

Species of Concern



Atlantic White-sided Dolphin
Lagenorhynchus acutus

SIZE: 6.5–9.0 ft, 364–550 lbs
 BODY: Stocky, torpedo-shaped body; sickle-shaped and relatively tall dorsal fin; thick tail stock; dark back with lighter grey flanks and white belly. Distinguishing features include sharply defined narrow white patch on the side beginning below the dorsal fin extending backward towards the tail until it terminates abruptly; sharply defined yellow or tan patch extending upward but not over the dorsal ridge of the tail; black ring around the eyes.
 DIET: Variety of fish, octopus, and squid.
 HABITAT: Temperate and sub-polar waters of the North Atlantic, primarily in continental shelf waters to the 100 m depth contour. The species inhabits waters from central West Greenland to North Carolina (about 35°N) and perhaps as far east as 43°W. During January to May, a few white-sided dolphins are found from Georges Bank to Jeffreys Ledge (off New Hampshire), with even lower numbers south of Georges Bank, as documented by a few strandings collected on beaches of Virginia and North Carolina. These observations appear to represent the southern extent of the species' range. From June through September, large numbers of white-sided dolphins are found from Georges Bank to the lower Bay of Fundy. From October to December, white-sided dolphins occur at intermediate densities from southern Georges Bank to southern Gulf of Maine. Sightings south of Georges Bank, particularly around Hudson Canyon, occur year round but at low densities.



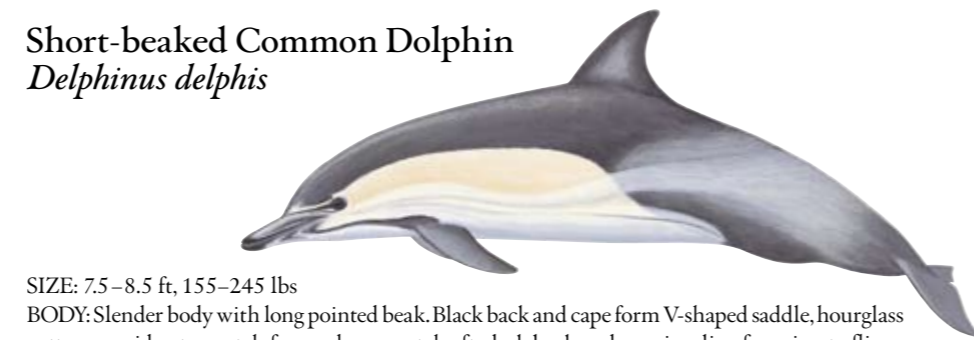
A female/calf pair of white-sided dolphins.
 Photo: Amy S. Van Atten (NOAA/NEFSC)



Short-beaked common dolphin photo: Ari Friedlaender (Duke University)

Short-beaked Common Dolphin

Delphinus delphis



SIZE: 7.5–8.5 ft, 155–245 lbs
 BODY: Slender body with long pointed beak. Black back and cape form V-shaped saddle, hourglass pattern on sides: tan patch forward, gray patch aft; dark beak and eye ring, line from jaw to flipper.
 DIET: Variety of small schooling fish and squid.
 HABITAT: In the North Atlantic, common dolphins occur over the continental shelf along the 200–2000 m isobaths and over prominent underwater topography from 50°N to 40°S latitude. In waters off the northeastern USA coast common dolphins are distributed along the continental slope (100 to 2,000 m) and are associated with Gulf Stream features. During mid-January to May, they occur from Cape Hatteras northeast to Georges Bank (35° to 42°N). Common dolphins move onto Georges Bank and the Scotian Shelf from mid-summer to autumn. Common dolphins are occasionally found in the Gulf of Maine. The species is less common south of Cape Hatteras, although herds have been reported as far south as eastern Florida.



A pod of long-finned pilot whales including a male; note the lack of a saddle behind the dorsal fin.

