and American lobster (\$4.05) all had average annual ex-vessel prices above \$4 per pound.
- Menhaden had the lowest average annual ex-vessel price at \$0.07 per pound. Squid and Atlantic surf clam had average annual prices just above \$0.50 per pound.
- The largest annual increase in ex-vessel price was 121% for squid from 2004-2005. Squid also had the largest annual decrease: -45% from 2003-2004.

Landings

From 1997 through 2006, total landings averaged 767 million pounds with a range of 667 million pounds in 2006 to 917 million pounds in 1998. Total landings, landings of finfish and other fishery products, and shellfish landings each decreased between 1997 and 2006: -26%, -28%, and -23%, respectively. Notable exceptions to these trends were sea scallops and summer flounder, which increased 250% and 46%, respectively. Landings of all other key species or species groups were either flat (striped bass and Atlantic surf clam) or experienced double digit declines during this time period.

Despite an average ex-vessel price of \$0.07 per pound, menhaden contributed more to total landings in the Mid-Atlantic than any other species or species group. Menhaden comprised an average of 58% of total landings or 445 million pounds. Although Virginia's harvest of menhaden declined 25% from 1997 to 2006, it harvests an average of 93% of total regional menhaden landings or 412 million pounds annually. This proportion of total menhaden landings is stable over time, varying between 90% and 95%.

Prices

Ex-vessel prices between 1997 and 2006 increased for the high-value Eastern oyster (85% nominally, 57% in real terms) and American lobster (46% nominally, 23% in real terms). Squid increased 72% (45% in real terms), from \$0.46 per pound to \$0.79 per pound and striped bass increased 43% (21% in real terms), from \$1.47 per pound to \$2.10 per pound. Quahog clams was the only species where ex-vessel prices decreased between 1997 and 2006 (-3% nominally; -18% in real terms).

Most species or species groups had higher ex-vessel prices in 2006 compared to their corresponding average ex-vessel price for the time period. Ex-vessel price for squid in 2006 (\$0.79 per pound) was 39% higher than the average price per pound (\$0.57). Likewise, the 2006 price of eastern oysters (\$6.59 per pound) was 38% higher than the average annual price per pound (\$5.19). In contrast, the 2006 price of blue crab (\$0.90 per pound) was 9% less than the average annual price (\$0.99).

Recreational Fishing

In 2006, 4.7 million recreational anglers fished in the Mid-Atlantic region, taking a total of 21.4 million fishing trips. Anglers spent \$956 million on recreational fishing trips in the region and \$3.7 billion on durable fishing-related equipment. These expenditures contributed between \$265 million to \$1.6 billion in total sales to individual states in the region, between 1,700 and 9,800 jobs in a state, and between \$120 million and \$830 million in value-added impacts within a state.

Key Mid-Atlantic Recreational Fishing Species

The Mid-Atlantic region's recreationally-important species are: Atlantic croaker, black sea bass, bluefish, scup, spot, striped bass, summer flounder, tautog, weakfish, and winter flounder.

Mid-Atlantic Summary

Participation Rates

Recreational anglers from coastal counties in the Mid-Atlantic region accounted for the majority of the region's anglers. From 1997 to 2006, this group averaged 58% of all anglers. Out-of-state anglers averaged 38% of total anglers and non-coastal county residents averaged 4% for this period.

Participation by all three groups peaked in 2005 with 5 million anglers, a 25% increase from 2004. Participation was also high in 2001 with 4.2 million anglers. Trends in angler participation for both coastal county residents and out-of-state residents were similar from 1997 to 2003. Between 2003 and 2006, there was a larger increase in participation among coastal county residents than out-of-state residents, 29% and 11%, respectively.

Recreational Fishing Trips

Private or rental boat fishing trips in the Mid-Atlantic region totaled 12 million in 2006: the highest number of trips taken by this fishing mode during the time period. This represented a 53% increase over the number of private boat trips in 1999, a year when the lowest number of private/rental boat trips were taken.

Recreational Fishing Facts

Participation

- The highest number of anglers in 2006 was reported for Maryland, with a total of 1.3 million. New Jersey had 1.2 million, and Virginia had 1 million.
- The total number of anglers in New Jersey reached a peak in 2005 (for the period 1997 to 2006), with 1.3 million. The lowest number of anglers during this time period occurred in 2002 with 656,000.

Recreational trips

- There were a combined 3.1 million shore trips taken in Delaware, Maryland, and Virginia in 2006.
- New Jersey and New York had the highest number of total fishing trips in 2006, with 7.3 million and 5.4 million respectively.

Economic impacts

- Maryland residents spent a total of \$94 million on fishing trips within the state in 2006; non-residents spent almost as much, with \$93 million.
- Recreational fishing in Maryland in 2006 added \$1.3 billion in total sales and \$628 million in value-added impacts to the state's economy.

Catch data for key species

- Of the top ten key species, Atlantic croaker was the species caught the most in Virginia in 2006, with 12 million fish both harvested and released.

Fishing trips taken from shore were highest in 2001, 2005 and 2006 with approximately 7.9 million trips each year.

Fishing trips on a party or charter boat were 6% of total fishing trips in 2006 (1.3 million fishing trips). For this fishing mode, the highest number of trips was reported in 1997 with 1.6 million trips.

