**Annual Report for Incidental Take Statement [50 CFR 402.14(i)(3)] for Fisheries and Ecosystem Research Activities Conducted by the Northeast Fisheries Science Center during January 01, 2025 – December 31, 2025 to satisfy Marine Mammal Protection Act (MMPA)**

Effective October 21, 2021, the National Marine Fisheries Service's Northeast Fisheries Science Center (NEFSC) and its designees were authorized under section 101(a)(5)(A) of the Marine Mammal Protection Act (MMPA; 16 U.S.C. 1371(a)(5)(A)) to take marine mammals incidental to fishery and ecosystem research activities in the Atlantic Ocean, subject to the provisions of the MMPA and the Regulations Governing Taking of Marine Mammals Incidental to Northeast Fisheries Science Center Fisheries Research in the Atlantic Coast Region (50 CFR Part 219, Subpart D) (Regulations).

In accordance with these authorizations, the NEFSC is required to provide an annual report. The following report will cover the period from January 01, 2025 - December 31, 2025. The MMPA LOA was renewed in the fall of 2021. The current permit is valid until October 21, 2026.

The report will be organized into the following sections:

I. Overview of NEFSC's required mitigation measures for MMPA LOA
II. Line-kilometers surveyed during which EK60, ME70, DSM300 were predominant & pro-rated estimates of actual Level B acoustic take for Marine Mammals
III. Information regarding use of all sampling gear
IV. Accounts of all incidents of marine mammal interactions including Pinniped Haul out Census during Penobscot Bay Acoustic Survey
V. Evaluation of effectiveness of NEFSC mitigation strategies
VI. Final outcome of serious injury determinations
VII. Training provided to NEFSC staff

## I. Overview of NEFSC's required mitigation measures

With the issuance of the NEFSC's MMPA LOA a set of prescribed mitigation measures were outlined for the Center to follow on all surveys in order to attempt to minimize the likelihood or severity of incidental gear interactions with marine mammals and other protected species. These measures vary slightly depending on the gear type and survey but are mainly comprised of dedicated marine mammal / protected species watches, an associated exclusion zone and move-on rule if protected species are seen during watch, and standard operating procedures by gear type.

Below are gear specific descriptions of these conservation measures.

**Trawl Surveys**:

(i) NEFSC shall conduct trawl operations as soon as is practicable upon arrival at the sampling station.

(ii) NEFSC shall initiate marine mammal watches (visual observation) prior to sampling. Marine mammal watches shall be conducted by scanning the surrounding waters with the naked eye and binoculars (or monocular). During nighttime operations, visual observation shall be conducted using the naked eye and available vessel lighting.

(iii) NEFSC shall implement the move-on rule if a marine mammal is sighted around the vessel before setting the gear. NEFSC may decide to move the vessel away from the marine mammal to a different section of the sampling area if the animal appears to be at risk of interaction with the gear. If, after moving on, marine mammals are still visible from the vessel, NEFSC may decide to move again or to skip the station. NEFSC may use best professional judgment in making this decision.

(iv) NEFSC shall maintain visual monitoring effort during the entire period of time that trawl gear is in the water (i.e., throughout gear deployment, fishing, and retrieval). If marine mammals are sighted before the gear is fully removed from the water, NEFSC shall take the most appropriate action to avoid marine mammal interaction. NEFSC may use best professional judgment in making this decision.

(v) If trawling operations have been suspended because of the presence of marine mammals, NEFSC may resume trawl operations when practicable only when the animals are believed to have departed the area. NEFSC may use best professional judgment in making this determination.

(vi) NEFSC shall implement standard survey protocols to minimize potential for marine mammal interactions. These may include maximum tow durations at target depth and maximum tow distance, cleaning of nets prior to deployment, and careful emptying of the trawl as quickly as possible upon retrieval.

**Dredge Surveys**:

(i) NEFSC shall deploy dredge gear as soon as is practicable upon arrival at the sampling station.

(ii) NEFSC shall initiate marine mammal watches (visual observation) prior to sampling. Marine mammal watches shall be conducted by scanning the surrounding waters with the naked eye and binocular s (or monocular). During nighttime operations, visual observation shall be conducted using the naked eye and available vessel lighting.

(iii) NEFSC shall implement the move-on rule. If marine mammals are sighted around the vessel before setting the gear, NEFSC may decide to move the vessel away from the marine mammal to a different section of the sampling area if the animal appears to be at risk of interaction with the gear. If after moving on, marine mammals are still visible from the vessel, NEFSC may decide to move again or to skip the station. NEFSC may use best professional judgment in making this decision but may not elect to conduct dredge survey activity when animals remain near the vessel.

(iv) NEFSC shall maintain visual monitoring effort during the entire period of time that dredge gear is in the water (i.e., throughout gear deployment, fishing, and retrieval). If marine mammals are sighted before the gear is fully removed from the water, NEFSC shall take the most appropriate action to avoid marine mammal interaction. NEFSC may use best professional judgment in making this decision.

(v) If dredging operations have been suspended because of the presence of marine mammals, NEFSC may resume operations when practicable only when the animals are believed to have departed the area. NEFSC may use best professional judgment in making this determination.