Photo: Amy S. Van Atten (NOAA/NEFSC)

There are two species of pilot whales in the western Atlantic—the Atlantic or long-finned pilot whale (*Globicephala melas*) and the short-finned pilot whale (*Globicephala macrorhynchus*). These species are difficult to differentiate from one another at sea. Long-finned pilot whales are found primarily in the northern portion of the North Atlantic and short-finned pilot whales are found primarily in the southern portion, but the two species overlap in the mid-Atlantic. Habitat preferences are perhaps associated with water depth or temperature. Pilot whales are distributed principally along the continental shelf edge off the northeast U.S. coast in winter and early spring. In late spring, pilot whales move onto Georges Bank and into the Gulf of Maine and more northern waters, and remain in these areas through late autumn. Pilot whales tend to occupy areas of high relief or submerged banks. They are also associated with the Gulf Stream wall and thermal fronts along the continental shelf edge.

Long-finned Pilot Whale

Globicephala melas



SIZE: 16–18 ft, 4,000–5,000 lbs
 BODY: Long robust body, a thick tail stock, and a head with prominent melon and slight beak. Sickle-shaped flippers sharply pointed and long (one-fifth of body length). Body is black or dark gray, with a prominent white anchor patch on belly between flippers. Back lacks the saddle behind the dorsal fin, which is found on the short-finned pilot whale.
 DIET: Principally squid and some fish.
 HABITAT: Pelagic continental shelf edge and slope, submerged banks; associated with the northern portion of the Gulf Stream. The long-finned pilot whale is distributed from North Carolina to North Africa (and the Mediterranean) and north to Iceland, Greenland and the Barents Sea.



Short-finned Pilot Whale

Globicephala macrorhynchus

SIZE: 15–18 ft, 3,000–4,000 lbs
 BODY: Long robust body, bulbous head with prominent melon and slight beak, flippers gently curved, pointed and less than one-sixth of body length, very large dorsal fin, all black or brownish black except for diffuse white anchor patch on belly between flippers and may have a faint saddle behind the dorsal fin.
 DIET: Squid and fish.
 HABITAT: Tropical, pelagic to coastal; in the Gulf Stream. The short-finned pilot whale is distributed worldwide in tropical to warm temperate waters. The northern extent of the range of this species within the U.S. Atlantic Exclusive Economic Zone is generally thought to be Delaware Bay.



Short-finned pilot whale head rise

Photo: Ari Friedlaender (Duke Univ.)

OTHER SPECIES
 In addition to pilot whales, Atlantic white-sided dolphin, and common dolphin, Atlantic trawl fisheries are known to interact with several other species of marine mammals including harbor porpoise and minke whale, and potentially grey, harbor, and harp seals.

Harbor Porpoise

Phocoena phocoena

SIZE: 4.5–6 ft, 125–145 lbs
 BODY: Smallest cetacean in the U.S. Atlantic. Stocky with small pointed flippers, no beak. Dark gray or black on back with lighter sides and white belly. Dorsal fin is small, triangular; located slightly aft of mid-body.
 DIET: Schooling fish and invertebrates. HABITAT: Coastal, cold waters usually less than 650 ft deep.



Minke Whale

Balaneoptera acutorostrata



SIZE: Adults to 29–33 ft, 22,000 lbs, females slightly larger than males.
 BODY: Smallest baleen whale in North Atlantic. Small sleek body, dark gray. Lighter underside often with pale chevron on back behind head. White band on flippers. Head sharply pointed with flat rostrum.
 DIET: Variety of schooling fish (herring, sand lance, capelin, cod, mackerel), squid, and zooplankton.
 HABITAT: Common and widely distributed in Atlantic waters; most abundant in New England during spring and summer months. Like most baleen whales, minke whales generally occupy the continental shelf proper, rather than the continental shelf edge region.

Harbor Seal

Phoca vitulina

SIZE: Males 4.9–6.25 ft at 370 lbs; females 4.9–5.6 ft, 220–290 lbs
 BODY: Short, spindle-shaped body with variable dark to light coloration consisting of spots and blotches.
 DIET: Highly varied including demersal and schooling fish, squid, and octopus.
 HABITAT: A variety of coastal habitats including estuaries, sandy to rocky beaches, fjords, and ice floes.



Harp Seal

Pagophilus groenlandicus

SIZE: Males 5.5–6.25 ft, 280–310 lbs; females to 5.9 ft, 290 lbs
 BODY: Silvery with black wish-bone or harp-shaped marking on back of mature animals, dark head.
 DIET: Schooling fish and invertebrates. HABITAT: Coastal, cold waters usually less than 650 ft deep.



