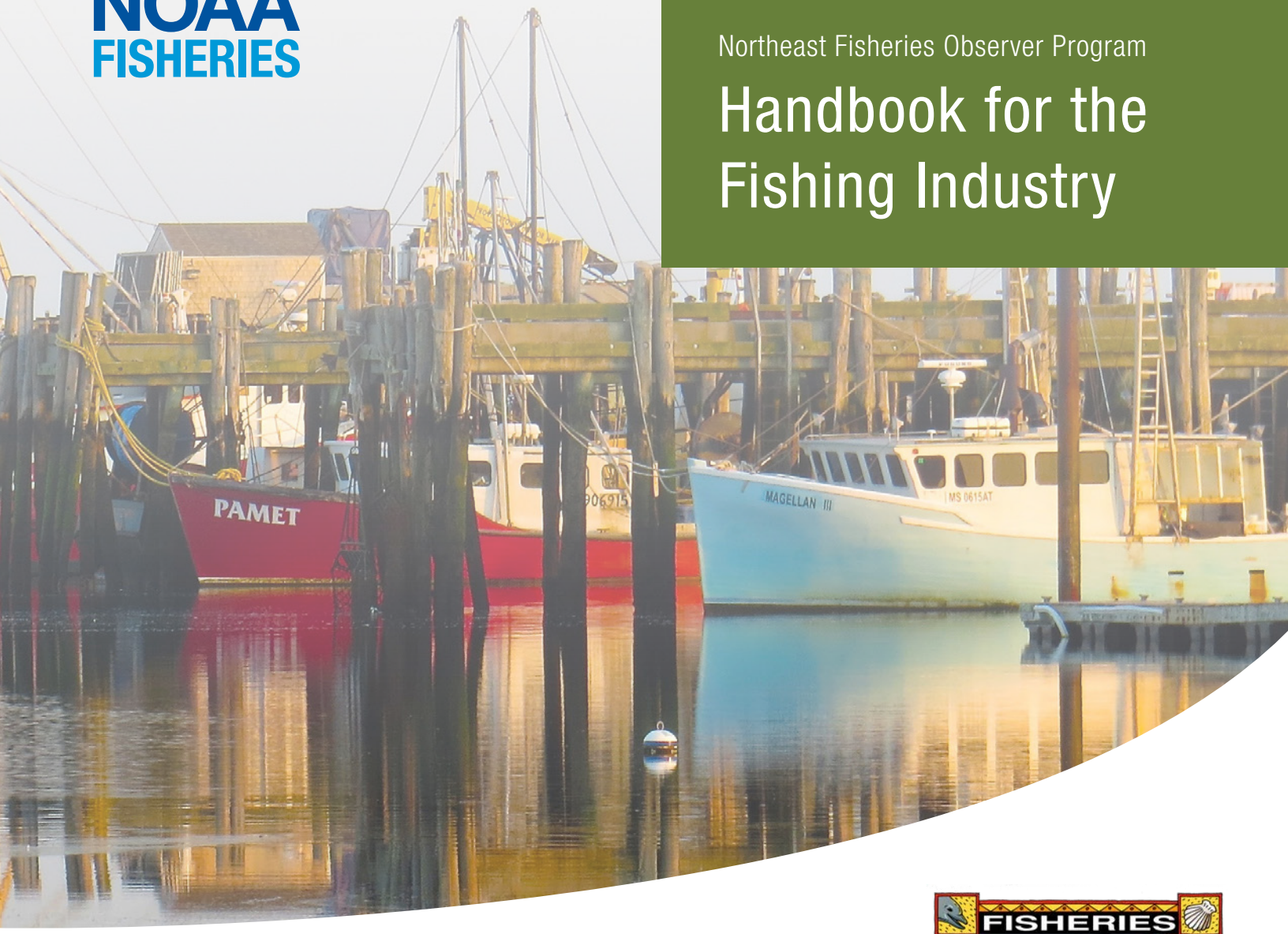
NOAA FISHERIES

Northeast Fisheries Observer Program

Handbook for the Fishing Industry



Published August 2019


FISHERIES
OBSERVER
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How to use this handbook

The purpose of this handbook is to provide commercial fishery participants with an overview of the Northeast Fisheries Observer Program—its objectives, approach and requirements for observed fishing trips. This document offers brief summaries of a range of observer-related requirements, along with references to the specific policies, memoranda, documents and/or reports that relate to each. A parallel handbook has also been prepared— *Northeast Fisheries Observer Program Handbook for Fisheries Observers and Providers*—which focuses on requirements and training for observers.

All referenced policies, memoranda, documents and reports have been included in a separate document—*Northeast Fisheries Observer Program Master Appendix*—which should be used alongside this handbook.

Both handbooks are available in printed format and electronically as a PDF; the master appendix is available as an electronic document only.

In addition to these resources, the FSB provides **three additional program manuals:** (1) the Operations Manual covers the process of observing a trip and provides detail on trip selection, gear, communication/conflict resolution, fishery-specific information, protected species information, and protocols for biological sampling and catch estimation; (2) the Observer On-Deck Reference Guide provides summaries and tables intended to enable observers to quickly determine the correct biological sampling protocols and methods, as well as suggested catch estimation strategies, while at sea; and (3) the Observer Data Entry Manual provides detailed instructions for each data field collected.

Published August 2019

Prepared for the Northeast Fisheries Science Center, Fisheries Sampling Branch (FSB) by Tidal Bay Consulting and Shelly Tallack Caporossi. Content development for these handbooks was a collaborative effort, with contributions from over a dozen FSB staff, coordinated by Tania Lewandowski and Amy Martins.

The content of this handbook and master appendix are current as of the date of publication. As observer programs evolve, these materials may change and the most current information may be obtained from the FSB. Please also refer to FSB for the most up-to-date rules and regulations, as these materials do not serve as a substitute for federal regulations or agency policies.

Table of Contents

List of acronyms

ACFCMA	Atlantic Coastal Fisheries Cooperative Management Act
ACL	Annual Catch Limit
AOLA	Atlantic Offshore Lobstermen's Association
AOP	Annual Operating Plan
ASM	At-Sea Monitoring
ASMFC	Atlantic States Marine Fisheries Commission
CAC	Common Access Card
CFR	Code of Federal Regulations
CFVSE	Commercial Fishing Vessel Safety Examination
COTR	Contracting Officer's Technical Representative
CV	Coefficient of Variation
DFO	Department of Fisheries and Oceans Canada
DOF	Declare out of Fishery
EEZ	Exclusive Economic Zone
EFP	Experimental Fishing Permit
EM	Electronic Monitoring
EPIRB	Emergency Position Indicating Radio Beacons
ER	Electronic Reporting
ESA	Endangered Species Act
EVIC	EPIRB Visual Inspection Card
eVTR	Electronic Vessel Trip Report
FMP	Fishery Management Plan
FOIA	Freedom of Information Act
FSB	Fisheries Sampling Branch
GARFO	Greater Atlantic Regional Fisheries Office
GMRI	Gulf of Maine Research Institute
HVF	High Volume Fisheries
IDIQ	Indefinite Delivery Indefinite Quantity

IFM	Industry-Funded Monitoring
IFS	Industry-Funded Scallop
LOF	List of Fisheries
MARPOL	International Convention for the Prevention of Pollution from Ships
MDM	Mobile Device Management
MMPA	Marine Mammal Protection Act
MSA	Magnuson Stevens Fishery Conservation and Management Act
NEFMC	Northeast Fishery Management Council
NEFOP	Northeast Fisheries Observer Program
NEFSC	Northeast Fisheries Science Center
NEPA	National Environmental Policy Act
NHFG	New Hampshire Fish and Game
NMFS	National Marine Fisheries Service (or NOAA Fisheries)
NOAA	National Oceanic and Atmospheric Administration
NOPAT	National Observer Program Advisory Team
OLE	Office of Law Enforcement (NOAA)
OMI	Operations, Management and Information
PFD	Personal Flotation Device
PRA	Paperwork Reduction Act
PTNS	Pre-Trip Vessel Notification System
PTVSC	Pre-Trip Vessel Safety Checklist
RFA	Regulatory Flexibility Act
SBRM	Standardized Bycatch Reporting Methodology
SDR	Safety Deficiency Reporting
SVP	Species Verification Program
SWAT	Safety & Wellness Advisory Team
USC	United States Code
USCG	United States Coast Guard
VMS	Vessel Monitoring Service
VTR	Vessel Trip Report


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Section 1.
Introduction

The Northeast Fisheries Science Center Fisheries Sampling Branch (FSB) manages three observer programs in the Northeast region, which all have unique legislative requirements, protocols, and internal policies. The FSB receives numerous requests for information each week. This handbook summarizes all the documents and policies that are most relevant to commercial fishing fishery—it should be used together with the Northeast Fisheries Observer Program Master Appendix.

The role of the Fisheries Sampling Branch

The National Oceanic and Atmospheric Administration (NOAA) is within the Department of Commerce, and the National Marine Fisheries Service (NMFS) has an extensive program to monitor and observe living marine resources and associated communities to provide information on biota, their habitats, and the human activities and actions that may impact coastal and ocean ecosystems.

The Northeast Fisheries Science Center (NEFSC) is a regional science center for NMFS. The NEFSC's Fisheries Sampling Branch (FSB) manages three major programs that collect data during commercial fishing trips throughout state and federal waters from North Carolina to Maine: (1) the Northeast Fisheries Observer Program (NEFOP), (2) the At-Sea Monitoring (ASM) program, and (3) the Industry-Funded Scallop (IFS) program. Trained fishery observers collect these data for scientific and fisheries management use, including stock assessments, protected species management, and catch accounting.

The FSB also processes and manages the data and biological samples obtained.

The fisheries requiring observer coverage fall under the following fishery management plans (FMPs) and permits: Atlantic sea scallops; Northeast multispecies (groundfish); monkfish; Northeast skate complex; squid, mackerel, and butterfish; scup, summer flounder (moratorium permit), and black seabass; bluefish; spiny dogfish; Atlantic herring; tilefish; Atlantic deep-sea red crab; Atlantic surfclam and ocean quahog; and American lobster.

Data are the foundation of the scientific advice that supports decision-making by resource managers. To collect the quantity and quality of data necessary to ensure good science and management, NMFS continually strives to increase its capacity for data gathering to supplement data self-reported by fishermen. Fishery observers are one of the most important sources for obtaining some types of at-sea information such as bycatch composition and mortality, and interactions with marine mammals, sea birds, and sea turtles.

