

Mid-Atlantic Bottom Trawl Fishery

Fishing gear type: Trawl

Current category: Category II*

Basis for current classification on the LOF: The total mortality and serious injury of common dolphins (Western North Atlantic [WNA] stock), long-finned pilot whales (WNA stock), Risso's dolphins (WNA), and short-finned pilot whales (WNA stock) in this fishery is greater than 1% and less than 50% of each of the stocks' PBR.

Current list of marine mammal species/stocks injured/killed (a ⁽¹⁾ indicates those stocks driving the fishery's classification): Bottlenose dolphin, WNA offshore; Common dolphin, Western North Atlantic (WNA)⁽¹⁾; harbor seal, WNA; Long-finned pilot whale, WNA⁽¹⁾; Risso's dolphin, WNA⁽¹⁾; Short-finned pilot whale, WNA⁽¹⁾; White-sided dolphin, WNA.

Estimated number of current participants: 1,388

Take Reduction Teams/Plans that affect this fishery: Atlantic Trawl Gear Take Reduction Team (ATGTRT).

Year added to the LOF: 1996

Category when originally listed: Category III

Basis for original classification on the LOF: This fishery was listed as Category III because there was no observer, logbook, or stranding data available for the fishery at the time.

Estimated number of participants when originally listed: >1,000

Past names, if any: Mid-Atlantic mixed species trawl until 2005.

Gear description/method for fishing: This fishery uses bottom trawl gear. Gear types such as flynets utilized in the mid-Atlantic region. The Mid-Atlantic bottom trawls using flynets target species through nearshore and offshore components that operate along the east coast of the mid-Atlantic United States. Flynets typically range from 80–120 ft (24–36.6 m) in headrope length, with wing mesh sizes of 16–64 in (41–163 cm), following a slow 3:1 taper to smaller mesh sizes in the body, extension, and codend sections of the net.

Target species: Target species include, but are not limited to: bluefish, croaker, monkfish, summer flounder (fluke), winter flounder, silver hake (whiting), spiny dogfish, smooth dogfish, scup, and black sea bass. The nearshore fishery targets Atlantic croaker, weakfish, butterfish, harvestfish, bluefish, menhaden, striped bass, kingfish species, and other finfish species; the deeper water fisheries target bluefish, Atlantic mackerel, *Loligo* squid, black sea bass, and scup.

Spatial/temporal distribution of effort: The fishery occurs year-round from all waters due east from the NC/SC border to the EEZ and north to Cape Cod, MA in waters west of 70° W. long. In areas where 70° W. long. is east of the EEZ, the EEZ serves as the eastern boundary. The nearshore fishery operates from October to April inside of 30 fathoms (180 ft; 55 m) from NJ to NC. Flynet fishing is no longer permitted in Federal waters south of Cape Hatteras in order to protect weakfish stocks. The offshore component operates from November to April outside of 30 fathoms (180 ft; 55 m) from the Hudson Canyon off NY, south to Hatteras Canyon off NC.

* The fishery is classified based on mortalities and serious injuries of a marine mammal stock greater than 1% and less than 50% (Category II) of the stock's Potential Biological Removal (PBR) level.

Levels of observer coverage each year[†]:

- From 1996-2008, the estimated observer coverage (measured in trips) for the Mixed Groundfish bottom trawl was 0.24%, 0.22%, 0.15%, 0.14%, 1%, 1%, 1%, 1%, 3%, 3%, 2%, 3% and 3%, respectively.
- From 1996-2008, the estimated observer coverage (measured in trips) for the *Illex* fishery was 3.7%, 6.21%, 0.97%, 2.84%, 11.11%, 0%, 0%, 8.74%, 5.07%, 6%, 15%, 14%, and 5% respectively.
- From 1996-2008, the estimated observer coverage (measured in trips) for the *Loligo* fishery was 0.37%, 1.07%, 0.72%, 0.69%, 0.61%, 0.95%, 0.42%, 0.65%, 5.07%, 4%, 3%, 2% and 2%, respectively.
- From 1997- 2008, estimated observer coverage (measured in trips) for the domestic Atlantic Mackerel fishery was 0.81%, 0%, 1.14%, 4.90%, 3.43%, 0.97%, 5.04%, 18.61%, 0%, 3%, 2%, and 0% respectively.
- Mandatory 100% observer coverage is required on any Joint Venture (JV) fishing operation. The most recent Atlantic Mackerel JV fishing activity occurred in 1998 and 2002.