(vi) NEFSC shall carefully empty the dredge gear as quickly as possible upon retrieval to determine if marine mammals are present in the gear.

**Longline Surveys**:

(i) NEFSC shall deploy longline gear as soon as is practicable upon arrival at the sampling station.

(ii) NEFSC shall initiate marine mammal watches (visual observation) no less than 30 minutes prior to both deployment and retrieval of the longline gear. Marine mammal watches shall be conducted by scanning the surrounding waters with the naked eye and binoculars (or monocular). During nighttime operations, visual observation shall be conducted using the naked eye and available vessel lighting.

(iii) NEFSC shall implement the move-on rule. If marine mammals are sighted near the vessel within the 30 minutes before setting the gear, NEFSC may decide to move the vessel away from the marine mammal to a different section of the sampling area if the animal appears to be at risk of interaction with the gear. If, after moving on, marine mammals are still visible from the vessel, NEFSC may decide to move again

or to skip the station. NEFSC may use best professional judgment in making this decision but may not elect to conduct longline survey activity when animals remain near the vessel.

(iv) For the Apex Predators Bottom Longline Coastal Shark Survey, if one or more marine mammals are observed within 1 nm of the planned location in the 30 minutes before gear deployment, NEFSC shall transit to a different section of the sampling area to maintain a minimum set distance of 1 nm from the observed marine mammals. If, after moving on, marine mammals remain within 1 nm, NEFSC may decide to move again or to skip the station. NEFSC may use best professional judgment in making this decision but may not elect to conduct pelagic longline survey activity when animals remain within the 1-nm zone.

(v) NEFSC shall maintain visual monitoring effort during the entire period of gear deployment or retrieval. If marine mammals are sighted before the gear is fully deployed or retrieved, NEFSC shall take the most appropriate action to avoid marine mammal interaction. NEFSC may use best professional judgment in making this decision.

(vi) If deployment or retrieval operations have been suspended because of the presence of marine mammals, NEFSC may resume such operations after there are no sightings of marine mammals for at least 15 minutes within the area or within the 1-nm area for the Apex Predators Bottom Longline Coastal Shark Survey. NEFSC may use best professional judgment in making this decision.

(vii) NEFSC shall implement standard survey protocols, including maximum soak durations and a prohibition on chumming.

**Gillnet Surveys**:

(i) NEFSC shall deploy gillnet gear as soon as is practicable upon arrival at the sampling station.

(ii) NEFSC shall initiate marine mammal watches (visual observation) prior to both deployment and retrieval of the gillnet gear. When the vessel is on station during the soak, marine mammal watches shall be conducted during the soak by scanning the surrounding waters with the naked eye and binoculars (or monocular).

(iii) NEFSC shall implement the move-on rule. If marine mammals are sighted near the vessel before setting the gear, the NEFSC and/or its cooperating institutions, contracted vessels, or commercially-hired captains, as appropriate may decide to move the vessel away from the ma1ine mammal to a different section of the sampling area if the animal appears to be at risk of interaction with the gear. If after moving on, marine mammals are still visible from the vessel, the NEFSC and/or its cooperating institutions, contracted vessels, or commercially-hired captains may decide to move again or to skip the station. NEFSC and/or its cooperating institutions , contracted vessels, or commercially-hired captains may use best professional judgment in making this decision but may not elect to conduct the gillnet survey activity when animals remain near the vessel.

(iv) If marine mammals are sighted near the vessel during the soak and are determined to be at risk of interacting with the gear, then NEFSC shall carefully retrieve the gear as quickly as possible. NEFSC and/or its cooperating institutions, contracted vessels, or commercially-hired captains may use best professional judgment in making this decision.

(v) NEFSC shall implement standard survey protocols, including continuously monitoring the gillnet gear during soak time and removing debris with each pass as the net is reset into the water to minimize bycatch.

(vi) NEFSC shall maintain visual monitoring effort during the entire period of gear deployment or retrieval. If marine mammals are sighted before the gear is fully deployed or retrieved, the NEFSC shall take the most appropriate action to avoid marine mammal interaction. NEFSC may use best professional judgment in making this decision.

(vii) NEFSC shall ensure that surveys deploy acoustic deterrent devices on gillnets in areas where required for commercial fisheries. NEFSC must ensure that the devices are operating properly before deploying the net.

(viii) NEFSC shall ensure that its cooperating institutions, contracted vessels, or co1mnercially-hired captains conducting gillnet surveys adhere to monitoring and mitigation requirements and shall include required protocols in all survey instructions, contracts, and agreements.

(ix) For the COASTSPAN gillnet surveys, NEFSC shall actively monitor for potential bottlenose dolphin entanglements by hand-checking the gill net every 20 minutes. In the unexpected case of a bottlenose dolphin entanglement, NEFSC shall request and a1Tange for expedited genetic sampling for stock determination. NEFSC shall also photograph the dorsal fin and submit the image to the NMFS Southeast Stranding Coordinator for identification/matching to bottlenose dolphins in the Mid-Atlantic Bottlenose Dolphin Photo-Identification Catalog.