Observed trips are required under many of the region's FMPs, and by other federal laws and authorities such as the Marine Mammal Protection Act (MMPA), the Atlantic Coastal Fisheries Cooperative Management Act (ACFCMA), the Endangered Species Act (ESA), and the Magnuson-Stevens Fishery Conservation and Management Act (MSA).

An **observer** refers to any observer or monitor working for a NEFOP, ASM or IFS provider.

A **provider** is a company approved by NMFS to provide observer services.

How we provide observer coverage

Observer services are provided by contractors who deliver valuable services that help NOAA execute its missions to ensure sustainable fisheries, and recover and conserve protected species.

FSB works with multiple private companies that provide observer coverage. These companies either hold a direct federal contract for these services or are an approved service provider that contracts directly with the fishing industry:

- FSB partners with private federal contractors to supply NEFOP observer support services.
- Approved providers for the IFS program provide observer services to vessels as they are selected for coverage by NMFS.
- Approved providers for ASM contract directly with the groundfish sectors.

Redacted copies of the NEFOP contract are available for public viewing. Proprietary corporate information protected by the Trade Secrets Act has been removed as the Freedom of Information Act (FOIA) protects this information. NEFOP services are provided by one contractor through an Indefinite Delivery Indefinite Quantity (IDIQ) contract, under which the contractor provides NEFOP services through IDIQ Task Orders.

For consistency in this document, the term “observer” refers to any observer or monitor working for a NEFOP, ASM or IFS provider; a “provider” refers to a company that has been approved by NMFS to provide observer services.

Our observer programs

This section provides an overview of the three core observer programs currently operating, including the fisheries covered, the gear types used, and areas fished. While there is overlap in the type of data collected, observers in each program have unique duties that are governed by various laws and regulations. There are also several other observer programs in development, including Industry-Funded Monitoring (IFM) for Atlantic herring and electronic monitoring (EM) and/or dockside monitoring in the groundfish fishery and in mid-water trawl fisheries for herring and mackerel.

At-Sea Monitoring (ASM)

At-sea monitors collect fisheries data used for scientific, management, compliance, and other purposes during fishing trips aboard commercial groundfish sector vessels. Monitors collect information by interviewing vessel captains and crew, observing fishing operations, and measuring selected portions of the catch and parts of the fishing gear. The ASM requirements are detailed under Amendment 16 to the Northeast Multispecies FMP and were first required beginning May 1st, 2010. At-sea monitoring coverage is an integral part of quota monitoring, and this is how these data are primarily used. At-sea monitors collect accurate information on catch composition and the data are used to estimate total discards by sectors, gear type, and stock area. The program ensures that annual catch limits (ACLs) are not exceeded, supporting the NOAA Fisheries mission to build sustainable fisheries.

Industry-Funded Scallop (IFS) Observer Program

The IFS observers monitor sea scallop dredge and trawl gear catch aboard Limited Access and Limited Access General Category vessels as specified by Amendment 13 to the Atlantic Sea Scallop FMP. Data collected by observers are used to identify key characteristics of the commercial scallop fishery in the Northeast and Mid-Atlantic regions. Catch data and biological information help inform stock assessments, which rely on several data sources, including information taken directly from the fisheries. Protected species are sometimes caught during fishing operations. Samples obtained from these animals provide life-history information and data used to understand where, when, and how many of these species are unintentionally caught during fishing operations.

Northeast Fisheries Observer Program (NEFOP)

NEFOP observers collect catch, gear, fishing effort, and biological data over a range of commercial fisheries from Maine to North Carolina. These include the groundfish, herring, squid, surfclam, ocean quahog, and lobster fisheries. The primary purpose of NEFOP is to collect data needed to confidently estimate bycatch of all federally managed species in the Northeast region. In most fisheries, vessels are required to carry a federal fisheries observer if their trip is selected for coverage, particularly if the vessel is federally permitted or participating in a Category I or II fishery under the MMPA.[1]

The catch data and biological information collected support scientists when preparing a stock assessment. Samples obtained from protected species encounters provide valuable life-history information and data for bycatch estimation.

1 The MMPA mandates that all commercial fisheries be classified by the level of incidental marine mammal death and serious injury. Accordingly, the List of Fisheries (LOF) puts each fishery into one of three categories: (I) Frequent incidental death or serious injury of marine mammals, (II) Occasional incidental death or serious injury of marine mammals, and (III) Remote likelihood of/no known incidental death or serious injury of marine mammals.

How observer data is used

Some of the largest, most profitable fisheries rely on fishery observers to collect, process and manage data and biological samples from commercial fishing trips for stock assessment and management purposes. Following are some other uses for observer data that may directly—or indirectly—impact you, your family and friends, your wallet, your lifestyle, your community and more.

1. FishWatch

Ever heard of FishWatch? FishWatch provides up-to-date information and facts about U.S. seafood so shoppers and restaurant patrons can make seafood choices that align with their personal goals for consuming sustainably harvested seafood. FishWatch also explains how seafood is harvested using strict monitoring, management and enforcement that helps keep our marine environment and our fisheries healthy. Fishwatch would not be possible if NEFOP was not collecting data that helps assess the state of the fishery, determine fishery impacts to habitats, and evaluate bycatch. Eco-certification programs (e.g. Marine Stewardship Council) have also used observer data to identify and recommend sustainable seafood choices like Northwest Atlantic haddock, spiny dogfish, sea scallop, pollock, Acadian redfish, Atlantic surfclam, and ocean quahog. If supporting businesses that harvest or provide sustainably fished seafood is important to you, then so too is the data NEFOP collects.

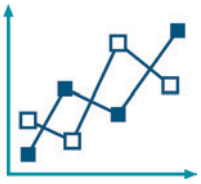
2. Safety

Per the federal requirements from NOAA and the United States Coast Guard (USCG), each time a fisheries observer arrives to cover a fishing trip, a thorough safety check is completed before the trip starts. This ensures that required life-saving equipment—for example, life rafts and emergency locator beacons—are present and in proper working condition to be utilized in an emergency. Safety preparedness and training help reduce the number and severity of worker accidents and at-sea emergencies. In addition to a well-equipped vessel, a well-trained observer leads to an overall increase in safety, to the benefit of all onboard.

3. Scientific and research community

Every year NEFOP receives requests from government agencies, the commercial fishing industry, and academic and research institutions across the country for data useful in fisheries research. In fact, from 2016-2018 the program processed 223 of these data requests. One of those requests came from the Massachusetts Department of Marine Fisheries, the University of Massachusetts Dartmouth, and an industry group called the Sustainable Fisheries Coalition who were working together on a project. Using NEFOP records of river herring catch, they established a system that sends real-time alerts to vessels about river herring and shad bycatch—how much is occurring and where—so fishermen can avoid areas where bycatch would be high.

4. Better stock assessments and fishery management



Stock assessments need to include information about total commercial catch—what is discarded at sea as well as what is landed. Commercial fishermen know that people not only *want* healthy, sustainably harvested seafood, they are also *willing to pay for it*. That is why fishermen work hard to minimize catch that they will not take to market, since it must be discarded and does not always survive. Observers help to document what is discarded and why—usually because there is no market, the individual fish is undersized for legal landing, or because landing the catch would result in exceeding a quota limit. This information directly contributes to better stock assessments and management, and provides seafood consumers with proof that what they are feeding their families aligns with their desire for sustainably harvested seafood.

5. Exploring new or revisiting small fisheries

When there is interest in exploring a new—or revisiting a smaller—commercial fishery, observers are there to collect baseline data to determine if the resource could be—or still is—fished sustainably. A sustainable blue or ocean economy happens when the ocean ecosystems can support economic activity such as a fishery, while remaining healthy and resilient. Collecting baseline data at the early stages of a burgeoning fishery is crucial for blue and ocean economies. Not only do these data help us maintain sustainable fisheries, but also related business like processing plants, utility and service providers, transport and delivery, restaurants, tourism, and their employees.

6. Special collections

Besides observers' regular duties, sometimes they are called upon to collect additional biological samples to fill data gaps, provide baseline data for preliminary research, or feed data-hungry statistical models for scientists and managers across the country. It is not unusual for universities, research institutions, and fisheries managers to tap into the experience, specialized sample collection gear, and remote fishing locations accessible within the observer program. It is another way scientists acquire the quantity and quality of data they require. Most recently FSB has worked with New Hampshire Fish and Game (NHFG), Massachusetts Division of Marine Fisheries, the Atlantic Offshore Lobstermen's Association (AOLA), Duke University, and Department of Fisheries and Oceans Canada (DFO) to collect samples for a variety of research studies.

For example, NEFOP was the only program sampling the offshore lobster fleet, prompting AOLA and NHFG to approach NEFOP with a pilot tagging and reproduction study to assess the distribution of egg-bearing female lobsters and their movement in eastern Georges Bank. Another example of a special data collection request is a study conducted by DFO on eastern Georges Bank cod. It is thought that there may be two genetically different populations of cod on Georges Bank—an eastern and a western population. Many studies have looked at the western population, but few have looked at the eastern. To determine if there are two genetically different populations, NEFOP observers are collecting DNA samples during the spawning season in targeted locations. If there are two genetically different populations, managers may have to assess and manage them differently.

7. Documenting species

In 2018, Northeast Fisheries Observers spent about 10,782 days—approximately 172,200 hours—at sea. During that time, they encountered many types of fish, mammals, seabirds, and invertebrates. The FSB's Species Verification Program (SVP) ensures accurate identification of the species they encounter by requiring observers to photograph or submit a wide variety of commercially important species, endangered species, or species of special concern. These records are each identified by at least two specially trained FSB staff—usually within 24 hours—who provide fast feedback to the observers, often before they deploy on their next trip.

In 2018, the SVP received 31,653 photos that included over 14,000 specimens. SVP data are used to audit and support observer data, improve training methods, and provide data users with information about data accuracy. Observers can send any species encountered on trips into the SVP for identification. As a result, observers can quickly learn the identification of less common species. In 2018, observers documented nine 'Verified for the first time within the NEFOP' fish or invertebrate species; these included a pallid sculpin, snubnosed eel, and dotterel filefish. Observer SVP records are a source of high-confidence data on species distributions that can be used to identify important habitats and species ranges, but also can be used to highlight changes in fishing effort or changing sea conditions.