Grey Seal

Halichoerus grypus

SIZE: Males to 7.5 ft, 660–770 lbs; females to 6.6 ft., 330–440 lbs
 BODY: Males dark brown to black with scars and light blotches; females light gray with darker blotches.
 DIET: Demersal and benthic fish, squid, and octopus; herring in some areas.
 HABITAT: Coastal, cold waters; sandy beaches to shore-fast ice and pack-ice floes.



THE NORTHEAST FISHERY OBSERVER PROGRAM (NEFOP)

This program collects data and biological samples during commercial fishing trips for scientific and fisheries management purposes. Data collected include gear characteristics, fishing location and methods and catch information. Fishery Observers are also responsible for documenting any protected species interactions and collecting biological samples including biopsy samples for genetic analysis for species identification and other purposes. Observer coverage is authorized under the MMPA, the Endangered Species Act (ESA), and the Magnuson-Stevens Act.

NMFS has the authority to place observers on any Category I or II vessel. The purpose of this program is to:

- obtain reliable estimates of incidental serious injury and mortality of marine mammals
- evaluate the reliability of reports submitted by vessel owners and operators
- identify changes in fishing methods/technology that may increase or decrease incidental injury or mortality.

Observer data is an essential component of the management of marine fisheries and protected resources.

The data collected are used to identify fisheries that interact with protected species, to estimate the take of protected resources, and to monitor the status and health of marine mammals and sea turtles. These data are critical in making management decisions to mitigate bycatch while ensuring bycatch reduction methods address the problem without overly impacting the fishing industry.

The selection of vessels for observer coverage is done fairly and evenly across the particular fishery/fleet. The distribution of observers is generally based on historic information of takes in the area, the type of fishing gear used, the season, and amount of fishing effort.

VOLUNTARY MEASURES TO REDUCE TAKES IN ATLANTIC TRAWL FISHERIES

The ATGTRT identified the following measures that may be employed by fishing vessels to reduce the risk of marine mammal take in areas with documented elevated interactions:

- reducing the numbers of turns made by the fishing vessel and tow times while fishing at night; and
- increasing radio communications between vessels about the presence and/or incidental capture of a marine mammal to alert other fishermen of the potential for additional interactions in the area.

TERMINOLOGY DEFINED BY THE MMPA

Strategic Stock—a marine mammal stock:

- for which the level of direct human-caused mortality exceeds the PBR level;
- which, based on the best available scientific information, is declining and is likely to be listed as a threatened species under the ESA within the foreseeable future; or
- which is listed as a threatened or endangered species under the ESA, or is designated as depleted under the MMPA.

Take—“to hunt, harass, capture, or kill” any marine mammal or attempt to do so.

Potential Biological Removal (PBR) level—the maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population.