**Pot/trap Surveys**:

(i) NEFSC shall deploy pot/trap gear as soon as is practicable upon arrival at the sampling station.

(ii) NEFSC shall initiate marine mammal watches (visual observation) no less than 30 minutes prior to both deployment and retrieval of the pot/trap gear. Marine mammal watches shall be conducted by scanning the su1Tounding waters with the naked eye and binoculars (or monocular). During nighttime operations, visual observation shall be conducted using the naked eye and available vessel lighting.

(iii) NEFSC shall implement the move-on rule. If marine mammals are sighted near the vessel before setting the gear, NEFSC, as appropriate, may decide to move the vessel away from the marine mammal to a different section of the sampling area if

the animal appears to be at risk of interaction with the gear. If after moving on, marine mammals are still visible from the vessel, NEFSC may decide to move again or to skip the station. NEFSC may use best professional judgment in making this decision but may not elect to conduct the pot and trap activity when animals remain near the vessel.

(iv) If marine mammals are sighted near the vessel during the soak and are determined to be at risk of interacting with the gear, then NEFSC shall carefully retrieve the gear as quickly as possible. NEFSC may use best professional judgment in making this decision.

(v) NEFSC shall ensure that surveys deploy gear fulfilling all pot/trap universal commercial gear configurations such as weak link requirements and marking requirements as specified by applicable take reduction plans as required for commercial pot/trap fisheries.

(vi) NEFSC shall ensure that its cooperating institutions, contracted vessels, or commercially-hired captains conducting pot/trap surveys adhere to monitoring and mitigation requirements and shall include required protocols in all survey instructions, contracts, and agreements.

**Fyke Net Surveys**:

(i) NEFSC shall conduct fyke net gear deployment as soon as is practicable upon arrival at the sampling station.

(ii) NEFSC shall visually survey the area prior to both deployment and retrieval of the fyke net gear. NEFSC shall conduct monitoring and retrieval of the gear every 12- to 24-hour soak period.

(iii) If marine mammals are in close proximity (approximately 100 m) of the setting location, NEFSC shall determine if the set location should be moved. NEFSC may use best professional judgment in making this decision.

(iv) If marine mammals are observed to interact with the gear during the setting, NEFSC shall lift and remove the gear from the water.

(v) NEFSC must install and use a marine mammal excluder device at all times when the 2-m fyke net is used.

**Beach Seine Surveys**:

(i) NEFSC shall conduct beach seine deployment as soon as is practicable upon arrival at the sampling station.

(ii) NEFSC shall visually survey the area prior to both deployment and retrieval of the

seine net gear.

(iii) If marine mammals are in close proximity of the seining location, NEFSC shall lift the net and remove it from the water. NEFSC may use best professional judgment in making this decision.

**Rotary Screw Trap Surveys**:

(i) NEFSC shall conduct rotary screw trap deployment as soon as is practicable upon arrival at the sampling station.

(ii) NEFSC shall visually survey the area prior to both setting and retrieval of the rotary screw trap gear. If marine mammals are observed in the sampling area, NEFSC shall suspend or delay the sampling. NEFSC may use best professional judgment in making this decision.

(iii) NEFSC shall tend to the trap on a daily basis to monitor for marine mammal interactions with the gear.

(iv) If the rotary screw trap captures a marine mammal, NEFSC shall carefully release the animal as soon as possible.

**II: Line-kilometers surveyed during which EK60, ME70, DSM300 (Raytheon C120) were predominant & pro-rated estimates of actual Level B acoustic take**

Table 1. Total line-kilometers (kms) surveyed during the reporting period (January 1, 2025 – December 31, 2025) for which the EK60, ME70, and C120 echo sounder was predominant acoustic source in the LME compared to the totals calculated in the NEFSC's MMPA LOA application (Appendix D of NEFSC's National Environmental Policy Act Programmatic Environmental Assessment).

| NEFSC Large Marine Ecosystem | | | | |
|---|---|---|---|---|
| Echo sounder | EA Estimated summed dominant line-kms/source (0-200m) | Summed line-kms of reporting period / source (0-200m) | EA Estimated summed dominant line-kms/source (>200m) | Summed line-kms of reporting period / source (>200m) |
| C120 | 16,927 | 4,883 | NA | NA |
| EK60 | 14,000 | 2,216 | NA | NA |
| ME70 | 36,697 | 49,903 | NA | NA |

Table. 2 Total line-kilometers (kms) surveyed during the reporting period (January 1, 2025 – December 31, 2025 for which the EK60 or ME70 echo sounder was predominant acoustic source in the NEFSC Offshore area compared to the totals calculated in the NEFSC's MMPA LOA application (Appendix D of NEFSC's National Environmental Policy Act Programmatic Environmental Assessment).

| NEFSC Offshore Area | | | | |
|---|---|---|---|---|
| Echo sounder | EA Estimated summed dominant line-kms/source (0-200m) | Summed line-kms of reporting period / source (0-200m) | EA Estimated summed dominant line-kms/source (>200m) | Summed line-kms of reporting period / source (>200m) |
| EK60 | 3,666 | 0 | 8,816 | 76 |
| ME70 | 5,150 | 0 | 0 | 1,433 |