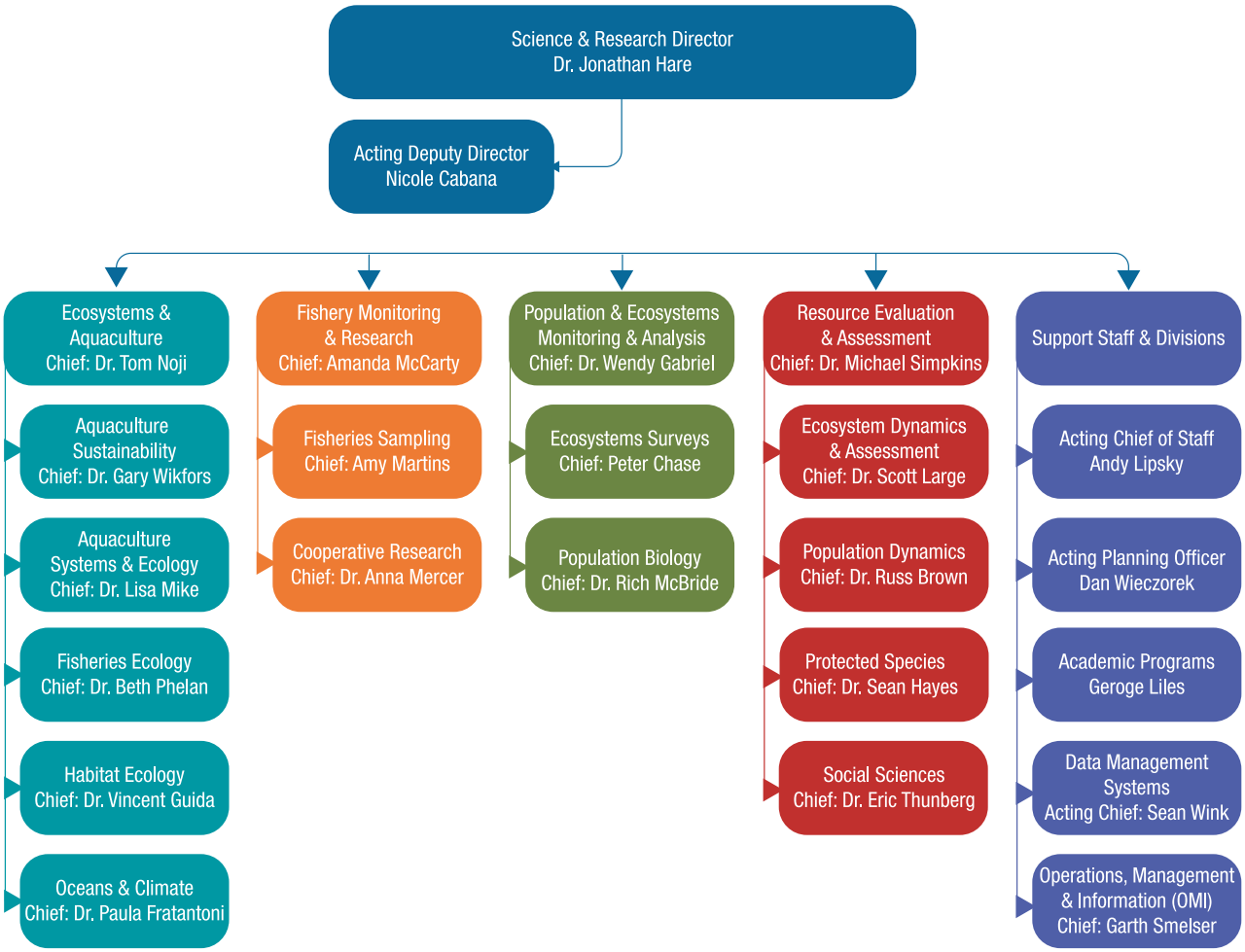
8. Gear modifications to reduce bycatch

Commercial fishery catch has two components: animals that will be kept, and those that will be thrown back. Kept catch is landed and sold. Catch thrown back into the ocean is referred to as discards or bycatch. Because a good portion of the bycatch does not survive capture and discard, NOAA Fisheries and other organizations are working on modifications to commercial fishing gear that reduce bycatch and improve survival of animals when discarded. Once a gear modification is being used, continued monitoring of modified gear performance is essential to make sure it is still fishing as intended even as fishing and ocean conditions change over time. Because observers are on commercial fishing vessels outfitted these modified gears, they can collect data to evaluate gear performance.

When gear modification is successful, it offers an alternative to allow fishing to continue while mitigating risks to protected or rebuilding populations. For example, haddock separator trawls retain haddock, but also have a separate panel that allows recovering species and stocks—like Georges Bank cod and yellowtail, winter, and witch flounders—to escape. Gear modifications can also help reduce fish processing time on commercial fishing vessels or allow commercial fishing in areas and at times that are otherwise prohibited. In a commercial fishery, where time is money, using modified gear can make a big difference.

Northeast Fisheries Science Center organizational chart

Directorate and Science & Research Divisions



OMI Branches

Office and Laboratory Locations

Fisheries Sampling Branch organizational chart

FSB is within the Fishery Monitoring and Research Division of the NEFSC. There are multiple observer programs within FSB. This organization chart shows how these programs are linked and lists staff that support these programs.

Fishery Monitoring & Research Division, Fisheries Research Branch (71): Updated 7/24/2019
13 federal positions (dark blue text), 4 vacancies (yellow text), 56 affiliates (white text), 5 part-time position (PT) and 3 off-site positions (OS).

Who we are

FSB comprises approximately 70 staff members, including a Branch Chief, administrative assistants, area and fisheries leads and assistants, a training team, debriefers, data auditors, data entry and archive staff, data analysts, database support, data quality control, at-sea technology integration, vessel call-in coordinators, and liaison staff for observers, fishermen and the electronic monitoring project.

Most staff members have at-sea and/or fishing industry experience as observers, scientists, observers, trainers, or liaisons. The FSB is responsible for:

- Observer training, support, equipment, and debriefing.
- Observer report reception, processing, and validation of observer reports.
- Observer data and sample management.

A staff directory is available online and in Appendix A1.

Where we operate and how to reach the Fisheries Sampling Branch

Our primary office where staff are located is the Observer Training Center within the Town of Falmouth's Technology Park, with the following physical and mailing address:

NOAA Fisheries
Northeast Fisheries Science Center
Fisheries Sampling Branch
Observer Training Center at Tech Park
25 Bernard East Saint Jean Drive
East Falmouth, MA 02536

Telephone: (508) 495-2130 or (508) 495-2000
Email: NEobserver.info@noaa.gov
Web: www.nefsc.noaa.gov/fsb

Contact information for common inquiries

FSB frequently responds to inquiries about programs and protocols. This table contains a point of contact and details for common inquiries.

General inquiries

Inquiry	Point of Contact	Phone #	Email Address
Emergency or to report a late observer	24/7 Line	(855) FISHES1 / (855) 347-4371	
Branch Chief	Amy Martins	(508) 495-2266	amy.martins@noaa.gov
Administrative	Kathy Abney	(508) 495-2338	katherine.abney@noaa.gov
Data requests	Gina Shield	(508) 495-2139	gina.shield@noaa.gov
Observer regulations	Tom Gaffney	(508) 495-2147	tom.gaffney@noaa.gov
Observer Compliance Liaison	Zachary Fyke Day/extended hours	(508) 495-2146 (774) 392-5261	zachary.fyke@noaa.gov
Observer service providers	A.I.S., Inc. E.W.T.S. Fathom Resources	(508) 990-9054 (860) 910-4957 (508) 990-0997	
Outreach coordination	Chad Keith	(508) 495-2067	charles.keith@noaa.gov
Safety	Kenneth Keene Kara Gross	(732) 872-3070 (508) 495-2154	kenneth.keene@noaa.gov kara.gross@noaa.gov
Seaday schedule	Sara Weeks	(508) 495-2227	sara.weeks@noaa.gov
Sector Manager Liaison	KB McArdle	(508) 495-2377	katherine.mcardle@noaa.gov

U.S.C.G. safety decals—the best way to schedule a Commercial Fishing Vessel Safety exam is to visit the official request page at: http://www.fishsafe.info/docksideexamrequest.htm

Fishery-specific inquiries

Scallop Pre-Trip Notification, (508) 495-2100

Herring, mackerel Pre-Trip Notification, (774) 392-2735

Groundfish Pre-Trip Notification System (PTNS):

Internet (preferred method) - This should be the primary means of trip notification and trip changes. The PTNS website is available at the following address: http://fish.nefsc.noaa.gov/PTNS/. Vessels should log in using the same username (Permit Number) and password (PIN) as they use for Fish-On-Line.

Email - This should be the secondary means of trip notification. The email address to submit trip notifications, trip changes, questions, or problems is nefsc.ptns@noaa.gov.

Phone - If neither the internet or email methods are working, the third means of trip notification is by phone. The number for notifications is 1 (855) FISHES1 or 1 (855) 347-4371. At this number the PTNS Coordinator is available from 8:00 am to 5:00 pm on business days. **After business hours and on weekends and holidays,** calls will be fielded by an answering service operator who is qualified to enter notifications, to answer frequently asked questions, and to help troubleshoot common PTNS issues. In emergency situations, the operator will immediately contact a NMFS representative for assistance.

Northeast Fisheries Science Center science plan

NEFSC vision statement

Conduct ecosystem-based research and assessments of living marine resources, with a focus on the Northeast Shelf, to promote the recovery and long-term sustainability of these resources, and to generate social and economic opportunities and benefits from their use.

Mission objectives

Research and monitoring

Understand and predict changes to marine ecosystems and their subsystems affecting living marine resources, fisheries, habitats, ecosystem condition, productivity, aquaculture, and the generation of net national benefits.

Scientific advice

- Develop and provide the scientific foundation for management programs that has an ecosystem-based framework.
- Enhance society's capability to respond to changing ecosystem conditions and to manage risk by developing science-based decision tools.

Education and outreach

Engage and interact with individuals, partners, schools, communities, and industries to facilitate information flow, to assure coordination and cooperation, and to provide technical assistance in the management of living marine resources and their habitats.

Core values

Fisheries Sampling Branch scientific work plan

FSB vision

To provide high quality information to support ecosystem-based fishery management.

Mission

To collect exceptional, timely, and unbiased fishery dependent data in the Northwest Atlantic. To promote long-term sustainability of fishery ecosystems by working collaboratively with fishing communities, scientists, resource managers, stakeholders, and the public.

Goals

- Train, certify, and retain high performing observers.
- Safely deploy and support observers.
- Modernize and enhance at-sea data collection and dissemination.
- Strengthen stakeholder relationships.
- Support science and fishing communities.
- Provide outreach to fishing communities and the public regarding observer program purpose and goals, including information about coverage levels.

