

Unique Species

During the course of the Delaware Bay Trawl Survey, several unique species were caught more than once. Here is a description of a few of those species:

Cownose Ray (*Rhinoptera bonasus*) – The trawl survey has caught 14 cownose rays during 5 sampling years. One ray per year was caught during 1992, 1993, 1994 and 2001. Ten rays were caught during 2002. The largest ray had a wingspan of 1090 mm (3.6 feet).



* Cownose rays come from the family Myliobatidae, which are large, free swimming rays. They are brown with olive on top. Their wings are long and pointed, and the rear edges are concave. Their snouts are squared, with an indent in the center. They range from New England to Florida, as well as the Gulf of Mexico to Brazil. These fish spend most of their time in the ocean, but do enter estuaries on occasion. They migrate in large schools, while feeding on bottom organisms such as clams. They bear live young, and are a preferred food for many species of sharks.

Lookdown (*Selene vomer*) – Since its inception, the trawl survey has caught 9 lookdowns. One per year was caught during the following years: 1991, 1992, 1996, 2000, 2002, 2003 and 2005. Two were caught during 2007. The size range of all fish caught was 51 mm to 150 mm (total lengths).



* Lookdowns come from the family Carangidae, better known as jacks. These are medium to large sized fish. They are fast swimmers that live in the open oceans, spending little time in bays and estuaries. Jacks feed on invertebrates and smaller fish. Lookdowns are silvery and iridescent. They have compressed, platelike bodies, and their head profiles are very steep. The lobes at the front of their dorsal and anal fins are very long. Their range is from Maine to Uruguay in South America.

Atlantic Moonfish (*Selene setapinnis*) – There have been 9 Atlantic moonfish caught during the trawl survey. One per year was caught during 1997, 2000 and 2007. Four were caught during 2001 and two during 2008. All moonfish were collected in the lower portion of the bay and ranged in size from 46 mm to 72 mm (fork lengths).



* Atlantic moonfish are also from the Carangidae family. Their appearance is similar to lookdowns, but the front rays of their dorsal and anal fins are not as elongated. Their range is from Nova Scotia to Uruguay.

Florida Pompano (*Trachinotus carolinus*) – Over the course of the trawl survey, biologists have caught 4 Florida pompanos. One per year was caught in 2000 and 2007. Two were caught in 1998. The largest Florida pompano caught had a total length of 175 mm.



* Also from the Carangidae family, Florida pompanos are silver with bluish tops. They are deep bodied. They are an important food fish, and are found from Massachusetts to Brazil.

Skilletfish (*Gobiesox strumosus*) – During 2008 sampling, two skilletfish were caught. One fish, with a total length of 48 mm, was caught in the upper bay. The other, with a total length of 63 mm, was caught in the lower bay.



* Skilletfish, from the Gobiesocidae family, get their name from being shaped like frying pans but are more commonly called clingfishes. They are small, flat fish with a large suction disk below the mouth area formed by fused pelvic fins. Skilletfish are scaleless, with a net-like pattern on their olive-colored skin. They prefer grassy and rocky shallow waters. Their range includes NJ, Bermuda and the Gulf of Mexico to Brazil.

Mutton Snapper (*Lutjanus analis*) – In 2001, the trawl survey caught one mutton snapper. This fish was caught in the lower portion of the bay, and had a fork length of 99 mm.



* A part of the Lutjanidae family, snappers are predaceous fish that are sometimes confused with groupers. Although both are important food and game fish, snappers differ by the presence of 1 or 2 enlarged canines near the front jaw. Mutton snappers have a small spot on their side and distinctly pointed anal fins. Body color varies depending on the activity of the fish, but is frequently entirely pink to red. A blue stripe is common below the eye, as well as blue spots or stripes behind the eye, which is typically bronze to red in color. Range includes Massachusetts, Bermuda and the Gulf of Mexico to Brazil.

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