Table 3. NEFSC's annual Level B harassment by acoustic sources by sound type for each marine mammal species in the LME. For each species and predominant source, the cross sectional area for the relevant depth strata (Table 6.5 of NEFSC EA appendix D) was multiplied by the actual line-km for each respective strata (Table 1.) and the volumetric density (shown here) to assess Level B harassment for the reporting period.

| Common Name | Volumetric density (#/km3) | Typical vertical habitat | | NEFSC Reporting Period Acoustic Takes (# of animals) | | | **Reporting Period Total Takes** | EA Estimated Annual Takes |
|---|---|---|---|---|---|---|---|---|
| | | 0 - 200m | >200m | EK60 | ME70 | C120 | | |
| **LME Area Cetaceans** | | | | | | | | |
| Atlantic white-sided dolphin | 0.122 | X | | 4 | 122 | 9 | 135 | 144 |
| Cmn. bottlenose dolphin (coastal) | 0.5165 | X | | 16 | 518 | 36 | 571 | 609 |
| Cmn. bottlenose dolphin (offshore) | 0.03 | X | | 1 | 30 | 2 | 33 | 35 |
| Cuvier's beaked whale | 0.0105 | X | | 0 | 11 | 1 | 11 | 12 |
| Dwarf/Pygmy Sperm Whale | 0.00004 | | X | 0 | 0 | 0 | 0 | 10 |
| Harbor Porpoise | 0.0965 | X | | 3 | 97 | 7 | 107 | 114 |
| Long-finned Pilot Whale | 0.1725 | X | | 5 | 173 | 12 | 191 | 203 |
| Mesoplodon beaked whales | 0.0105 | X | | 0 | 11 | 1 | 12 | 12 |
| Risso's dolphin | 0.011 | X | | 0 | 11 | 1 | 12 | 13 |
| Short-beaked common dolphin | 1.0575 | X | | 33 | 1,061 | 74 | 1,168 | 1,247 |
| Short-finned Pilot Whale | 0.1725 | X | | 5 | 173 | 12 | 191 | 203 |
| Sperm Whale | 0.00005 | | X | 0 | 0 | 0 | 0 | 10 |
| White-beaked dolphin | 0.0405 | X | | 1 | 41 | 3 | 45 | 48 |
| **LME Area Pinnipeds** | | | | | | | | |
| Gray Seal | 0 | X | | 0 | 0 | 0 | 0 | 0 |
| Harbor Seal | 1.422 | X | | 45 | 1,426 | 100 | 1,571 | 1,677 |

Table 4. NEFSC's annual Level B harassment by acoustic sources by sound type for each marine mammal species in the offshore area. For each species and predominant source, the cross sectional area for the relevant depth strata (Table 6.5 of NEFSC EA appendix D) was multiplied by the actual line-km for each respective strata (Table 1.) and the volumetric density (shown here) to assess Level B harassment for the reporting period.

| Common Name | Volumetric density (#/km3) | Typical vertical habitat | | NEFSC Reporting Period Acoustic Takes (# of animals) | | | **Reporting Period Total Takes** | EA Estimated Annual Takes |
|---|---|---|---|---|---|---|---|---|
| | | 0 - 200m | >200m | EK60 | ME70 | C120 | | |
| **Offshore Area Cetaceans** | | | | | | | | |
| Atlantic spotted dolphin | 0.104 | | X | 3 | 104 | 0 | 108 | 16 |
| Cmn. bottlenose dolphin (offshore) | 0.263 | | X | 8 | 264 | 0 | 272 | 41 |
| Cuvier's beaked whale | 0.0312 | | X | 1 | 31 | 0 | 32 | 19 |
| Dwarf sperm whale | 0.004 | | X | 0 | 4 | 0 | 4 | 2 |
| Long-finned pilot whale | 0.0512 | | X | 2 | 51 | 0 | 53 | 32 |
| Mesoplodon beaked whales | 0.0312 | | X | 1 | 31 | 0 | 32 | 19 |
| Northern bottlenose whale | 0.0034 | | X | 0 | 3 | 0 | 4 | 2 |
| Pygmy sperm whale | 0.004 | | X | 0 | 4 | 0 | 4 | 2 |
| Risso's dolphin | 0.422 | | X | 13 | 423 | 0 | 437 | 66 |
| Rough toothed dolphin | 0.008 | | X | 0 | 8 | 0 | 8 | 1 |
| Short-beaked common dolphin | 0.9375 | | X | 30 | 940 | 0 | 970 | 146 |
| Short-finned pilot whale | 0.0512 | | X | 2 | 51 | 0 | 53 | 32 |
| Sperm whale | 0.0304 | | X | 1 | 30 | 0 | 31 | 19 |
| Striped dolphin | 1.514 | | X | 0 | 0 | 0 | 0 | 236 |

**III: Information regarding use of all sampling gear**

Table 5. NEFSC trawl deployments by project for reporting period of January 1, 2025 – December 31, 2025. Durations are in minutes.