Values statement

With integrity and transparency, safely deploy highly trained fisheries observers. Through strong relationships with fishermen and end users, provide an adaptive workforce to support ecosystem-based fishery management with unbiased quality data.

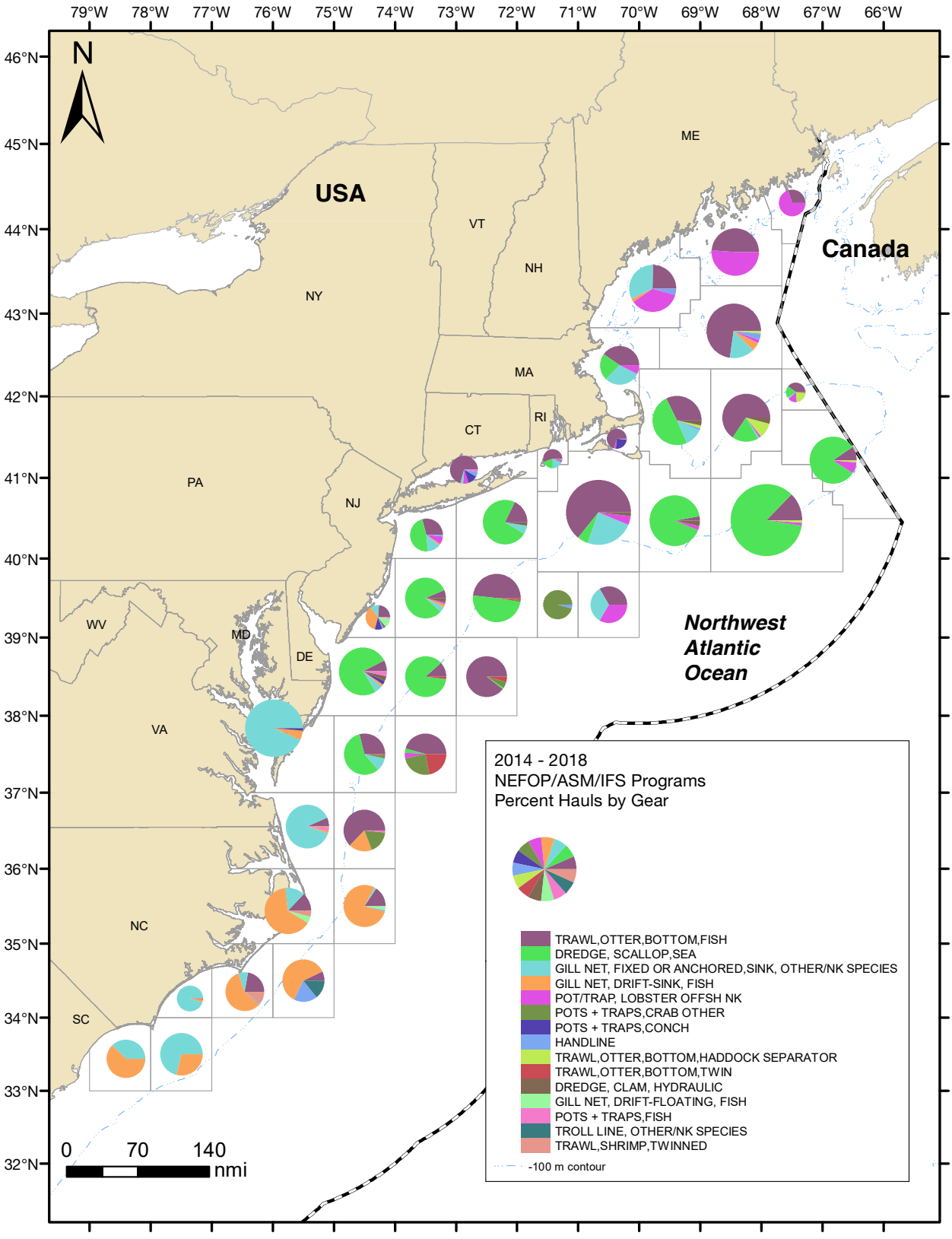
Fisheries Sampling Branch milestones

NOAA's Annual Operating Plan (AOP) consists of performance measures with associated milestones directed toward achievement of the agency's strategic plan objectives and annual priorities. NOAA Fisheries leadership tracks accomplishments through the NOAA Fisheries AOP, and reports progress quarterly to NOAA. This includes planning, monitoring, and reporting of milestones and performance measures.

The NOAA Fisheries Strategic Plan 2019-2022 provides specific strategic guidance on our highest priorities; it addresses our core mission, administration priorities, and those priorities identified in the Department of Commerce Strategic Plan. Milestones have been set to align with this guidance, supporting our priorities. Milestones are directed by our strategic goal to improve organizational excellence and regulatory efficiency, strengthening our capacity to maximize return on program investments, and deliver quality, timely service.

Background information

Observer coverage by gear type in the Greater Atlantic Region (2014-2018)



Additional uses for observer data

To manage fisheries, data are needed—not only for species targeted by a fishery, but for all species making up the affected ecosystem. Observers are the only independent data collection source for some types of at-sea information, such as bycatch, catch composition, biological sampling, protected species interactions, and gear configuration.

Reducing bycatch

Not everything caught by a fishing vessel is kept. In many cases, fishing vessels discard fish that are too small or are not the species being targeted. Some protected and regulated species cannot be kept by law and are also discarded. In other cases, the fishing vessel has reached its total allowable catch for a species, so any extra catch of that species must be discarded. Depending on the fishery and species caught, discards may be alive or dead.

Observer programs are the primary source for discard data in the U.S. While on board commercial fishing vessels, observers record the type and amount of discards as well as the reason for discarding. We need this information to create a complete picture of fishing impacts. High levels of discards, particularly of commercial and ecologically valuable species, may be a signal to alter fishing activities or gear to reduce the impact of fishing on the marine environment.

Supporting stock assessments

Stock assessments provide a picture of the current state of a fishery stock as well as its likely future state under various conditions. A range of biological samples taken throughout the year in all fisheries help scientists and managers see changes in a fish population, and perhaps to determine the cause of change. These assessments drive the fisheries management process and are used to set catch levels, maintain healthy fish populations, and rebuild overfished stocks—all required by the under U.S. law, which mandates sustainable federal fisheries.

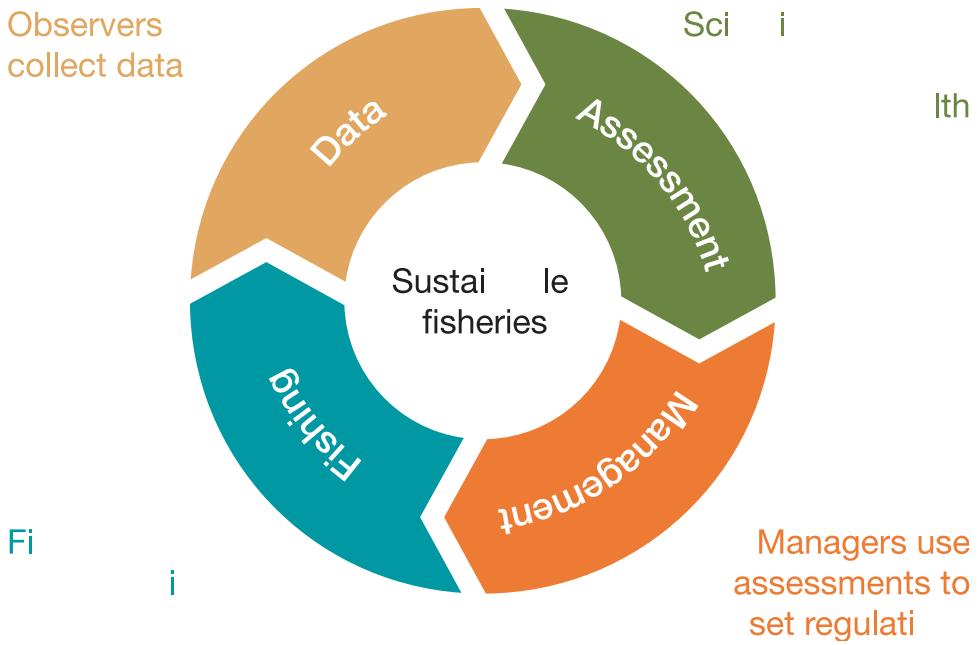
The stock assessment process requires detailed information for each species, such as size, age, gender, and number caught. Our fishery scientists use the information provided by observers, along with other data sources such as research surveys and fishermen-reported data, to complete a stock assessment.

Monitoring protected species interactions

Observers also collect information on when and how often fishermen interact with, or "take," protected species like marine mammals, sea turtles, certain populations of fish, and endangered seabirds. The term "take" refers to fisheries interactions with species protected under the MMPA or ESA, as well as seabirds protected under the Migratory Bird Treaty Act. The data collected help scientists develop ways to reduce the risk of fisheries interactions with these species. The information collected by fisheries observers also allows scientists to monitor the health of marine mammal and protected species populations, which is required under the MMPA and the ESA.

Biological data—such as estimates of the total number, age, and gender, of animals incidentally killed or seriously injured during the course of commercial fishing operations—are used by NOAA Fisheries take reduction teams when developing take reduction plans. These plans help to recover or prevent depletion of certain marine mammal stocks. Biological data on capture and discard rates of fish species are also an important part of recovery plans developed for threatened and endangered species under the ESA.

The role of observers and fishermen in sustainable fisheries



Monitoring experimental fisheries and gear types

The fishing industry constantly evolves as new technology is developed and new markets open. Observer programs are one way to collect information on the impacts of changes in fishing activity and gear types.

Observers are often included as a condition of getting federal exempted fishing permits. These permits are issued to test modifications to fishing gear, such as devices intended to help reduce bycatch. An exempted permit may also be issued when a fishery develops to serve a new market. In all of these cases, observer data help fisheries managers make balanced decisions on the potential benefits and impacts of the experiment. In the past, observer data collected under exempted permits has led to the development of bycatch reduction devices such as the turtle excluder devices in the southeastern U.S. shrimp trawl fishery, and the implementation of acoustic deterrents, or "pingers," to reduce harbor porpoise bycatch in the Northeast and Southwest.

Supporting regulations for sustainable fisheries

Most observer programs are authorized through federal FMPs, which are administered by regional fishery management councils. Each FMP outlines what measures will be used to regulate the fishery. Observer data are critical to the success of the plans, as they inform council decisions regarding quotas, caps, and discard allocations. For example, when a "total allowable catch" level has been specified for a species, observer data are used during the fishing season to project when the cap has been reached.