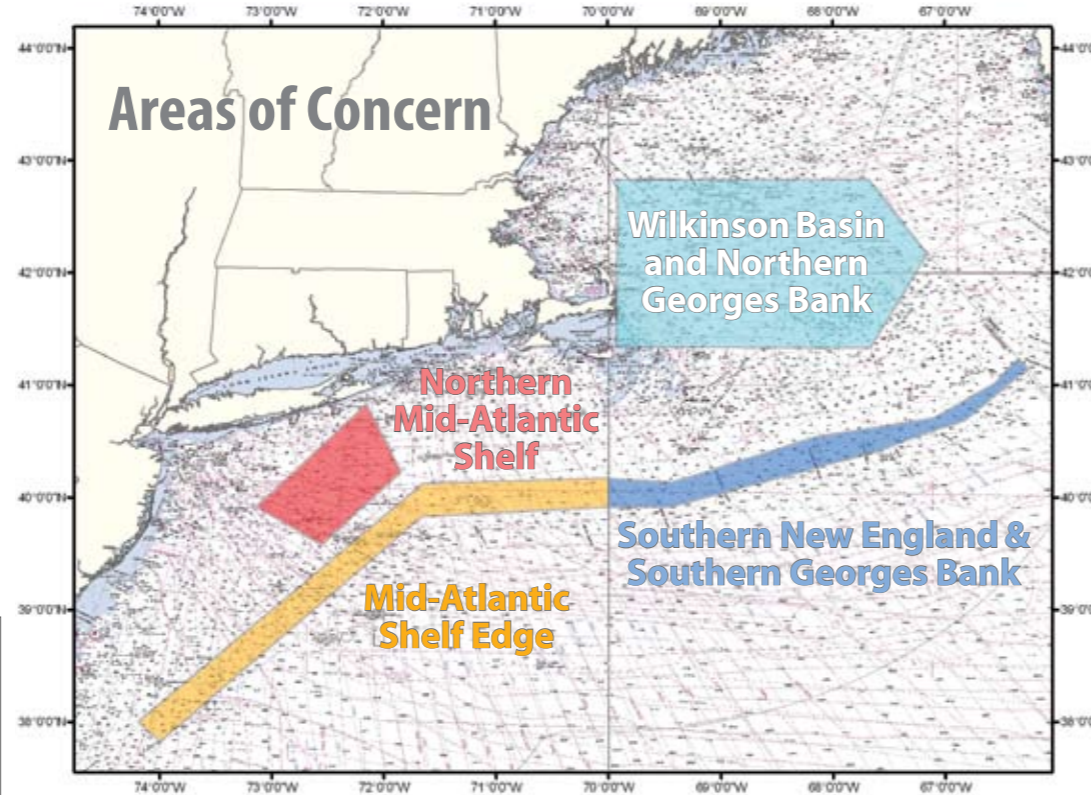
Zero Mortality Rate Goal (ZMRG)—a requirement that the level of incidental mortality and serious injury of marine mammals be reduced to insignificant levels approaching a zero rate.

List of Fisheries—classifies U.S. commercial fisheries annually into one of three categories, based on the relative frequency of incidental serious injuries and mortalities of marine mammals in each fishery:

- Category I fisheries have frequent injuries and mortalities incidental to commercial fishing;
- Category II fisheries have occasional serious injuries and mortalities;
- Category III fisheries have a remote likelihood or no known serious injuries or mortalities.

ADDITIONAL INFORMATION

List of Fisheries www.nmfs.noaa.gov/pr/interactions/lof/
 Take Reduction Teams www.nmfs.noaa.gov/pr/interactions/trt
 Marine Mammal Authorization Program www.nero.noaa.gov/prot_res/mmap/certificate.html
 Or call NOAA/NMFS Protected Resources Division at 978-281-9328.



Bottom and mid-water trawl gear operating along the shelf edge of **Southern New England and Southern Georges Bank** are areas of concern for risk of incidental capture of pilot whales and common dolphins. White-sided dolphins are also present. Population density in these areas varies throughout the year. However, common dolphin bycatch has occurred most frequently during the 3rd and 4th quarters followed by pilot whale bycatch during the 2nd quarter (April) of the calendar year in depths between 55–137 fathoms (100–250 meters).

Bottom trawl gear operating along the **Mid-Atlantic Shelf Edge** is an area of concern for risks of incidental capture of pilot whales and common dolphins. White-sided dolphins are also present in this area. Population density of the animals in these areas varies throughout the year. However, common dolphin bycatch has occurred most frequently during the 1st (March) and 4th quarters (December) followed by pilot whale bycatch during the 2nd calendar quarter in depths between 55–273 fathoms (100–500 meters).