Expenditures and Economic Impacts

In 2006, Mid-Atlantic anglers spent a total of \$4.6 billion on both fishing trip expenditures and purchases of durable equipment. In-state residents spent \$600 million on all fishing trip-related expenses, compared to non-residents who spent \$356 million. Vehicle expenses by both groups of anglers equaled \$1.4 billion, boat expenses were \$852 million, and fishing tackle expenses accounted for \$847 million.

Within the region, recreational fishing economic impacts were highest in New Jersey: \$1.6 billion in total sales, \$830 million in value-added impacts, and 9,814 jobs sustained. Maryland and Virginia had \$1.3 billion and \$774 million, respectively, in total sales impacts related to recreational fishing activities. In New York, total sales impacts in 2006 were \$812 million. There were 5,365 jobs sustained and \$424 million in value-added impacts related to recreational fishing. Delaware had \$265 million in total sales impacts and \$120 million in value-added impacts.

Recreational Catch and Release

Mid-Atlantic anglers caught more summer flounder than any other species: a total of 18.8 million fish in 2006. Of this total, the majority were released (15 million). New Jersey anglers had the highest recorded catch of summer flounder in 2006 with 1.6 million harvested and 6.8 million released. New York reported the second highest numbers with a harvest of 802,000 fish and release of 5.3 million fish.

The number of Atlantic croaker caught in the region was also high with a total catch of 17.5 million fish. This catch was almost equally distributed between fish that were harvested (9.5 million) and released (8.1 million).

Striped bass was also a recreationally-important species with a total catch of 11.5 million across the region. Of these, 9.5 million fish were released. Of the Mid-Atlantic states, Maryland reported the highest number of striped bass caught with 4.5 million fish. However, white perch was the most frequently caught species in Maryland with 6.9 million fish both harvested and released.

Marine Coastal Economy

When considering all industries in the Mid-Atlantic region, New York had the highest number of establishments and employees, followed by New Jersey, Virginia, Maryland,

and Delaware. In 2005, the gross domestic product by state in this region ranged from \$961 billion for New York (7.8% of the national total) to \$56 billion for Delaware (0.5% of the national total).

When considering commercial fishing-related industries only, New Jersey had the highest Commercial Fishing Location Quotient of all states in the region: 0.89 in 2006. This was a 24% decrease from 1.17 in 2001. Maryland (0.71), Virginia (0.48), and New York (0.12) followed. This measure was not available for Delaware in 2001 or 2006.

Seafood Sales and Processing

In 2005, there were 482 non-employer firms engaged in the seafood retail industry, down from 519 firms in 1998. Non-employer seafood retail firms increased slightly over the time period for Maryland, Virginia, and Delaware, remained relatively stable for New Jersey, and declined in New York. Annual receipts were relatively flat in New York and New Jersey but increased sharply in Delaware and Virginia (125% and 131%, respectively). Employer establishments engaged in seafood retail increased 27% in the Mid-Atlantic from 1998 to 2005; annual payroll from this industry increased from \$49 million in 2002 to \$59 million in 2005, a 21% increase (17% in real terms).

Excluding Delaware, for which data is not available, all Mid-Atlantic states experienced an increase in the number of non-employer seafood product preparation and packaging establishments but either flat or declines in the number of employer establishments in this industry from 1998 to 2005. For example, in Virginia, the number of non-employer firms increased five-fold in this industry but the number of employer establishments declined 15%. Virginia's receipts for the non-employer firms increased 13-fold; payroll of employer establishments increased 35% during this period.

The number of employer seafood wholesale establishments and the number of workers employed by this industry either declined or was relatively flat in all Mid-Atlantic states. Overall, this sector lost 131 employer establishments and 918 employees from 1998 to 2005; payroll, however, increased 15%, from \$144 million in 1998 to \$166 million in 2005.

Transport, Support, and Marine Operations

Though establishment numbers for industries in this sector were available for all states except Delaware, employee numbers and annual payroll data were often suppressed or missing. All employee and payroll information in the discussion below excludes Delaware, for which this data was largely unavailable or suppressed.

The number of employees (21,000) and annual payroll (\$938 million) from ship and boat building in Virginia dwarfed all other industries in this sector in the Mid-Atlantic region. The number of establishments and employees engaged in this industry in Virginia has been relatively flat since 1998; annual payroll has increased 10% nominally but declined 3% after adjusting for inflation.

In 2005, there were 72 employer establishments engaged in the marine cargo industry, down from 81 firms in 1998. Annual payroll for this industry increased 71% from 1998 to 2005, from \$319 million to \$546 million, while the number of workers employed by this sector has been relatively flat (8,127 employees in 2005).¹

There were 118 employer establishments engaged in the deep sea freight transportation industry in 2005, a modest increase from 116 firms in 1998. The number of employees declined 50% in this industry from 5,929 in 1998 to 2,956 in 2005. Annual payroll declined 26% (34% in real terms), from \$293 million to \$218 million during this time period.

Data for all industries in this sector was available for the state of New Jersey for 2005. Industries involved in handling marine cargo had the highest annual payroll (\$363.7 million) and employed the greatest number of people (4,972), relative to other industries in this sector. In comparison, navigational services industries had the lowest annual payroll (\$9.67 million) and employed the fewest people (169).

¹Note that 2004 data was used for New York.