For rebuilding species, such as New England groundfish, pre-season target catch numbers are provided to the management team. After the fishing season, observer data are evaluated and compared to the pre-season targets to evaluate total catch, and the next season's targets are adjusted accordingly. We may also cap the number of marine mammals, sea turtles, or seabirds incidentally caught by the fishery. Observer data are used to estimate when that number has been reached. If it is reached before the fishing season ends, the fishery may be closed early.

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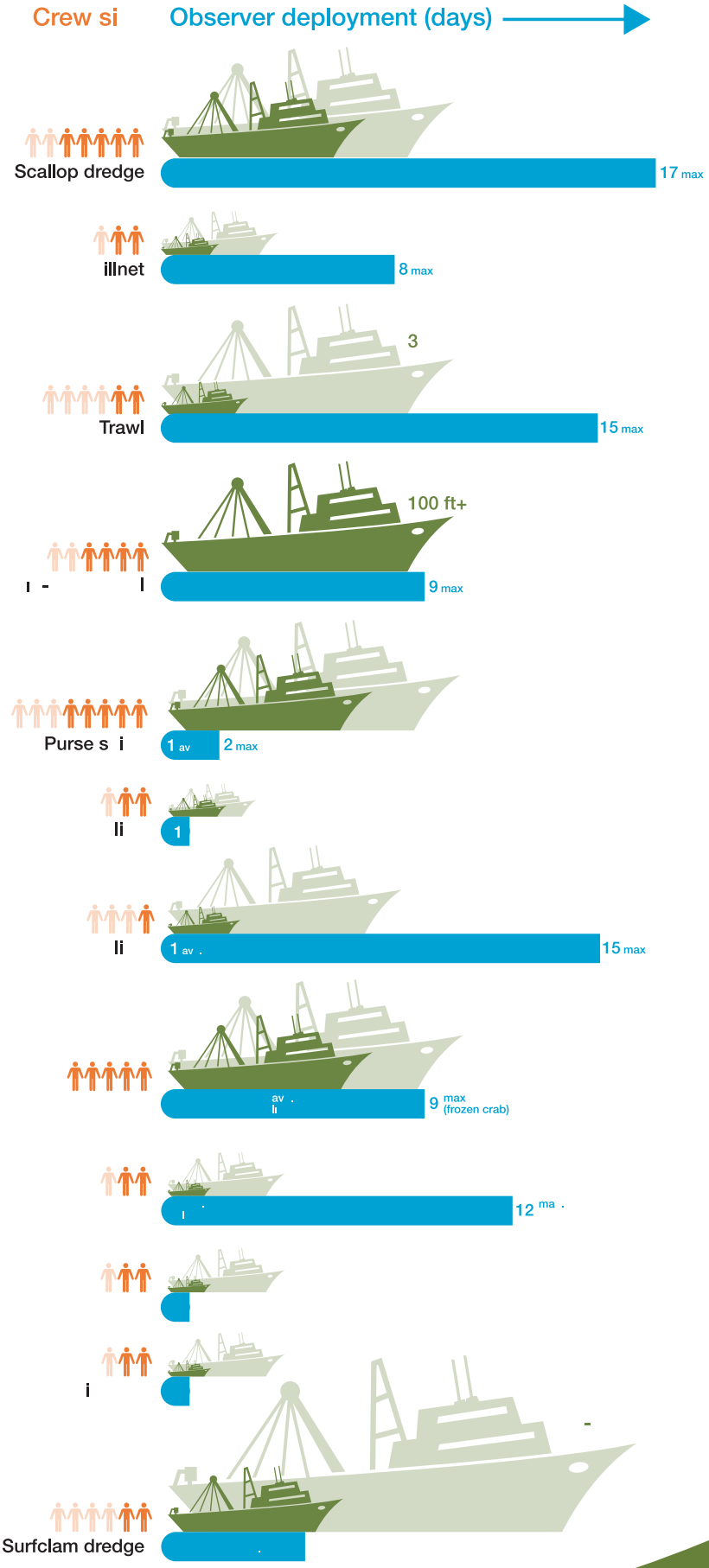
Observer gear types and trip lengths



How trips are selected

Each fishery has slightly different regulations and requirements around notification to NMFS and vessel selection.

Pre-Trip Notification System for Northeast multispecies (groundfish) trips

The Pre-Trip Notification System (PTNS) is designed by NMFS to provide a fast, simple, and effective way to ensure fair and adequate coverage across multiple sampling programs, of all vessels fishing for groundfish. Vessels must notify NMFS for groundfish trips a minimum of 48 hours in advance of trip sail time.

Notification system for Atlantic herring

Atlantic herring vessel representatives notify NEFOP 48 or 72 hours in advance of a fishing trip, depending on their permit category. NEFOP will issue waivers or selection notices for observer coverage weekly via Vessel Monitoring Service (VMS). Selection of vessels is representative of effort, and designed to achieve sea days allocated by fleet per quarter under the Standardized Bycatch Reporting Methodology (SBRM). More information about SBRM is available online.

Notification system for Atlantic mackerel

Representatives for Atlantic mackerel vessels that are issued a limited access permit (Tier 1, 2, or 3) must call NEFOP at least 48 hours in advance of a fishing trip. NEFOP will issue waivers or selection notices for observer coverage weekly via the vessel's VMS. Selection of vessels is representative of effort, and designed to achieve sea days allocated by fleet per quarter under SBRM.

Notification system for Atlantic sea scallop

The IFS Observer Program utilizes an automated Interactive Voice Response (IVR) system to record information on a vessel's intent to fish for scallops, (508) 495-2100. The system is available 24 hours a day, 365 days a year. Limited Access vessels are required to call the system on a per-trip basis, and Limited Access General Category vessels are required to call once per calendar week (Sunday through Saturday). Each permit type is required to provide the IVR with 72-hour notice of their intent to fish.

Section 2.

What to know before taking a commercial fishing trip

The Fisheries Sampling Branch (FSB) administers three separate observer programs in the Northeast region: the Northeast Fisheries Observer Program (NEFOP), the At-Sea Monitoring (ASM) program, and the Industry-Funded Scallop (IFS) program. Each of these programs is designed to collect bycatch data that supports fisheries management. This section gives an overview of each observer program and their pre-trip notification requirements.

Observer coverage

For commercial fisheries, information about bycatch that is needed for fisheries management is primarily collected by at-sea observers. Since observers cannot be on every trip, we rely on information from observed trips to estimate the discard on the trips that don't carry observers.

In the Northeast region of the United States, observer coverage is accomplished through three categories of observers: Northeast Fisheries Observer Program (NEFOP), At-Sea Monitoring (ASM), and Industry-Funded Scallop (IFS). These programs are described in this Section. Baseline sea day coverage is driven by the results of an annual analysis termed the Standardized Bycatch Reporting Methodology (SBRM), required under the Magnuson-Stevens Fishery Conservation and Management Act (MSA). Observer coverage is supported by the MSA, Marine Mammal Protection Act (MMPA), the Atlantic Coastal Fisheries Cooperative Management Act (ACFCMA), and the Endangered Species Act (ESA).

Since 2010, the NEFOP and ASM programs have provided onboard observers to the groundfish fishery. Until recently, both programs allocated observers to trips in the groundfish fishery based on fixed coverage rates to meet required total combined coverage targets, established annually, prior to each fishing year. Fishing year 2019 is the first year NOAA Fisheries will use a more sophisticated method for selecting groundfish fishing trips for NEFOP observation. This method will still implement the combined coverage target rate for the groundfish fishery, but will use the SBRM fleet-based stratification to allocate NEFOP coverage rather than a flat rate across sectors. SBRM is the primary process by which the Seaday Schedule is assigned for NEFOP, which is described in detail below.

Standardized Bycatch Reporting Methodology: What does it mean?

Maybe you have heard the term, SBRM—or Standardized Bycatch Reporting Methodology—and you know that it has something to do with observers, but you do not fully understand what it is. You are not alone! Essentially, to assign observers coverage for the purpose of estimating bycatch in commercial fisheries across the Greater Atlantic Region, the SBRM process divides commercial vessels into fleets based not on what they fish for, but rather on the type of fishing gear they use and where they fish (New England or Mid-Atlantic). The observer coverage assigned to each fleet is primarily driven by the variability in discards of the managed fish species and sea turtles.

For example, if boats using a certain gear always discard ten pounds of a particular species for every 100 pounds of fish landed, we could easily estimate how much an unobserved trip discarded since we know how much fish was landed for each trip. However, if the amount discarded by vessels using a certain gear type is highly variable, it is more difficult to estimate discards on unobserved trips. Generally, more observer coverage leads to both a better understanding of discard variability and a more precise estimate of total discards.

The Fisheries Sampling Branch (FSB) revised the SBRM in 2015 (in response to a 2011 court ruling), which now uses a formulaic process to distribute limited observer coverage across the various fleets in our region. In some cases, this change results in more observers being assigned to fleets that have had little or no observer coverage in past years, such as vessels that fish with hydraulic clam dredges or red crab pots.

SBRM is the primary process FSB utilizes to assign coverage for NEFOP. The groundfish sector ASM and IFS programs also utilize SBRM, and have other regulations and requirements that drive coverage and allocation of seadays.

More information on the SBRM Amendment and the final rule are available online.

Northeast Fisheries Observer Program

NEFOP has a specific protocol for NEFOP observers working for a federally-contracted observer provider, to accomplish SBRM and MMPA-driven sea days on the NEFOP Seaday Schedule in the Greater Atlantic Region, from Maine to North Carolina.

The sea days needed to achieve a precision-based performance standard—30% Coefficient of Variation (CV) of the discard estimate—for 15 SBRM species groups[1] (including sea turtles) are estimated by the Northeast Fisheries Science Center (NEFSC). Funding levels are determined and a final NEFOP Seaday Schedule is established. The NEFOP Seaday Schedule is a compilation of sea days required under the SBRM and MMPA by fleet, excluding sea days required to monitor discards in the Northeast multispecies (groundfish) and IFS programs.

At-Sea Monitoring coverage for groundfish sector vessels

An effective and affordable monitoring program is essential to the success and sustainability of the New England groundfish fishery. The total monitoring coverage should provide confidence that the overall catch estimate is accurate enough to ensure that sector fishing activities are consistent with the MSA National Standard 1 requirements, which were set to prevent overfishing while achieving optimum yield from each fishery on a continuing basis.