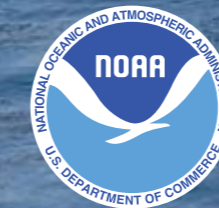
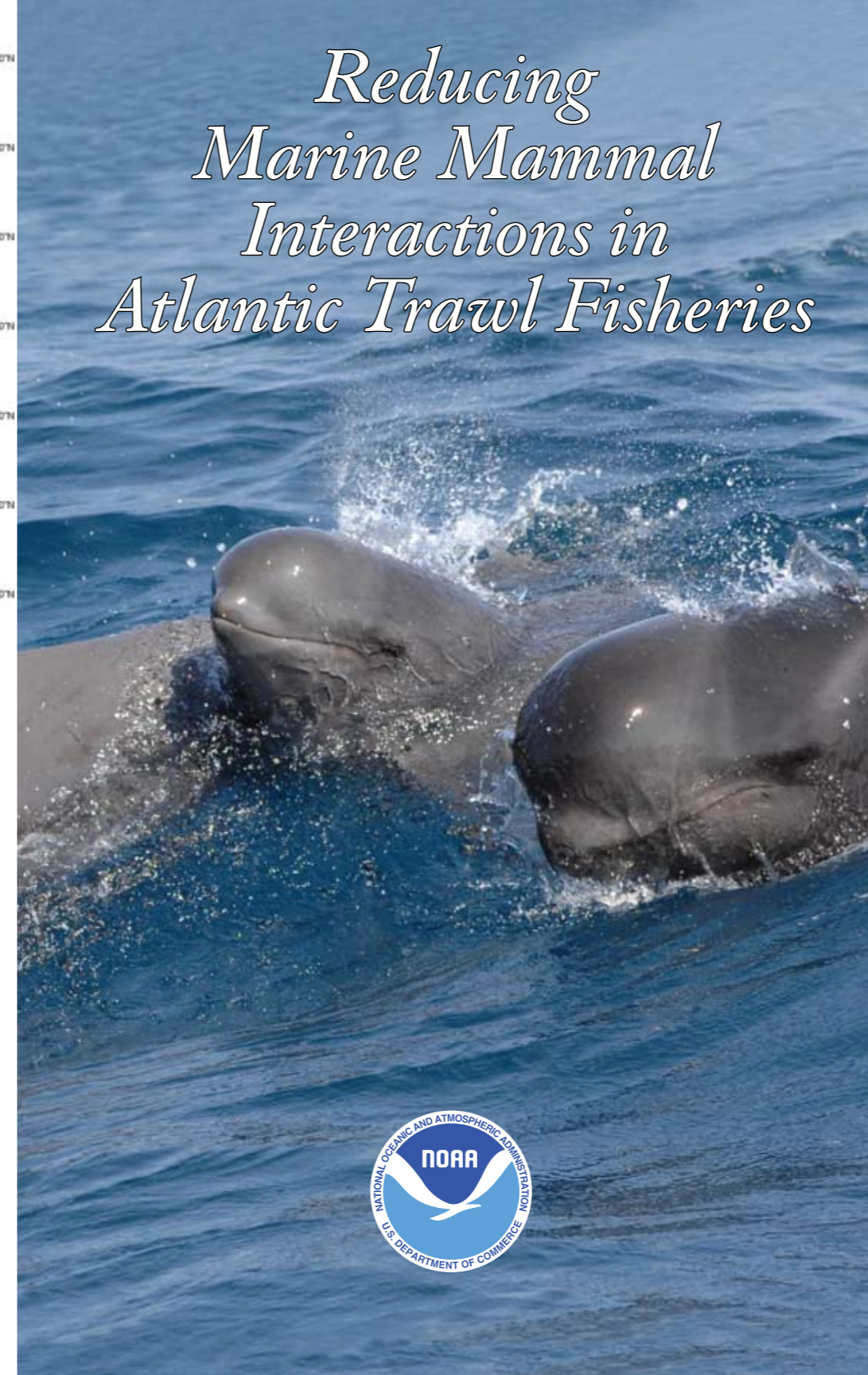
Bottom and mid-water trawl gear operating in **Wilkinson Basin and Northern Georges Bank** are areas of concern for risk of incidental capture of white-sided dolphins, pilot whales and common dolphins. Population density in these areas varies throughout the year. However, white-sided dolphin bycatch occurs most frequently during the 1st and 2nd quarters (March/April), followed by pilot whale bycatch during the 3rd and 4th quarters and common dolphin bycatch during the 1st and 4th quarters of the calendar year in shelf edge areas with depths between 55–137 fathoms (100–250 meters).

Mid-water trawl gear operating on the **Northern Mid-Atlantic Shelf** is an area of concern for risk of incidental capture of white-sided dolphins. Common dolphins and pilot whales are also present in this area. Population density of the animals in this area varies throughout the year. However, white-sided dolphin bycatch has occurred most frequently during the 1st quarter (February) of the calendar year in depths between 27–41 fathoms (50–75 meters).