| **Trawl Project** | Trawl Gear Type | #Trawls | Depth Range (m) | Duration |
|---|---|---|---|---|
| Spring Bottom Trawl Survey – NEFSC | 4 seam 3 bridle rock hopper | 370 | 10 - 400 | 20 |
| Spring State of MA Inshore Survey | 2 seam rock hopper | 107 | 5 – 50 | 30 |
| Spring ME/NH NEAMAP Inshore Trawl Survey | 4 seam shrimp rock hopper | 104 | 5 - 200 | 20 |
| Spring VIMS NEAMAP Inshore Survey | 4 seam 3 bridle cookie sweep | 150 | 5 - 50 | 20 |
| Northern Shrimp Trawl GOM survey - NEFSC | 4 seam shrimp net rock hopper | 0 | 50 - 400 | 20 |
| Fall Bottom Trawl Survey - NEFSC | 4 seam 3 bridle rock hopper | 258 | 10 - 400 | 20 |
| Fall State of Mass Inshore Survey | 2 seam rock hopper | 106 | 5 – 50 | 30 |
| Fall ME/NH NEAMAP Inshore Trawl Survey | 4 seam shrimp rock hopper | 150 | 5 - 200 | 20 |
| Fall VIMS NEAMAP Inshore Survey | 4 seam 3 bridle cookie sweep | 82 | 5 - 50 | 20 |

Table 6. NEFSC dredge deployments by project for reporting period of January 1, 2025 – December 31, 2025. Dredge haul durations in minutes.

| **Dredges** | Dredge Gear Type | #Dredge hauls | Depth Range (m) | Duration |
|---|---|---|---|---|
| Summer Scallop Survey - NEFSC | 8’ wide scallop dredge | 177 | 10 - 100 | 15 |
| Scallop RSA Grant Programs | 8’ and 15’ wide scallop dredge | 400 | 1 - 150 | 15/30 |
| Surf Clam and Ocean Quahog - NESC | Commercial clam dredge 13’ | 0 | 10 – 100 | 5 |

Table 7. NEFSC long line deployments by project for reporting period from January 1, 2025 – December 31, 2025. Long line soak times in hours.

| **Long Line Gear** | Sets | Number of Hooks (avg.) | Avg. Soak Time (hours) |
|---|---|---|---|
| Spring GOM Longline Survey – NEFSC | 45 | 1000 | 2 |
| Fall GOM Longline Survey – NEFSC | 46 | 1000 | 2 |
| NEFSC Large Coastal Shark Bottom Longline Survey – NEFSC | 0 | 300 | 3 |
| NEFSC DE Bay COASTSPAN Bottom Longline - NEFSC | Juvenile (0)<br>Adult (0) | 50<br>25 | .5<br>2 |
| Virginia Institute of Marine Science COASTSPAN COOP Longline Survey | Juvenile (105) | 50 | 0.5 |
| SC Dept. of Nat. Resources (SCDNR) COASTSPAN COOP Longline | SEAMAP (360)<br>Drumline (88)<br>Juvenile (58) | 40<br>1<br>50 | .75<br>1<br>.5 |
| Univ. N. Florida (UNF) COASTSPAN COOP Longline | Large (0)<br>Juvenile (131)<br>Drumline (80) | 50<br>50<br>1 | .5<br>.5<br>1 |
| Florida Atl. Univ. (FAU) COASTSPAN COOP Longline | Drumline(0)<br>Juvenile (38) | 1<br>50 | 1<br>1 |

Table 8. NEFSC gill net deployments by project for reporting period from January 1, 2025 – December 31, 2025. Gill net soak times in hours.

| **Gill Net Gear** | Sets | Length of set (meters) | Avg. Soak Time (hours) |
|---|---|---|---|
| South Carolina Dept. of Nat. Resources (SCDNR) | Small (77) | 45 meters | .5 |
| COASTSPAN COOP Gillnet | Long (71) | 231 meters | .5 |
| Florida Atl. Univ. (FAU) | Small (26) | | |
| COASTSPAN COOP Longline | Long (38) | 50 meters | .5 |

Table 9. NEFSC fyke net, beach seine, pot/trap, rotary screw traps deployments by project for reporting period from January 1, 2025 – December 31, 2025.

| Gear | Effort |
|---|---|
| Fyke Net | None |
| Beach Seine | None |
| Pot/traps | None |
| Rotary Screw Trap | 4 |

**IV: Accounts of all incidents of marine mammal interactions (mortality or injury leading to mortality) from January 1, 2025 – December 31, 2025**

**Injury or mortality interactions in NEFSC LME and Offshore Area**

Incidental Take: During the 2025 period of reporting, there was one reported marine mammal M/SI take during the fall NEAMAP ME/NH trawl survey: FC2501. It occurred on September 29, 2025. An unidentified whale corpse was intercepted in their trawl net and brought to the surface. The body was so decomposed, identification could not be determined. The scientific crew, and later verified by NEFSC scientists, determined that it was a badly decomposed baleen whale. No physical samples were retrieved and preserved, unfortunately. This take was considered to be not caused by the NEAMAP survey activity, but recorded as a take against our LOA permit. There were no reasonable and prudent measures that the crew and scientists could have taken to avoid intercepting a corpse of a dead whale.