Every year, the National Marine Fisheries Service (NMFS) conducts an analysis to determine the target monitoring coverage level for sector vessels. This analysis considers past performance in order to predict the necessary coverage for the upcoming year to effectively monitor sectors and estimate discards. Coverage must meet a level of precision in estimating discards at the overall stock level for each groundfish stock, and the target coverage level is set based on the stock that has the highest monitoring requirement to achieve the required level of precision, based on a 3-year average.

DID YOU KNOW ...

Data from the most recent three full fishing years are used to predict the coverage level necessary to reach the precision standard for each groundfish stock.

For example, in fishing year 2019, sectors are required to have monitors on 31% of their groundfish trips. As established by the New England Fishery Management Council (NEFMC) and SBRM regulations, NOAA Fisheries must set coverage levels to meet the precision standard, a CV of at least 30%, in order to reliably estimate overall catch by sector vessels. The coverage level will verify area fished, as well as catch and discards by species and gear type, in the most cost-effective means practicable. Sectors are responsible for paying for the at-sea costs of the ASM program.

Data from the most recent three full fishing years are used to predict the coverage level necessary to reach the precision standard for each groundfish stock. For example, the 2019 target coverage level is based on data from the 2015-2017 fishing years.

1 15 SBRM species groups include: (1) Atlantic salmon, (2) Bluefish, (3) Fluke, Scup & Black sea bass, (4) Atlantic herring, (5) Large mesh groundfish (American plaice, Atlantic cod, Atlantic halibut, Atlantic wolffish, Haddock, Ocean pout, Pollock, Redfish, White hake, Windowpane flounder, Winter flounder, Witch flounder, Yellowtail flounder), (6) Monkfish, (7) Atlantic deep-sea red crab, (8) Sea scallop, (9) Skate complex (Barndoor skate, Clearnose skate, Little skate, Rosette skate, Smooth skate, Thorny skate, Winter skate), (10) Small mesh groundfish (Offshore hake, Red hake, Silver hake), (11) Spiny dogfish, (12) Squid, Butterfish & Mackerel, (13) Surfclam & Ocean quahog, (14) Blueline & Golden tilefish, and (15) Loggerhead turtles.

With Congressionally appropriated funds, NMFS reimburses a percentage of the industry's ASM costs. For example, Congress provided $10.3 million for groundfish at-sea monitoring in both 2018 and 2019, providing 100% of the funding each year. This funding provides additional economic stability for the sector vessels, especially in light of the increasing coverage rate. To maintain the infrastructure currently used to reimburse groundfish operations for ASM, the NEFSC will use these funds to continue the reimbursement program administered by the Atlantic States Marine Fisheries Commission (ASMFC) to reimburse sectors for ASM costs. Groundfish sectors will continue to contract directly with service providers for monitoring services.

> *"ASM coverage, assigned through the Pre-Trip Notification System (PTNS), will be used in conjunction with NEFOP to ensure that groundfish sectors achieve their total required combined coverage. Differences in the sectors' SBRM fleet type compositions will result in some sectors having higher coverage provided by NEFOP than others. Because NEFOP coverage is paid for NMFS and the ASM program is intended to be industry funded, this change in selection method may cause cost disparities across sectors in the future."*
>
> Werner S, Demarest C, Thunberg E. 2019. Assessing Distributional Impacts Stemming from a Methodological Change in the Multispecies Fishery Combined Coverage Monitoring Program. *US Department of Commerce, Northeast Fish. Science Center Reference Document.* In review. Submitted 26 April 2019.

For more information, please read the Summary of Analysis Conducted to Determine At-Sea Monitoring Requirements for Multispecies Sectors FY2019 available on the Greater Atlantic Regional Fisheries Office (GARFO) website.

Industry-Funded Scallop Observer Program

There are two processes for allocating observer days to the New England and Mid-Atlantic scallop fleets. All observed scallop seadays are prosecuted under the IFS Observer Program. The first process is the SBRM, which is completed by the NEFSC and the second process is a scallop compensation rate analysis which is conducted by the GARFO. The SBRM process estimates the number of seadays necessary to achieve a 30% CV from the discard estimates in the scallop fisheries. SBRM seadays serve as a minimum number of seadays needed for the scallop fishing fleets. The scallop compensation rate analysis determines the total number of industry-funded sea days available for observing the scallop fleets by taking 1% of the scallop biomass (observer set-aside) from the annual catch limit (ACL) for the fishing year.

DID YOU KNOW ... The IFS program allows scallop vessels an increase in landings to help defray the costs of carrying the observer

The IFS program allows scallop vessels an increase in landings to help defray the costs of carrying the observer (i.e., the compensation rate). The sale of the additional scallops allocated to each boat supplies the funding for the at-sea costs of observer coverage. Based upon projected scallop landings and expected prices, the IFS program generates funds in support of additional discard monitoring of the scallop fleets. The Scallop Fishery Management Plan (FMP) justifies the use of the scallop observer set-aside to achieve observer coverage levels that exceed those required by SBRM in order to increase the precision of finfish bycatch estimates and to aid in scallop assessment and rotational management.

Vessel pre-trip notification and observer selection

While many of the Northeast and Mid-Atlantic fisheries require observer coverage, only some fisheries require a vessel representative to notify NEFOP prior to every trip. These fisheries include: Northeast multispecies (groundfish), Atlantic sea scallop, and the Atlantic herring and mackerel fisheries. To achieve the coverage levels described above, each observer program has a different method of selecting vessels to carry an observer and/or monitor after they are notified.

Northeast multispecies (groundfish) notification requirements and observer selection

The Pre-Trip Notification System (PTNS) selects trips declared into the groundfish fishery for both NEFOP and ASM coverage. As described in the Observer Coverage Section, NEFOP selection is driven by SBRM requirements and is at the fleet level, and ASM selection is driven by a target percentage (set annually) of sector vessels. PTNS is designed by NMFS to provide a fast, simple, and effective way to ensure fair and adequate coverage of all vessels fishing for Northeast groundfish, across multiple sampling programs. Vessels must notify NMFS for groundfish trips a minimum of 48 hours in advance of trip sail time.

A vessel may submit notifications at https://fish.nefsc.noaa.gov/PTNS/. Captains may also email them to nefsc.ptns@noaa.gov, or call them in to 1 (855) FISHES1, or 1 (855) 347-4371. This PTNS phone line is available 24 hours a day, 365 days a year; it is manned by NMFS staff during business hours and by an answering service contractor after business hours, weekends and holidays. After business hours emergencies and urgent troubleshooting can be requested through the answering service by on-call NMFS staff.

When a notification is entered into the system, the PTNS determines the eligible sampling tiers for the trip based on the vessel and the trip characteristics entered. PTNS initiates an automated process that randomly selects a trip for possible observer coverage or issues it a waiver based on the coverage rate of trips in the same stratum or fleet depending on the tier it is selected at.

PTNS selects trips at an increased rate in a stratum/fleet when that stratum's coverage is low and at a lower rate when that stratum's coverage is high. Increased selection rates are most evident at the start of the fishing year or when a stratum with zero previous trips begins fishing. This high amount of selection is normal and works to accomplish observer coverage on enough trips to calculate an observed discard rate as quickly as possible.

If a trip is selected for possible coverage, the NEFOP provider or the sector's contracted ASM provider is notified. Based on observer availability, the provider either accepts the trip and assigns it an observer or indicates they are unable to provide groundfish observer coverage for that trip—in which case the vessel will then be issued a waiver.

A vessel will receive automated emails to their Vessel Monitoring System (VMS) and other email addresses registered in their PTNS account when a notification is entered. Emails are also sent between 24 and 48 hours prior to a vessel's scheduled sail time when the trip's final observer status is determined.

Please see the PTNS website for more information.

Atlantic herring notification requirements and observer selection

Atlantic herring vessel representatives notify NEFOP 48 or 72 hours in advance of a fishing trip, depending on their permit category by calling (774) 392-2735. NEFOP will issue waivers or selection notices for observer coverage weekly via VMS. Selection of vessels is representative of effort and is designed to achieve sea days allocated by fleet per quarter under the SBRM. More information about SBRM is available online.

Atlantic mackerel notification requirements and observer selection

Representatives for Atlantic mackerel vessels that are issued a limited access permit (Tier 1, 2, or 3) must call NEFOP at least 48 hours in advance of a fishing trip by calling (774) 392-2735. NEFOP will issue waivers or selection notices for observer coverage weekly via the vessel's VMS. Selection of vessels is representative of effort and is designed to achieve sea days allocated by fleet per quarter under SBRM.

Atlantic sea scallop notification requirements and observer selection

The IFS Observer Program utilizes an automated Interactive Voice Response (IVR) system to record information on a vessel's intent to fish for scallops, (508) 495-2100. The system is available 24 hours a day, 365 days a year. Limited Access vessels are required to call the system on a per-trip basis, and Limited Access General Category vessels are required to call once per calendar week (Sunday through Saturday). Each permit type is required to provide the IVR with 72-hour notice of their intent to fish.

1. Random selection for coverage of scallop trips occurs based on fleet, gear type, and area fished; and takes into account the vessel's previous observer coverage. Selection or waiver emails are sent by NEFOP via the vessel's VMS within 24 hours of notice of their intent to fish. If selected, fishermen are then required to contact all of the approved provider companies to arrange observer coverage for their selected trip. The list of approved IFS provider companies is available online. If no observers are available from any of the observer providers the vessel representative may request a waiver from NEFOP. Appendix B1 provides additional details on these IFS Observer Program requirements, and Appendix B2 is a guide for calling into the IVR system.

NEFOP Seaday Schedule and vessel selection

Fleets with no pre-trip notification requirements are selected off the NEFOP Seaday Schedule, where vessel selection for trips is done at the fleet level. Fleets are partitioned by five classification variables: geographic region (New England or Mid-Atlantic), gear type, mesh category, access area, and trip category. For example, the New England large mesh bottom trawl fleet consists of any vessel landing in a port from Maine to Rhode Island using bottom trawl gear with a codend mesh size of 5.5 inches or greater.