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Reducing Marine Mammal Interactions in Atlantic Trawl Fisheries



THE MARINE MAMMAL PROTECTION ACT — A BRIEF OVERVIEW

In 1972, Congress enacted the Marine Mammal Protection Act (MMPA), establishing a national policy to prevent marine mammal population stocks from declining to the point that they are no longer a functioning component of the marine ecosystem. The MMPA prohibits, with certain exceptions, the “take” of marine mammals in U.S. waters and by U.S. citizens on the high seas.

Section 117 requires NOAA’s National Marine Fisheries Service (NMFS) to develop Stock Assessments Reports (SARs) for all marine mammal stocks in U.S. waters. These assessments provide information used in the management of marine mammal stocks and commercial fisheries that incidentally take marine mammals. The SARs include descriptions of a stock’s geographic range; population abundance estimates; current population trends; potential biological removal (PBR) levels; and estimates of annual human-caused mortality and serious injury due to commercial fisheries interactions. The information is used, in part, to develop the annual “List of Fisheries” (LOF) and Take Reduction Plans (TRP) and to evaluate the progress of fisheries towards achieving the MMPA’s “Zero Mortality Rate Goal” (ZMRG).

Section 118 establishes a method for managing incidental interactions between marine mammals and commercial fisheries. Take reduction plans (TRPs) are developed to identify actions necessary to conserve and protect strategic marine mammal stocks that interact with Category I and II fisheries.

The immediate goal of a TRP is to reduce the incidental injury or mortality of marine mammals from commercial fishing to levels less than PBR. The long-term goal is to reduce the incidental injury and mortality to insignificant levels approaching ZMRG, taking into account the economics of the fishery, the availability of existing technology, and existing state or regional fishery management plans.

Take Reduction Teams (TRTs) consisting of representatives from the fishing industry, fishery management councils, state and federal resource management agencies, the scientific community and conservation organizations develops the TRP while NMFS is responsible for its implementation. After a TRP is finalized, it is monitored and updated as necessary. Take reduction plans must recommend regulatory or voluntary measures for the reduction of incidental mortality and serious injury.

MARINE MAMMAL AUTHORIZATION PROGRAM (MMAP)

The MMPA requires all vessels participating in Category I and II to register under the MMAP. The MMPA provides an authorization for commercial fishermen from the general taking prohibitions of the MMPA.

The holder of a valid state or federal permit for a fishery that falls under one or more of the Category I or II fisheries in the Northeast region is automatically registered. While fishing in a Category I or II fishery, one must comply with the terms and conditions of the Authorization Certificate. These conditions include:

- Keeping the certificate, or a copy, on board the vessel. This certificate, in combination with a valid state or federal fishing permit, serves as authorization under the MMPA to incidentally take marine mammals during commercial fishing operations. In the case of non-vessel fisheries, the certificate, or a copy, must be in the possession of the person in charge of the operation.
- Reporting all injuries and mortalities of marine mammals within 48 hours of returning from the trip during which the takes occurred using the mortality/injury reporting form.
- Taking an observer aboard your vessel, if requested by NMFS or its designate.
- Complying with any take reduction plans or emergency regulations that apply to your specific fishery.

Only Category I and II commercial fishery participants registered under the MMAP are exempted from MMPA’s prohibition on the taking of non-endangered/threatened marine mammals incidental to their fishing operations. No takes of endangered or threatened marine mammals listed under the ESA are authorized in the Atlantic. If registered in the program there are no consequences for reporting an injured or dead marine mammal. All fishermen, regardless of the category of fishery or whether an observer is on board, are required to report incidental takes of marine mammals.

ATLANTIC TRAWL GEAR TAKE REDUCTION TEAM (ATGTRT)

In September 2006, NMFS convened the ATGTRT under the MMPA. The ATGTRT intends to address the injury and incidental mortality of long-finned pilot whales, short-finned pilot whales, common dolphins, and Atlantic white-sided dolphins in several trawl gear fisheries operating in the Atlantic Ocean. These marine mammal species are known to interact with trawl fisheries. Presently, none of the marine mammal stocks under consideration by the ATGTRT are classified as a “strategic stock” nor do they currently interact with a Category I fishery.