Management and regulations: There are at least two distinct components to this fishery. One is the mixed groundfish bottom trawl fishery. It is managed by several federal and state FMPs that range from Massachusetts to North Carolina. The relevant FMPs include, but may not be limited to, Monkfish (FR 68(81), 50 CFR Part 648); Spiny Dogfish (FR 65(7), 50 CFR Part 648); Summer Flounder, Scup, and Black Sea Bass (FR 68(1), 50 CFR part 648); and Northeast Skate Complex (FR 68(160), 50 CFR part 648). The second major component is the squid, mackerel, butterfish fishery. This component is managed by the federal Squid, Mackerel, Butterfish FMP. The *Illex* and *Loligo* Squid Fisheries are managed by moratorium permits, gear and area restrictions, quotas, and trip limits. The Atlantic Mackerel and Atlantic Butterfish Fisheries are managed by an annual quota system.

History of Changes on the LOF

2012 LOF:

- Added Risso's dolphin (WNA stock) to the list of species/stocks killed/injured. In 2010, fifteen Risso's dolphins were observed killed in this fishery: one was killed during a bottom otter trawl trip targeting summer flounder in April 2010; one was killed during a bottom otter trawl trip targeting monkfish in April 2010; eight were killed in a bottom otter trawl trip targeting *Illex* squid in June 2010; and five were killed in bottom otter trawls again targeting *Illex* squid in October 2010. These recorded takes occurred west of 70° W. long., which serves as the boundary between the Northeast and Mid-Atlantic bottom trawl fisheries. These mortalities were observed and reported in the April 2010, June 2010, and October 2010 NEFOP Incidental Take Reports (<http://www.nefsc.noaa.gov/fsb/>). The total annual estimated average fishery-related mortality or serious injury to this stock during 2004-2008 was 20 Risso's dolphins (2010 SAR). However, no takes were attributed to the Mid-Atlantic bottom trawl fishery during this time. The fifteen takes that occurred during 2010 in this fishery represents more than 1 percent of the stock's PBR of 124. Therefore NMFS also included the notation "†" next to this stock in Table 2 to indicate that the stock is driving the Category II classification of the fishery.
- Added harbor seal (WNA stock) to the list of species/stocks killed/injured. In March 2009, a harbor seal was killed in a bottom trawl targeting *Loligo* squid and operating west of 70° W. long., which serves as the boundary between the Northeast and Mid-Atlantic bottom trawl fisheries. The PBR for this stock is unknown (2010 SAR); therefore, it is unknown what percentage of PBR this mortality represents. However, given the most recent PBR reported for this stock was 2,746 (2009 SAR), it is unlikely that this one mortality equates to a rate of annual serious injury and mortality that exceeds 1 percent of PBR. Therefore, this stock is not driving the classification of this fishery. This mortality was observed and reported in the March 2009 NEFOP Incidental Take Reports (<http://www.nefsc.noaa.gov/fsb/>).
- Clarified the spatial boundary to read as follows: "all waters due east from the NC/SC border to the EEZ and north to Cape Cod, MA in waters west of 70° W. long."
- Estimated number of participants updated from 1,182 to 1,388.

2011 LOF:

[†] Observer coverage levels include the latest information reported in the most current final Stock Assessment Report (SAR).

- Added bottlenose dolphin (WNA offshore stock) to the list of species/stocks killed/injured. One freshly dead bottlenose dolphin taken in 2009, during a trip targeting *Loligo* squid, and three freshly dead bottlenose dolphins taken in 2009 during a trip targeting *Illex* squid. The estimated annual serious injury and mortality rate based on these four mortalities is 0.8 animals/year, or 0.14 percent of the stock's PBR level of 566.
- Incorporated the participants of the "Mid-Atlantic flynet" fishery into this fishery. Bottom otter trawl nets include a variety of net types, including flynets; therefore, the term "flynet" does not refer to a unique gear type and is better suited to be listed within the "Mid-Atlantic bottom trawl" fishery definition. Additionally, flynets are not used to target *Illex* squid offshore.
- Estimated number of participants updated from >1,000 to 1,182.

