

NORTHEAST FISHERIES SCIENCE CENTER OBSERVER DATA ENTRY MANUAL 2021



U.S. Department of Commerce
NOAA Fisheries Service
National Marine Fisheries Service
Northeast Fisheries Science Center
Fisheries Monitoring and Research Division
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Paperwork Reduction Act Statement

Information collected through the observer program will be used to: (1) monitor catch and bycatch; (2) understand the population status and trends of fish stocks and protected species, as well as the interactions between them; (3) determine the quantity and distribution of net benefits derived from living marine resources; (4) predict the biological, ecological, and economic impacts of existing management actions and proposed management options; and (5) ensure that the observer programs can safely and efficiently collect the information required for the previous four uses. In particular, the observer program provides information that is used in analyses that support the conservation and management of living marine resources and that are required under the Magnuson-Stevens Fishery Conservation and Management Act (MSA), the Endangered Species Act (ESA), the Marine Mammal Protection Act (MMPA), the National Environmental Policy Act (NEPA), the Regulatory Flexibility Act (RFA), Executive Order 12866 (EO 12866), and other applicable law. Most of the information collected by observers is obtained through “direct observation by an employee or agent of the sponsoring agency or through non-standardized oral communication in connection with such direct observations”.

Under the Paperwork Reduction Act (PRA) regulations at 5 C.F.R. 1320.3(h)(3), facts or opinions obtained through such observations and communications are not considered to be “information” subject to the PRA. The public reporting burden for responding to the questions that observers ask and that are subject to the PRA is estimated to average 74 minutes per trip, including the time for hearing and understanding the questions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. However, depending on the fishery and trip duration, the public reporting burden can range from 4-250 minutes per trip. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: Ryan Shama, National Marine Fisheries Service, Northeast Fisheries Science Center, Training and Data Quality Branch, 166 Water Street, Woods Hole, MA 02543-1026. Providing the requested information is mandatory under regulations at 50 C.F.R. 600.746 for the safety questions and at 50 C.F.R. §600.725, §600.746, §648.11; 16 U.S.C. 1387 §118; 16 U.S.C. 1531 *et seq.*, 16 U.S.C. 742a §222 for the other questions. All information collected by observers will be kept confidential as required under Section 402(b) of the MSA (18 U.S.C. 1881a(b)) and regulations at 50 C.F.R. Part 600, Subpart E. Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number. This is an approved information collection under OMB Control No. 0648-0593 through 01/31/2024

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Introduction

The National Marine Fisheries Service (NMFS) Northeast Fisheries Science Center (NEFSC) Fisheries Monitoring and Research Division (FMRD) collects, maintains, and distributes data for scientific and management purposes in the Northwest Atlantic. FMRD manages at-sea human observing, at-sea electronic monitoring (EM), and shore-side sampling programs. For the purposes of this manual, “observer” refers to any observer, monitor, shore-side sampler, or EM reviewer working for FMRD.

The purpose of this guide is to provide FMRD observers, as well as end users of NEFSC Observer Program data, with a description of each data field collected. In addition to this manual, the Observer Operations Manual provides detailed protocols and methods for observer data collection, and the Observer On-Deck Reference Guide provides summaries and tables intended to enable observers to quickly determine the correct sampling priorities while at sea.

Using this Manual

Each section in this manual corresponds to a data collection log, worksheet, or at-sea data entry screen. Detailed information for each fishery, such as background information, definitions, sampling protocols, and common scenarios are found in the Observer Operations Manual. For data fields requiring observers to choose from or enter a code, the full code lists are provided in the Appendices. The Appendices contain other useful information, such as charts of statistical areas and common names for species, which are the same for all programs. Not all code lists will be applicable to all programs.

General Instructions

All data fields must be based on measurements/inspections made by the observer, or feedback given by the captain. Do not record assumptions. Verify uncertain information with the captain. Provide comments explaining any unusual situations. Record any calculations used to answer any of the questions.