The FSB contracts with an observer service provider, who stations observers in ports throughout the Greater Atlantic Region, to achieve the sea days tasked on the Seaday Schedule. The NEFOP provider is responsible for selecting vessels for coverage and the day-to-day logistics of observer deployments and support, although a vessel may also be selected by a NMFS employee, or observer acting on behalf of the Regional Administrator. The NEFOP provider, as the NMFS designated contractor, has several ways to inform vessel representatives they have been selected for observer coverage:

1. The majority of vessel selections for NEFOP Seaday Schedule trips will occur via phone communication (text message or call). The provider will call the vessel representative to inform them the vessel is selected for its next trip.
2. The provider or observer may also select a vessel in person. This can be done at any time, including shortly before a fishing trip. The provider should attempt phone or in-person selection before resorting to other selection methods.
1. If contact cannot be made by other means, or if the vessel has expressed a preference, the provider may send a vessel selection letter (Appendix B3) to the permit holder address, permit holder email or VMS. Once a letter has been received the permit holder is responsible for ensuring the vessel carries an observer to meet the requirements of the letter. Letters may select a vessel for single or multiple trips, a date range or specified number of days at sea. Letters may also specify selection for a specific gear type, VMS declaration code, or mesh size category.

Once a vessel has been notified of observer selection, they must communicate with the designated contractor at least 24 hours prior to deploying on the selected trip. There is no limit to the number of trips a vessel can be selected for within a given month. Observer coverage will be based on sea day requirements and individual vessel activity. Individual fleets should be covered representative of vessel activity; vessels making more trips or longer trips will be responsible for carrying an observer for a greater number of sea days than those who fish less frequently. FSB staff review the previous year's fishing effort and provide guidance to the provider as an estimated target number of sea days needed on an individual vessel. This is based on the number of days the vessels are expected to actively fish within a given calendar

quarter and can/should be adjusted based on realized effort within the quarter. FSB provides the Area Coordinators[2] with graphical representations of federally permitted fishing effort and estimated required observer coverage in order to assist the coordinators in communicating target coverage, by vessel.

The NEFOP service provider attempts to cover a vessel no more than the minimum number of trips necessary to ensure that coverage is spread throughout the fleet. If a vessel participates in multiple fleets (uses more than one gear type/mesh category or fishes out of different regions), they may be requested to carry an observer to accomplish sea days for each of those fleets. For example, if an individual vessel uses both large and small mesh gillnet gear on different trips, they may be asked to carry an observer on both types of trips.

The Observer Program utilizes these procedures to collect representative data and aims to reduce vessel selection bias wherever possible (i.e. try to be fair and even with consistent procedures across all active vessels within a fleet, based on required levels of coverage under the SBRM and MMPA). Observer and/or service provider preference in vessel selection is strictly prohibited. In addition, observer assignment should not incorporate industry preferences. Representative and equitable coverage is required and necessary to prevent incorporating bias into observer data. A service provider's observer assignment must be fair, equitable, representative of fishing activities within the fishing fleet, and able to monitor fishing activity throughout the fishing year. Observer assignment is driven by homeport, observer certification, and observer availability, and should not be influenced by observer preference in accordance with contract requirements and the selection process. Observer discretion in trip coverage is specific only to those vessels with safety deficiencies or health and wellness concerns, and in these cases, the observer is instructed to not deploy for safety concerns.

For more information on NEFOP Seaday Schedule vessel selection contact FSB at (508) 495-2227.

2 The NEFOP observer service provider breaks the Northeast region into smaller management units (i.e. individual states) overseen by Area Coordinators. These individuals are responsible for day-to-day management of the observers homeported and deploying in their assigned area as well as trip selection and communications with industry in their area.

Section 3.
What to expect during a commercial fishing trip

The Fisheries Sampling Branch (FSB) trains its observers to clearly communicate their work flow, including the requirements before leaving dock, and their duties once onboard. Captains and crew members are expected to support the observer's work onboard and provide suitable working conditions.

Letter of introduction

The letter of introduction is a document identifying a specified individual as an observer that can be given to the vessel captain or the United States Coast Guard (USCG). Common Access ID Cards (CACs) are issued to all observers, although there are instances when they first start working and may not have received their CACs. This document can also be added to USCG boarding reports or can be requested by a captain to record who the observer was for a trip. Each Fisheries Sampling Branch (FSB) observer program has slightly different letters. A template for the Northeast Fisheries Observer Program (NEFOP) Letter of Introduction is included in Appendix B4.

Late observer policy

NEFOP does not accept observers being late for a trip. Observers recognize this, and it should be a rare occurrence that an observer is late for a trip. Observers should not delay scheduled fishing operations. Observers with unacceptable reasons for being late will be put on probation, which may result in decertification.

This late observer policy relies on a specific communication protocol as outlined below.

Clear trip information is relayed directly from the captain to the observer, and includes the:

- sail date,
- sail time (specify AM or PM),
- expected trip length,
- location the vessel is tied or moored, and
- a current contact phone number for the captain.

When a multiday trip is delayed, observers should be provided with advance notice once a new sail date and time is established, so that they may prepare for the trip and travel to the vessel.

As trip details may change due to weather and other unpredictable variables, it is critical that all parties clearly communicate trip details. Information provided via the Pre-Trip Notification System (PTNS), such as time of departure, is meant to be the best estimation at the time of the notification. If trip details change from what was submitted in the PTNS, the final trip information must be conveyed to the observer assigned to the trip by establishing contact with the provider/observer before the vessel sails. Vessels providing false information in the PTNS or to the observer will be referred to the Office for Law Enforcement (OLE).

Should an observer fail to arrive at the vessel at the scheduled sail time, it is recommended that the vessel captain call the observer service provider program manager immediately to ensure that the proper trip information was communicated.

Once assigned an observer, a trip may not sail without an observer unless it has been issued a written or verbal waiver from FSB. If an assigned observer is late, the vessel must call the PTNS line or FSB to obtain a waiver prior to sailing. Refer to Appendix B5 for a copy of the full policy, including service provider contact information and PTNS information. Contact information for service providers is also included in Section 1 on page 11.

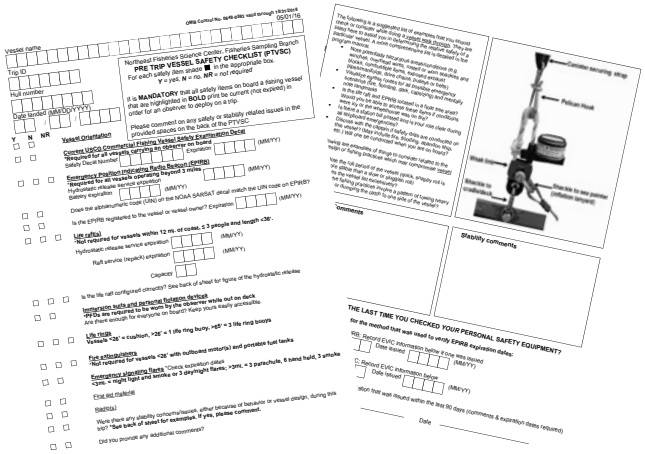
Vessel safety

USCG Commercial Vessel Safety Examination

Commercial fishing vessels that operate beyond 3 miles from the territorial sea baseline are required to successfully complete a mandatory safety exam at least once every 5 years. If the vessel carries a fishery observer, the vessel must complete an exam every 2 years (50 CFR 600.746 [b]-[d]). Upon completion of the exam, the vessel will be issued a safety decal that expires in 2 years. The best way to schedule a Commercial Fishing Vessel Safety Examination (CFVSE) is to go online to the request webpage.

Pre-Trip Vessel Safety Checklist

Observers are required to complete a Pre-Trip Vessel Safety Checklist (PTVSC) before deploying on a fishing vessel. The purpose of the PTVSC is to improve safety at sea for all onboard, increase personal safety awareness to meet the USCG requirement for a vessel safety orientation (46 CFR 28.270 [e]-[f]), and provide accurate, vessel specific, safety information to the FSB. It includes equipment from first aid materials and personal flotation devices (PFDs) to emergency signaling flares.



Observer duties

While there are many overlapping duties among observers in different programs, there are also unique duties for each fishery. This section outlines observer duties and captain and crew responsibilities for each observer program. The following tables provide a high-level overview of this information, and are not meant to be representative of all responsibilities, nor do they go into detail on the complexity of these tasks. For more information, contact the FSB Training Lead or the service provider.

At-sea observers should provide a handout containing this information to the captain at the beginning of an observed trip.

Observers shall perform the following duties, at a minimum:

Description	ASM	IFS	NEFOP
Conduct a pre-trip safety check.	•	•	•
Communicate with vessel personnel about monitor duties and data collection.	•	•	•
Ask the captain and/or owner of the vessel for some economic information, such as trip costs (price of fuel, ice, etc.), dealer, and Vessel Trip Report (VTR) number.	•	•	•
Collect information on fishing gear, such as size of nets and dredges, mesh sizes, and gear configurations. (For IFS this includes information on dredge frame type and size, presence or absence of turtle chains, twine top/codend mesh measurements, measurements of bag ring sizes; and obtain photographs of each dredge frame and chain mat used.)	•	•	•
Collect tow-by-tow information, such as depth, water temperature, wave height and location, and time when fishing begins and ends.	•	•	•
Record all kept and discarded catch (fish, sharks, crustaceans, invertebrates, and debris) **on observed hauls** and record kept catch, tagged animals and pelagic species on unobserved hauls, which includes species, weight, and reason kept or discarded.	•	•	•
Collect actual weights of catch whenever possible, or estimate or extrapolate weights by sub-sampling.	•	•	•
Collect length frequencies of kept and discarded catch.	•	•	•
Record shell heights for both kept and discarded scallops every other observed haul; obtain shucked meat weight, and volume of meats for one crew filled basket of kept scallops per on-watch period.	-	•	-
Complete an off-watch log with the captain's assistance for hauls when observer is not on effort out on deck, to include number of hauls not observed, locations, average number of bushels/weight of kept scallops caught.	-	•	-
(Depending on the watch schedule) the observer should switch watches halfway through the trip to ensure proper data collection, and should be respectful of the crew's off-watch time.	-	•	-
Collect whole specimens, photos, length frequencies, and biological samples, such as scales, ear bones, and/or spines from fish, invertebrates, and incidental takes (for IFS trips this is a minimum of once per watch).	-	•	•
Collect detailed information, biological samples, measurements and photographs on interactions with protected species, such as sea turtles, porpoise, dolphins, whales, and birds (also called incidental takes).	•	•	•

Per Observer Standards of Conduct, observers are **not permitted to sign *any* documents not authorized by NMFS.**

Observers should not:

Description
Provide advice about fishing regulations.
Accept any gifts or direct payment in any form from the vessel operator, owner, or crew.
Participate in commercial fishing activities during the trip, such as dressing fish, shucking scallops, or standing wheel watch.
Hinder or slow fishing operations unless necessary to obtain critical discard or incidental take information.
Use personal recording devices, such as camcorders, cameras, cell phones, and diaries.
Use the vessel's communication equipment for personal purposes.
Discuss the observed trip with anyone other than program staff.
Handle the Emergency Position Indicating Radio Beacon (EPIRB) in any manner, including removing housing.

