Northeast Bottom Trawl Fishery

Fishing gear type: Trawl

Current category: Category II*

Basis for current classification on the LOF: The total annual mortality and serious injury of white-sided dolphins (Western North Atlantic [WNA] stock) in this fishery is greater than 1% and less than 50% of the stock's Potential Biological Removal (PBR) level.

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, WNA; Gray seal, WNA; Harbor porpoise, Gulf of Maine/Bay of Fundy (GME/BF); Harbor seal, WNA; Harp seal, WNA; Long-finned pilot whale, WNA; Short-finned pilot whale, WNA; White-sided dolphin, WNA⁽¹⁾.

Estimated number of current participants: 2,584

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 categorized as a Category III based on 1989-1993 observer data. The annual mortality and serious injury was more than 50% of PBR for striped dolphins, coastal bottlenose dolphins, and pilot whales. This fishery would have been a Category I; however, because the observer coverage was low and the fishery was so diverse, NMFS could not extrapolate observed interactions over the entire fishery (i.e., the estimated mortality and serious injury levels were statistically weak). NMFS anticipated obtaining additional information from other observer programs that could show that future reclassification was warranted.

Estimated number of participants when originally listed: 1,052

Past names, if any: "North Atlantic bottom trawl fishery" until 2005.

Gear description/method for fishing: This fishery uses bottom trawl gear.

Target species: This fishery targets species including, but not limited to: Atlantic cod, haddock, pollock, yellowtail flounder, winter flounder, witch flounder, American plaice, Atlantic halibut, redfish, windowpane flounder, summer flounder, spiny dogfish, monkfish, silver hake, red hake, white hake, ocean pout, and skate species.

Spatial/temporal distribution of effort: The fishery operates year-round, with a peak from May-July. The Northeast bottom trawl fishery includes all U.S. waters south of Cape Cod, MA that are east of 70° W and extending south to the intersection of the Exclusive Economic Zone (EEZ) and 70° W (approximately 37° 54' N), as well as all U.S. waters north of Cape Cod to the Maine-Canada border.

Levels of observer coverage each year[†]: From 1994-2008, estimated observer coverage (measured in trips) was 0.4%, 1.1%, 0.2%, 0.2%, 0.1%, 0.3%, 1%, 1%, 3%, 4%, 5%, 12%, 6%, 6%, and 8% respectively.

^{*} 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.

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

Management and regulations: The fishery is primarily managed by TACs, individual trip limits (quotas), effort caps (limited number of days at sea per vessel), time and area closures, and gear restrictions under several interstate and federal FMPs

History of Changes on the LOF

2012 LOF:

- Added bottlenose dolphin (WNA offshore stock) to the list of species/stocks killed/injured. From 2009-2010, five bottlenose dolphins (WNA offshore stock) were killed in this fishery: One bottlenose dolphin was killed during a trip targeting groundfish in April 2009; three were killed on during a trip targeting *Illex* squid in August 2009; and one was killed in a bottom otter trawl targeting *Loligo* squid in March 2010. The most recent total mean estimated annual fishery-related mortality for this stock was unknown (2010 SAR), but these 5 mortalities in one year represented less than 1 percent of the stock's PBR of 566. Further, corrected an error in the 2011 LOF where the three August 2009 takes were incorrectly attributed to the Category II "Mid-Atlantic bottom trawl" fishery. However, these three takes occurred east of 70° W. long., which serves as the boundary between the Northeast and Mid-Atlantic bottom trawl fisheries, and therefore should be attributed to the "Northeast bottom trawl" fishery. These mortalities were observed and reported in the April 2009, August 2009 and March 2010 Northeast Fisheries Observer Program Incidental Take Reports (http://www.nefsc.noaa.gov/fsb/).
- Added gray seal (WNA stock) to the list of species/stocks killed/injured in the Category II "Northeast bottom trawl" fishery. In November 2009, a gray seal was killed in a bottom trawl targeting *Loligo* squid and operating east of 70° W. long., which serves as the boundary between the Northeast and Mid-Atlantic bottom trawl fisheries. The PBR for this stock was undetermined because the minimum population size is unknown (2010 LOF); therefore, it was unknown what percentage of PBR this mortality represents and whether the take is driving the Category II classification of the fishery. However, the stock's abundance appeared to be increasing in U.S. waters and the total U.S. fishery-related serious injury and mortality was considered insignificant and approaching a zero mortality or serious injury rate (2010 SAR). This mortality was observed and reported in the November 2009 NEFOP Incidental Take Reports (http://www.nefsc.noaa.gov/fsb/).
- Clarified the spatial boundary of this fishery to read as follows: "The Northeast bottom trawl fishery includes all U.S. waters south of Cape Cod, MA that are east of 70° W and extending south to the intersection of the Exclusive Economic Zone (EEZ) and 70° W (approximately 37° 54' N), as well as all U.S. waters north of Cape Cod to the Maine-Canada border."
- Estimated number of participants updated from 1,635 to 2,584.