In the future, physical samples should be collected as a best practice for species identification. This aspect and the incident will be discussed during the summer annual training.

**Level B Disturbance of Penobscot Bay Pinniped Haul-out Area Survey for 2025**

NEFSC Atlantic Salmon Ecosystems Research Team has conducted various activities related to the Penobscot Estuary Fish community which are individually detailed in the 2016 Biological opinion table A-1 and hereafter names are bolded for reference to the table. This work is performed cooperatively with a partnership with Maine Sea Grant scientists. We did not conduct **Beach Seine Survey** or **Marine Estuaries Diadromous Survey** (fyke) in Maine during 2025. These are also not planned for 2026. Also, we did not conduct **Penobscot Estuarine Fish Community and Ecosystem Survey (trawl)** in 2025, so there are no interactions to report from this survey. These are also not planned for 2026.

Table 10. Pinniped Haul-out Survey and Response Severity

| Species | Count (on haul-out) | Count (in water) | Response (severity score = # of animals) |
|---|---|---|---|
| Harbor seal | 0 | 0 | (1) (3) |
| Grey seal | 0 | 0 | (1) (3) |
| Harbor porpoise | 0 | 0 | (1) (3) |

## V: Evaluation of Monitoring and Effectiveness of NEFSC mitigation strategies

An evaluation of the mitigation measures employed by the NEFSC to reduce potential impacts to marine mammals is outlined below for deployed fishing gear types. For detailed mitigation measure descriptions, please see Section 1 of this report. Monitoring, recording of sightings, and indication of decision to move on within a sampling area or skip a sampling location was not instigated for NEFSC programs consistently in 2025. Data recorded and presented is anecdotal or derived. During the 2024 MMPA LOA training, NEFSC did discuss guidance for recording the presence of marine mammals that trigger a mitigation measure unless it was an incidental harassment injury or mortality take. Some programs did record incidents when a sampling location is dropped or the "move-on rule" is evoked. All monitoring was conducted and mitigation measures were taken. Monitoring, recording of sightings, and indication of decision to move on within a sampling area or skip a sampling location was discussed during the February 2024 training. Program Leads were asked to provide these data for analysis during the annual training in February 2025, but unfortunately we were unable to conduct an inperson training in 2025. We will be discuss this subject during our summer 2026 training.

### Trawl Survey Marine Mammal Mitigation Strategies

The Northeast Fisheries Science Center and its partners utilizes several different types of bottom and mid-water trawling gear. They range from the 4 seam 3 bridle standardized bottom trawl with rock hopper footrope gear for the seasonal shelf wide bottom trawl survey, an inshore seasonal shelf wide bottom trawl survey with the same gear and an alternate cookie footrope, 2 seam bottom trawls for inshore work for the state of Massachusetts inshore bottom trawl survey, cooperative research work with 2 seam bottom trawl gear for turtle excluder devices (TEDS), 4 seam rock hopper rigged shrimp trawls for Gulf of Maine shrimp

survey, paired trawls gear comparison research cruises with the standardized nets rigged with different footgear, 8' wide beam trawls, and small mid-water trawls for Penobscot bay predator/prey surveys. We currently do not separate mitigation and reporting measures between bottom and mid-water trawling gear. With the dramatic reduction in mid-water trawling activities, the need to separate these gear types for reporting purposes has diminished.

During use of any of these trawl gears, the following mitigation protocols were to be conducted: trawls were conducted as soon as practicable, visual observations (mammal watches) were conducted by Bridge staff during the entire gear deployment, move on rule to within the sampling site or sites skipped if mammals were in the area and not moving out of the site, and maintain standard trawling protocols to minimize marine mammal interactions (short trawls (20 minutes) and cleaning out nets quickly and carefully upon retrieval.

The NEFSC discussed a standardized method to record mitigation efficiency effects from trawl surveys at the January 2020 training session and had planned to discuss this again during the 2025 training, which was postponed. Bridge logs and electronic entry may be used to assemble a data base of times the move-on and trawl aborted rule for each trawl survey was initiated in order to assess the loss of survey time (survey efficiency loss due to abiding by marine mammal mitigation measures). The NEFSC will work during 2025 to finalize a standard method of recording these data and reporting requirements to the LOA coordinator. Some of our surveys utilize an electronic bridge log that may be able to record these data easily.

The NEAMAP Inshore Trawl survey responded in 2025: no stations were moved or dropped due to the presence of marine mammals.

NEFSC Standardized Trawl Survey in 2025: No stations were moved or dropped due to the presence of marine mammals.

ME/NH Inshore Trawl Survey in 2025: No stations were moved or dropped due to the presence of marine mammals.