2009 LOF:

- White-sided dolphin (WNA) added the list of species/stocks killed/injured in this fishery based on information provided in the 2007 SAR stating that one Atlantic white-sided dolphin incidental take was observed in 1997 and another in 2005
- Modified the fishery description based on a public comment received on the 2008 LOF that the "Mid-Atlantic mid-water trawl fishery" was inaccurately characterized as targeting *Illex* squid, *Logligo* squid, and Atlantic butterfish. NMFS determined that the gear targeting these species is better characterized by this fishery, the "Mid-Atlantic bottom trawl fishery." Therefore, NMFS replaced the fishery description with: "The Category II 'Mid-Atlantic bottom trawl fishery' uses bottom trawl gear to target species including but not limited to: bluefish, croaker, monkfish, summer flounder (fluke), winter flounder, silver hake (whiting), spiny dogfish, smooth dogfish, scup, black sea bass, Atlantic cod, haddock, pollock, yellowtail flounder, witch flounder, windowpane flounder, summer flounder, American plaice, Atlantic halibut, redfish, red hake, white hake, ocean pout, skate spp, Atlantic mackerel, *Loligo* squid, *Illex* squid, and Atlantic butterfish. These fisheries occur year round from Cape Cod, MA, to Cape Hatteras, NC, in waters west of 72° 30' W. long. and north of a line extending due east from the NC/SC border. While the gear characteristics for the mixed groundfish bottom trawl gear have not yet been determined, the *Illex* and *Loligo* squid fisheries are dominated by small-mesh otter trawls. The *Loligo* fishery occurs mostly offshore near the edge of the continental shelf during fall and winter months (October to March) and inshore during spring and summer (April-September) though landings of *Loligo* are also taken by inshore pound nets and fish traps in the spring and summer. The fishery for *Illex* occurs offshore, mainly in continental shelf and slope waters during summer months (June-September). The *Illex* and *Loligo* fisheries are managed by moratorium permits, gear and area restrictions, quotas, and trip limits. Atlantic butterfish are mainly caught as bycatch in the directed squid and mackerel fisheries and observer data has suggested that there is a significant amount of butterfish discarding that occurs at sea."

2006 LOF: Added a superscript "1" IN Table 2 after common dolphin (WNA), long-finned pilot whale (WNA), and short-finned pilot whale (WNA), indicating that these stocks are driving the categorization of the fishery.

2005 LOF:

- Elevated this fishery from a Category III to a Category II based on interactions with common dolphins (WNA) and long- and short-finned pilot whales (WNA). The serious injury and mortality rate, along with the PBR levels, were calculated for both long- and short-finned pilot whales (WNA) as one species/stock because observers cannot reliably identify which species is killed/injured as a result of the similarity in appearance. From 1997-2001, the level of serious injury and mortality for pilot whales (WNA) in this fishery was 46 animals/year, or 48.59% of PBR (PBR=108). The level of serious injury and mortality for common dolphins (WNA) in this fishery was 19 animals/year, or 8.37% of PBR (PBR=227).
- Added to the list of species/stocks killed/injured in this fishery: Common dolphin (WNA), long-finned pilot whale (WNA), and short-finned pilot whale (WNA) based on observer documented mortalities and serious injuries were more than 1% but less than 50% of each stock's PBR.
- Renamed this fishery from the "Mid-Atlantic mixed species trawl" to the "Mid-Atlantic bottom trawl" to encompass similar bottom trawl fisheries operating in the region.

2001 LOF: Incorporated the Category III "Bluefish, croaker, flounder trawl fishery" as part of this fishery because bluefin, croaker, and flounder may not always be the target species of that fishery. Incorporating the "Bluefish, croaker, flounder trawl fishery" into this more general trawl fishery ensured that this fishing activity was covered by the LOF.