2011 LOF:

- Updated the fishery description to update the FMPs applicable to the fishery, stating "The fishery is primarily managed by TACs, individual trip limits (quotas), effort caps (limited number of days at sea per vessel), time and area closures, and gear restrictions under several interstate and federal FMPs."
- Estimated number of participants updated from 1,052 to 1,635. This estimation may be an inflation of actual effort; however, it represents the potential effort for the fishery, given the multiple gear types several state permits may allow for.

<u>2010 LOF:</u> Harbor porpoise (GME/BF) added to the list of species/stocks killed/injured in this fishery. The final 2008 SAR indicates that there have been several mortalities from 2003-2008 (included 1 dead in 2003, 4 in 2005, and 1 in 2006). Estimates have not been generated or reported in the SARs for the percentage of the stock's PBR taken in this fishery.

2009 LOF:

- Added harbor seal (WNA) to the list of species/stocks killed/injured in this fishery based on information
 presented in the 2007 Stock Assessment Reports (SARs) stating that two harbor seal mortalities were
 observed from 2001-2005.
- Removed harbor porpoise (GME/BF) from the list of species/stocks killed/injured in this fishery. The inclusion of this stock was a typographical error. NMFS proposed to add the stock in 2005, but did not do

so based on a public comment stating that the animal taken in the fishery was badly decomposed and the trawl duration was only 5 hours. NMFS has never considered this stock to be taken in this fishery; however, the stock inadvertently retained on the LOF.

2007 LOF: To correct a typographical error, the subscript "1" was removed from harp seal (WNA) on the list of species killed/injured (Table 2 in the LOF) because this stock does not drive the fishery's classification as a Category II

2006 LOF:

- Deleted striped dolphin (WNA) and bottlenose dolphin (WNA offshore) from the list of species killed/injured in this fishery because no interactions were documented in the previous 5 years.
- Added a superscript "1" in Table 2 after white-sided dolphin (WNA) and harp seal (WNA), indicating that these stocks were driving the categorization of the fishery. (The "1" after harp seal was a typographical error corrected in the 2007 LOF.)

2005 LOF:

- Elevated the fishery from a Category III to a Category II based on documented interactions with Atlantic white-sided dolphins (WNA). There were 12 mortalities or serious injuries in this fishery during 2003, or 3.3% of the stock's PBR (PBR=364).
- Renamed the fishery from the "North Atlantic bottom trawl fishery" to the "Northeast bottom trawl fishery" to encompass similar bottom trawl fisheries operating in the region.
- Harp seals (GME/BF) added to the list of species/stocks killed/injured in this fishery based on interactions documented in a recent Stock Assessment Report (SAR).
- Proposed to add harbor porpoise (GME/BF) to the list of species/stocks killed/injured in this fishery based on a single mortality in 2003. Did not add this stock to the list based on a public comment that the observed mortality was a badly composed animal and trawl duration was only 5 hours; therefore, the animal was likely dead before entering the trawl. This was supported by the SAR.

<u>1999 LOF:</u> Common dolphin (WNA) added to the list of species/stocks killed/injured in this fishery based on three mortalities from 1991-1995 (as reported in the 1997 SAR, but was not explained in the 1999 LOF). The average annual mortality and serious injury was 28.4 animals/year, or 18.3% of PBR (PBR=155).