**Dredge Gear Marine Mammal Mitigation Strategies**

The NEFSC and its partners utilize several types of dredge gear to conduct surveys and research. The standardized scallop survey uses a lined 8' wide New Bedford style dredge, the RSA Scallop surveys utilize both 8'wide science dredge and 15' wide commercial sized scallop dredge gear, the clam survey uses a commercial sized (13' wide) clam dredge, During use of any of these dredge gears, the following mitigation protocols were to be conducted: dredge hauls were conducted as soon as practicable, visual observations (mammal watches) were conducted by Bridge staff during the entire gear deployment, move on rule to within the sampling site or sites skipped if mammals were in the area and not moving out of the site, and maintain standard dredging protocols to minimize marine mammal interactions (short trawls (15 and 30 for scallop, 5 for clam) and cleaning out dredge gear quickly and carefully upon

retrieval.

As stated above, NEFSC has initiated the standardization of the collection of the mitigation measures, therefor assessment of the successes to mitigation measures at this time is still anecdotal.

**Longline Gear Marine Mammal Mitigation Strategies**

As stated above, NEFSC has not standardized the collection of marine mammal sightings, triggers for mitigation measures, therefore assessment of the successes to mitigation measures is anecdotal.

**Gill Nets Marine Mammal Mitigation Strategies**

Gill net surveys for shark species are conducted using gill nets in waters off of Delaware, Virginia, Georgia, Florida, and South Carolina.

**Pot/Traps, Fyke Nets, Beach Seines, Rotary Screw Traps Marine Mammal Mitigation Strategies**

Each PI was provided the LOA that contain the mitigation and monitoring measures for each gear type. From all reports, mitigation monitoring and reporting were followed. These included marine mammal watches before, during, hauling of all gear types.

**VI: Final outcome of serious injury determinations**

We had planned to discuss the mammal takes in 2025 during the February 2026 training session, but we did not conduct a training session in February due to funding concerns and a possible government shut down. We are planning to conduct the training this summer (2026) and will discuss the marine mammal take during the NEAMAP ME/NH survey. Discussion of possible ways to avoid future similar interactions were discussed in the summer 2026 training.

Mitigation measures were reviewed with PI's and a discussion about possible improvements to the mitigation measures was discussed. Other than reviewing and adhering to the current mitigation strategies, no changes were recommended by the staff at the 2025 training session. The last group discussed the advantages of conducting the yearly training/ refresher program. Development of a standardized method to record marine mammal sightings was discussed and some programs are already recording this information on bridge logs. NEFSC needs to standardize this information. Other than not conducting operations at night or low visibility conditions, the group did not have and alternative. This alternative is not an option that we could adopt without a dramatic shift in funding for our programs.

If a method of recording then presence or absence of marine mammals in an area is still going to have an issue with night/ low visibility observations. NEFSC does not see a method to resolve that, unless a monumental shift occurs with our methods of sampling. Another issue was

discussed with the possibility of seasonal increases of marine mammals in large sampling areas and how that would prevent NEFSC from conducting its surveys in a timely manner. We will be reaching out to OPR for more guidance for this issue.

**VII: Training provided to NEFSC staff in 2025**

NEFSC was unable to conduct in-person training in 2025. NEFSC has not conducted a training session in 2026, yet. Due to the uncertainty with the current budget climate, we postponed the training to summer 2026.

The NEFSC is required to conduct annual training for all chief scientists and other personnel who may be responsible for implementing mitigation measures, data collection, and reporting requirements. A portion of the training must be dedicated to discussion on the use of best professional judgment to avoid marine mammal interactions to gain an understanding of successful versus unsuccessful decisions.

In person training was conducted by NEFSC Staff for NEFSC staff and partner seagoing personnel in 2024 over two days. Trained PI's were instructed to review the permits and RMA's and review them with their vessel staff on the protocols for marine mammals the day of sailing. A period during the meeting was dedicated to discussion the marine mammal interactions from and methods to avoid interactions.

Review of training from 2024

Victor Nordahl (NEPA Coordinator) developed and provided the logistics, *Training on Incidental Take Authorization and Environmental Compliance Process for NEFSC Fisheries and Ecosystem Research* – the 2024 training was put on for NEFSC's biological sampling programs in Woods Hole Massachusetts. The training occurred over two full work days and divisions determined who from seagoing staff would participate – chief scientists relayed all relevant information to those folks who could not make the training.

The training was designed to introduce staff who had not played a major role in acquiring environmental compliance and incidental take authorizations to the process and new regulatory requirements that would have to be implemented on their surveys. Throughout the training two way communication was promoted between staff and presenters to ensure that a thorough and complete understanding or all new requirements was translated.

First, an overview and background were provided to give a general understanding of statutory requirements, NEFSC's incidental take history, and development of the NEFSC's mitigation measures. After that, the main objective of the training was to introduce 1) the scope (research areas, gear types, authorized take species, etc.) of what the Center's authorizations would cover, and 2) the implementation of the authorization conditions (mitigation measures, reporting requirements, data collection, etc.) for each Incidental Take species group. Included was a portion of the training focused on the circumstances in which professional judgment decisions can be used and what decisions are frequently made when dealing with specific gear types and interactions / avoidance practices with protected species.

The first session of the daily training was titled "Sea Turtles" and was conducted by Katie Choate from PSDNEFSC. The session included sea turtle identification, resuscitation

methods, sampling protocol review, photographing, biopsy protocols, Iconel tagging and pit tagging scanning practice.