The captain's legal responsibilities include, but are not limited to:

Description
Ensure the vessel has a current United States Coast Guard (USCG) CFVSE decal and other essential non-expired safety devices, provide the monitor with a safety orientation, and maintain a wheel watch throughout the trip.
Cooperate with the monitor in the performance of the monitor's duties.
Provide the monitor with living quarters, meals, and amenities comparable to a crew member.
Allow the monitor access to areas of the vessel and gear necessary to conduct their duties.
Assist the observer in obtaining EPIRB expiration dates that are mandatory for the Pre-Trip Vessel Safety Checklist (PTVSC).
Allow the monitor access to communication and navigation equipment as necessary to perform their duties.
Provide true vessel locations by latitude and longitude upon request by the monitor.
Provide the observer with VTR Serial Numbers and Vessel Monitoring System (VMS) Fishing Activity Codes if requested.
Notify the monitor when commercial fishing operations are to begin and end.
Bring aboard marine mammals, sea turtles and sea birds that were killed during fishing operations if requested by the monitor.
Provide refrigerated storage space for monitor-collected specimens within reason.

It is illegal for captains and crew to:

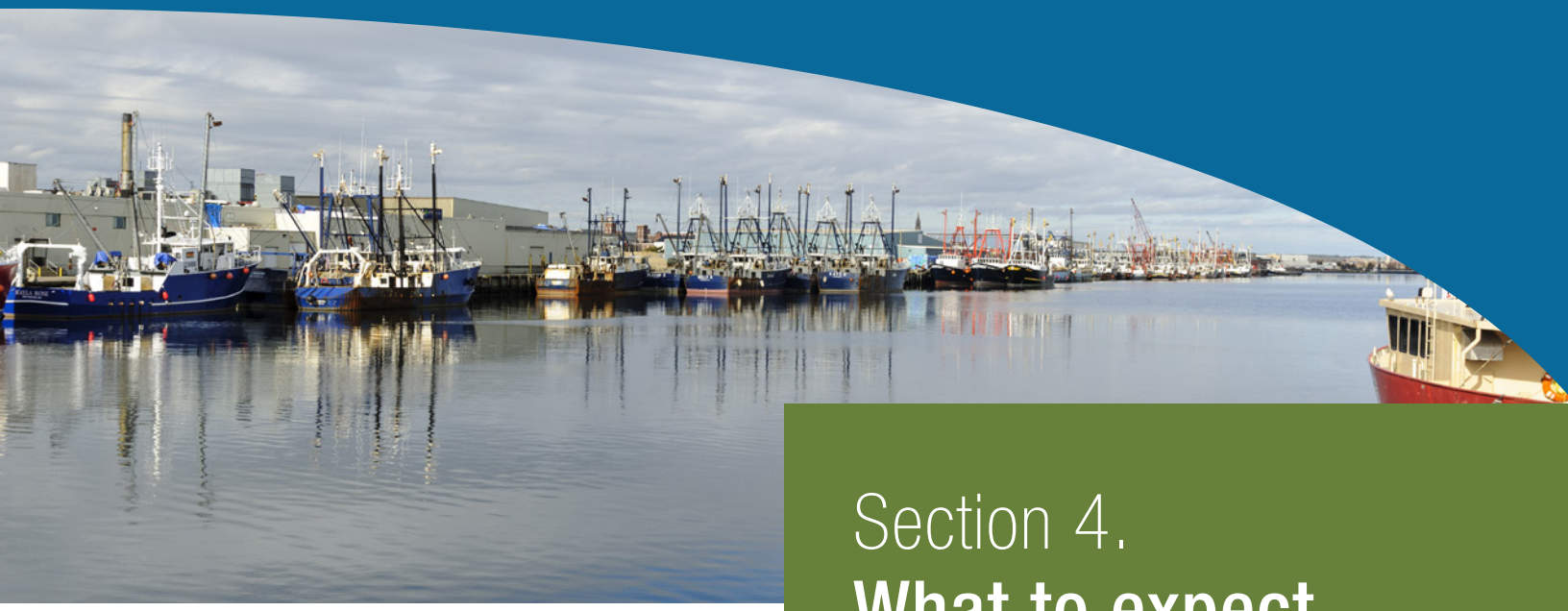
Description
Assault, harass or sexually harass, intimidate or attempt to influence observers.
Interfere with or impede observer duties.
Ask observers to stand watch or help with fishing operations.
Fish without an observer or official waiver once selected by NMFS to carry a monitor/observer.

Observers should bring the following, along with other scientific gear:

Description
CPR / First Aid cards.
Personal identification (picture ID, letter of introduction, and CAC) and proof of insurance.
Immersion suit, Personal Flotation Device (PFD), and satellite communication device.
Appropriate clothing, such as boots, raingear and gloves.
Catch sampling equipment, including: a length-frequency board for finfish and scallops; volumetric measuring cup for scallop meats; spring and motion-compensating marine platform scale; thermometer; scientific caliper and tape measure; buckets and/or baskets; and NMFS-issued camera, tablet, logs, manuals, and field guides.

Upon completion of a trip, observers should provide the captain with:

Description
Data Release Form to request a photocopy of the monitor's trip logs.
Fishermen's Comment Card with pre-paid postage.



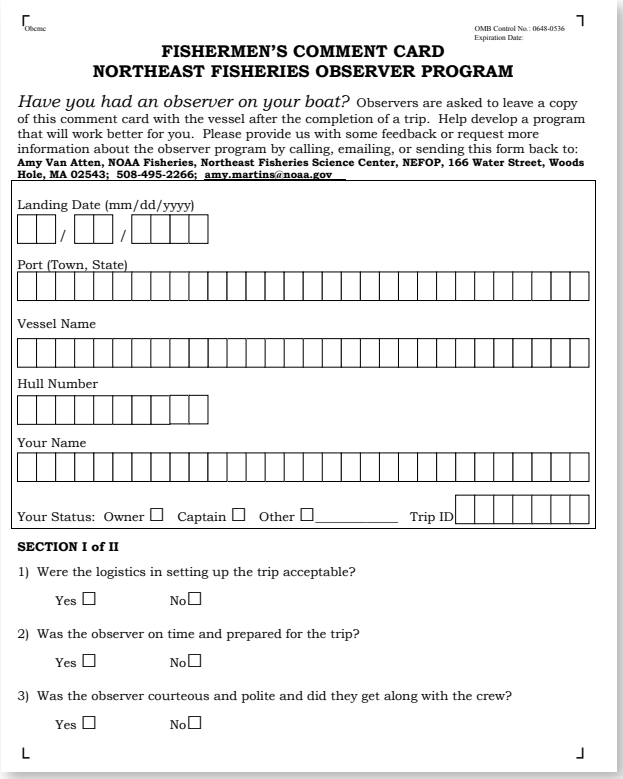
Section 4.
What to expect after a commercial fishing trip

Upon returning from a fishing trip, industry participants are encouraged to provide feedback on both the Fisheries Sampling Branch (FSB) program and the observers. Industry feedback—as with the data obtained during each commercial fishing trip—is confidential and FSB has policies and procedures to strictly control access to the data.

Feedback and evaluation process

Fishermen's comment card

As an owner, captain or crew aboard a fishing vessel carrying an observer, the Fisheries Sampling Branch (FSB) Northeast Fisheries Observer Program (NEFOP) is always seeking feedback to evaluate how well the observers are performing their duties and to serve as a line of communication between the fishermen and NEFOP. Observers are required to offer a comment card to the captain at the completion of each observed fishing trip. Refer to Appendix B6 for a copy of the comment card, which is also available online or through contacting the NEFOP in Woods Hole, MA.



Obcmc

OMB Control No.: 0648-0536
Expiration Date:

FISHERMEN'S COMMENT CARD
NORTHEAST FISHERIES OBSERVER PROGRAM

Have you had an observer on your boat? Observers are asked to leave a copy of this comment card with the vessel after the completion of a trip. Help develop a program that will work better for you. Please provide us with some feedback or request more information about the observer program by calling, emailing, or sending this form back to:
Amy Van Atten, NOAA Fisheries, Northeast Fisheries Science Center, NEFOP, 166 Water Street, Woods Hole, MA 02543; 508-495-2266; amy.martins@noaa.gov

Landing Date (mm/dd/yyyy)
/ /

Port (Town, State)

Vessel Name

Hull Number

Your Name

Your Status: Owner ☐ Captain ☐ Other ☐_____ Trip ID

SECTION I of II

1) Were the logistics in setting up the trip acceptable?
Yes ☐ No ☐

2) Was the observer on time and prepared for the trip?
Yes ☐ No ☐

3) Was the observer courteous and polite and did they get along with the crew?
Yes ☐ No ☐

Captain interviews

The FSB Observer Program and observer provider companies collect information to evaluate observed trips. A set of standard questions are asked on a subset of observed trips to make sure observers are fulfilling duties. These interviews are required for observers working with the provider who holds the NEFOP contract, but not for other programs, as their providers don't hold federal contracts. A copy of this form is included in Appendix B7.

> *"Did an excellent job. Worked harder than any observer I've had in 16 years. Did the work honestly and thoroughly."*

Trip data release form

The National Marine Fisheries Service (NMFS) is required to keep trip data confidential to comply with requirements in the Magnuson-Stevens Fishery Conservation and Management Act (MSA) and the Marine Mammal Protection Act (MMPA). As an owner and/or captain of a fishing vessel participating in the FSB Observer Program, you are eligible to request data from observed trips. Observers are required to offer a data release form to the captain at the completion of each observed fishing trip. Refer to Appendix B8 for a copy of the Trip Data Release Form, which you must submit in paper form to the Northeast Fisheries Science Center (NEFSC), at the address listed in the form.

> *"Today we had one of the hardest working monitors, we have had since the start. Not afraid to jump right in and work. It is also nice to see people that are actually interested in how everything works, that to me means it's not just a job."*

FISHERIES
OBSERVER
LYBRAND / TROLL

NOAA Fisheries, Northeast Fisheries Science Center
Fisheries Sampling Branch
Observer Training Center at Tech Park
25 Bernard East Saint Jean Drive, East Falmouth, MA 02536
(508) 495-2130 or (508) 495-2000
neobserver.info@noaa.gov