

Delaware Bay's Bounty: COMMERCIAL FISHING IN



An artist's mural commemorates Philadelphia's Fishtown neighborhood as the former hub of the Delaware River's shad-fishing industry.

The Delaware Estuary Watershed, or the land draining to the tidal Delaware River and Bay, generates over \$10 billion annually; this for a region with the seventh-largest metropolitan economy in the United States. This income is derived from industries that depend on the environment. Examples include water suppliers, agriculture, parks and recreation, maritime transportation, and fishing and hunting.

A Storied Past

The commercial fishing industry in particular boasts a long and profitable history in the estuary. At the end of the 19th century, the Delaware Estuary supported the largest commercial American shad and sturgeon fisheries along the Atlantic coast. By the 1880s, about 1,400 sailing vessels were harvesting 22 million pounds of oysters a year from the Delaware Bay. And in 1896 alone, watermen caught over 14 million pounds of shad worth \$400,000 (over \$10 million in 2013 dollars).

Today, the estuary is home to over 200 species of resident and migrant fish and shellfish. Commercial fish landings contribute \$34 million annually to our region's economy. Many of these fisheries provide

us with the seafood that ends up on our dinner plates, such as blue crabs, summer flounder, oysters, and striped bass. Ordering these fish injects money into our local economy and supports an industry that has grown with cleaner water in the estuary.

Pennsylvania

The watershed draws 35% of its population from Pennsylvania despite occupying only 7% of its land area.

Not surprisingly, the Pennsylvania region of the watershed contributes the least in terms of the landed weight and value of its fisheries.

However, this was not always the case. In the late 1800s and early 1900s, the Delaware River,



ABOVE: Caviar makers and fishermen pose for a photograph on the deck of their packing house floating in the Delaware Bay off Caviar, New Jersey circa the 1890s or early 1900s. This boomtown was located at the mouth of Stowe Creek in Cumberland County, where Atlantic sturgeon were once plentiful.



LEFT: Fishermen slice open three Atlantic sturgeon for their eggs on the docks of Caviar, New Jersey in 1923. Like the fishery, this town no longer exists, but it could again with careful management of the species.

THE ESTUARY

By Matthew Speiser, Communications Intern,
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from Delaware City, Delaware, to Roebing, New Jersey, was home to one of the largest juvenile Atlantic and shortnose sturgeon populations in the world. This was due to the species' tendency to spawn in freshwater, temperate climates.

The roe (eggs) of these sturgeon produced high-quality caviar. During the "caviar craze" from the late 1800s to the early 1900s, greater Philadelphia found itself at the center of this sturgeon population. Needless to say, a significant commercial fishery developed with annual harvests approaching 7 million pounds nationwide. Unfortunately this boom was short lived due to overharvesting and the sturgeon population has been in decline ever since the early 1900s. Today the yellow perch is the most profitable fishery in Pennsylvania with a landed value that exceeds \$70,000 annually. Meanwhile, the Atlantic sturgeon has a long road to recovery. It has joined the shortnose sturgeon on the endangered species list. However, the sturgeon fisheries at the turn of the 20th cen-

ture will always represent the Pennsylvania fishing industry at its prime.

Delaware

Unlike Pennsylvania, Delaware's fisheries have a much more profound impact on our current local economy. In 2011, watermen harvested over 3.5 million pounds of blue crab in the Delaware River and Bay for a landed value of close to \$5 million. A staple of the Mid-Atlantic, the blue crab is renowned particularly for its health benefits. Believe it or not, three ounces of steamed blue crab contains 90 calories and only one gram of fat, making it one of the healthiest food choices available locally.

Historically, Delaware's blue crab harvests have fluctuated dramatically. These range from under a quarter-million pounds in 1968 to over 7.5 million pounds in 1995. However, over the past five years, harvests have consistently produced at least 3 million pounds of blue crab. This is important in a country where the average person will eat

over a half-pound of crab per year, making crab the eighth-most consumed seafood in the United States.

New Jersey

New Jersey boasts the largest commercial fishing industry in the region, despite sharing only 26% of its land area with the watershed. In fact, four of the top-ten fishing ports in the Mid-Atlantic are located in New Jersey, including the port of Cape May-Wildwood, which produces upward of \$80 million annually in landed value. New Jersey fisheries contribute more landed weight and value than Delaware and Pennsylvania's combined; although, many were impacted by Hurricane Sandy.