The second session was titled "Marine Mammals and Sea Birds" and was conducted by Katie Choate from PSD/NEFSC. The session included marine mammal identification, sampling protocol review, photographing, biopsy protocols, and condition reporting. Sea bird sighting and sampling protocols for retaining sea bird carcasses.

The third session was titled "Sturgeon" and was conducted by GARFO's Lynn Lankshear. The session included species identification between Atlantic and Short-nosed sturgeon, critical measurements, fin clip protocols, photographing, resuscitation, and pit tag scanning and tagging practice.

Atlantic salmon mitigation was not presented this year. PI's were instructed to review the Biological compliance manual. We were unable to acquire a presenter for Atlantic salmon in 2024.

The fifth session was titled "Mitigation Results" and was conducted by Anthony Lefevour of the Operations, Management and Information Division/ NEPA Coordinator. Results of the 2024 sampling year were presented with numbers of interactions reported by survey type. Discussions regarding the best practices for avoiding marine mammal interactions. A plan for the 2024 season was discussed for each program to record when a station or sampling site had to be moved or the move on rule evoked. To this point, protocols were being followed, just not tracked.

The sixth session was a hands on lab session for handling and tagging turtles and sturgeon. Anthony Lefevour, Heather Haas and Katie Choate conducted the sessions. The marine mammal and sea turtle handling and sampling portion of the trainings were developed in coordination with NEFSC's Marine Mammal and Turtle Division and GARFO. There have been several turtle and sturgeon interactions, but all mitigation measures have been followed. It was decided to continue with reporting and not to re-assess mitigation measures at this time. Staff were provided pit tag scanners, pit tagging devices, and turtle tag applicators to practice applying tags. Actual turtle flippers were provided.

There is a small number of NEFSC staff that need the training. Although, NEFSC recognizes the value of meeting each year to provide updates to changes in protocols, discuss past mitigation measures, and discuss improvements. The idea is that an annual training session is useful to prepare seagoing staff immediately prior to their field season, and a forum is useful to debrief implementing mitigation, reporting and collecting data during the past season while memories are still fresh. The NEFSC Environmental Compliance Coordinator will make plans to conduct onsite training for new staff at remote sites if needed.

Appendix 1. Section 5 of Letter of Authorization

Monitoring

The holder of this Authorization is required to implement the following monitoring requirements:

(a) Visual monitoring:

(i) Marine mammal visual monitoring shall occur prior to deployment of trawl, longline, gillnet, fyke net, beach seine, pot/trap, and rotary screw trap gear, respectively; throughout deployment of gear and active fishing of all research gears (not including longline soak time); prior to retrieval of longline gear; and throughout retrieval of all research gear.

(ii) Marine mammal watches shall be conducted by watch-standers (those navigating the vessel and/or other crew) at all times when the vessel is being operated.

(iii) NEFSC shall monitor any potential disturbance of pinnipeds on ledges, paying particular attention to the distance at which different species of pinniped are disturbed. Disturbance shall be recorded according to a three-point scale of response severity (i.e., 1 = alert; 2 = movement; 3 = flight) to disturbance.

(b) NEFSC shall continue to conduct a local census of pinniped haul out areas in the Penobscot River estuary to understand the local abundance of animals. The NEFSC's census reports shall include an accounting of disturbance based on the three-point scale of response severity metrics as outlined in monitoring section 4(a)(iii).

(c) Training

(i) NEFSC must conduct annual training for all chief scientists and other personnel who may be responsible for conducting dedicated marine mammal visual observations to explain mitigation measures and monitoring and reporting requirements, mitigation and monitoring protocols, marine mammal identification, completion of datasheets, and use of equipment. NEFSC may determine the agenda for these trainings.

(ii) NEFSC shall also dedicate a portion of training to discussion of best professional judgment, including use in any incidents of marine mammal interaction and instructive examples where use of best professional judgment was determined to be successful or unsuccessful.

(iii) NEFSC shall coordinate with NMFS' Southeast Fisheries Science Center regarding surveys conducted in the southern portion of the Atlantic coast region, such that training and guidance related to handling procedures and data collection is consistent.

(d) Handling procedures and data collection:

(i) NEFSC must develop and implement standardized marine mammal handling, disentanglement, and data collection procedures. These standard procedures will be subject to approval by NMFS' Office of Protected Resources (OPR).

(ii) When practicable, for any marine mammal interaction involving the release of a live animal, NEFSC shall collect necessary data to facilitate a serious injury determination.

(iii) NEFSC shall provide its relevant personnel with standard guidance and training regarding handling of marine mammals, including how to identify different species, bring an individual aboard a vessel, assess the level of consciousness, remove fishing gear, return an individual to water, and log activities pertaining to the interaction.

(iv) NEFSC shall record such data on standardized forms, which will be subject to approval by OPR. The data shall be collected at a sufficient level of detail (e.g., circumstances leading to the interaction, extent of injury, condition upon release) to facilitate serious injury determinations under the MMPA. NEFSC shall also answer a standard series of supplemental questions regarding the details of any marine mammal interaction.