Popular species native to the Delaware Estuary waters of New Jersey include the blue crab, shad, striped bass, summer flounder, and bluefish. In recent years, the blue crab has been the most profitable fishery. Commercial crabbers hauled in over 9 million pounds in 2010 and 2011 in the Garden State (with about half that catch in the Delaware Estuary) after never having a season's catch of more than 8 million pounds since 1950. This netted them an average of around \$5 million per year from the Delaware Estuary in New Jersey.

The summer flounder, also known as "fluke", has been the model for consistency among New Jersey fisheries. This is because every season has yielded at least a million pounds in landed weight dating back to 1950. However, the Atlantic States Marine Fisheries Commission reduced the limit of summer flounder caught this season by 15%, due to a lack of spawning stock.

Atlantic menhaden is the third-most profitable species in the New Jersey waters of the estuary. This fishery generates almost \$3.2 million annually in landed revenue. Then there are eastern oysters, which gave rise to

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The year is 1928 and over 40 schooners are docked outside the shipping sheds in Bivalve, New Jersey; so named because of the port's booming oyster industry.

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the bayshore towns of Bivalve and Shellpile. Oystermen dredge up about a half-million pounds of these per year, which are valued at over \$2.5 million – before they ever leave the docks.

Commercial fishing, much like the estuary itself, is a complex system that is forever changing. Many jobs – from the anglers all the way to the wholesalers – depend on the living marine resources in the estuary. Then there are all the industries related to commercial fishing, such as bait and tackle shops, marinas, and hundreds upon thousands of seafood restaurants, all of which employ cooks, servers and more. Commercial fishing is an economic machine that generates millions of dollars and is only one of many ways that the estuary helps our region prosper. Consider that the next time you crack into that bucket of crabs! ■

Top 10 Seafood Products

1. Blue crabs:\$10.8 million
 2. Summer flounder:.....\$4 million
 3. Atlantic menhaden:.....\$3.2 million
 4. Eastern oysters:.....\$2.7 million
 5. Striped bass:.....\$1.7 million
 6. American Eel:.....\$625,500
 7. Atlantic herring:.....\$563,000
 8. Whelk:.....\$511,200
 9. Bluefish:.....\$508,100
 10. Weakfish:.....\$261,200
- Industry Total: \$25.4 million**

Sample Local Seafood

Every June:

DELAWARE BAY DAY
in Bivalve, NJ

HARBOR FEST
in Cape May, NJ

Every August:

BIG THURSDAY
in Bowers Beach, DE

COHANSEY RIVERFEST
in Bridgeton, NJ

Every October:

DELAWARE COAST DAY
in Lewes, DE (see page 15)



Credit: Shaun Bailey of the PDE

Pennsylvania Coast Day

September 7, from Noon to 5 p.m.

Philadelphia, PA

Discover Pennsylvania's coastal connection at Pennsylvania Coast Day, hosted by the Partnership for the Delaware Estuary (PDE). Attractions at Penn's Landing will include boat rides, kayaking, kids crafts, face painting, swan boats and more. Dive in to DelawareEstuary.org for details, or call (800) 445-4935, extension 112.

International Coastal Cleanup

September 21

Worldwide

Last year more than half a million volunteers collected over 10 million pounds of trash during the International Coastal Cleanup. You can join this worldwide movement in a community near you. Simply visit DNREC.Delaware.gov/CoastalCleanup for details in Delaware, NJClean.org for news in New Jersey, and <http://bit.ly/14Ln88x> for plans in Pennsylvania.

Hayride & Beer Tasting

September 28, from 6 to 10 p.m.

Wilmington, DE

The PDE is teaming up with Bellevue State Park and Peco's Liquors for the Great Pumpkin Debate and Hayride. Enjoy a fall hayride through Bellevue State Park and sample pumpkin beers at the barn. Proceeds will benefit the PDE's work in the nearby Brandywine River, Delaware River and beyond. Call Peco's Liquors at (302) 764-0377 for tickets, or e-mail KForst@DelawareEstuary.org for information.

A vendor display's the day's catch in Philadelphia's Italian Market, the oldest outdoor market in America. Plan your visit at ItalianMarketPhilly.org.



Credit: B. Krist for the Greater Philadelphia Tourism Marketing Corporation