If information is unavailable or unknown, it must be marked to show that it was not skipped:

- “Yes/No” question on paper logs – record a “9” on the line next to the code for “No”
- Coded field on paper logs – mark the box/line next to “Unknown”
- Coded field on electronic screens – select the dropdown option for “Unknown”
- Numeric fields on paper logs – record a dash (“—”) in the field
- Numeric fields on electronic screens – leave blank

If a field relates to a question to which you previously answered “No”, leave the field blank.

Fields marked with an asterisk (*) are collected electronically in the groundfish At-Sea Monitoring (ASM) program. Logs that are common to all programs will be noted as such in the instructions; these will not have asterisks as all fields will be collected on all trips.

An additional log may be used if there are more comments than can fit on a single page. In these cases, fill out the header information to identify the record, but do not duplicate data from the original log. For example, if an additional haul log is needed, fill in the tripid, date land, page number, gear code, gear number, and haul number.

Pre-Trip Vessel Safety Checklist

This Pre-Trip Vessel Safety Checklist (PTVSC) is a detailed log of the safety equipment and safety practices onboard a vessel. All fields on this log are required to be completed before the departure of a trip, with the exception of date land and observer signature, which must be completed at the end of the trip. This log is required for all programs.

DO NOT make any markings or notes outside of the designated areas on the front of the log. If you have comments, record them in the appropriate box in the comments section on the back of the log. If information is unavailable or unknown regarding a piece of safety equipment or safety practices, leave the associated box(es) blank and comment in the comments section on the back of the log. DO NOT record partial numbers or partial dates. ONLY make comments regarding legitimate safety and stability concerns or an explanation as to why a field was left blank. All equipment expiration dates are to be recorded in the MM/YY format (2-digit month and 2-digit year). DO NOT put slashes (/) or dashes (—) in any of the boxes when recording expiration dates.

All fields on this form should be filled out prior to any observed fishing trip, regardless of program.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Vessel Name	Leave a space between words.	N/A	Cannot be unknown.
2	Trip ID	See instructions on VESSEL AND TRIP INFORMATION LOG .	3-character ObsID plus 3- digit trip number	Cannot be unknown.
3	Hull Number	Either the US Coast Guard Documentation Number or the state registration number.	Up to 8 characters	Cannot be unknown.
4	Date Landed	See instructions on VESSEL AND TRIP INFORMATION LOG .	MM/DD/YYYY	Cannot be unknown.
5	Vessel Orientation – did you conduct a vessel walk through?	Yes/No.	Checkbox	Cannot be unknown.
6	Current USCG Commercial Fishing Vessel Safety Examination Decal	Yes/No.	Checkbox	May not deploy if unknown. Contact your provider or FMRD to verify Safety Examination.
6a	Safety Decal Number	Obtain from decal or USCG documentation.	6 characters	
6b	Decal Expiration Date	Obtain from decal or USCG documentation.	MM/YY	
7	Emergency Position Indicating Radio Beacon (EPIRB)	Yes/No/Not Required. Comment if not required.	Checkbox	Cannot be unknown.
7a	Hydrostatic release service expiration date	Obtain from EPIRB unit (opened by captain/crew) or previously-issued EVIC.	MM/YY	Leave blank if EPIRB not required or EVIC used.
7b	Battery expiration date	Obtain from EPIRB unit (opened by captain/crew) or previously-issued EVIC.	MM/YY	Leave blank if EPIRB not required or EVIC used.
8	Does the alphanumeric code (UIN) on the NOAA SARTSAT decal match the UIN code on EPIRB?	Yes/No.	Checkbox	Cannot be unknown.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
9	Is the EPIRB registered to the vessel or vessel owner? ¹	Obtain from decal.	Checkbox	Cannot be unknown.
9a	EPIRB registration expiration date	Obtain from decal or alternate documentation which lists the expiration date.	MM/YY	Cannot be unknown.
10	Life Raft(s)	Yes/No/Not Required. Comment if not required.	Checkbox	Cannot be unknown.
10a	Hydrostatic release service expiration date	Obtain from unit.	MM/YY	Leave blank if life raft not required or "float free" style.
10b	Raft service (repack) expiration date	Obtain from unit.	MM/YY	Leave blank if life raft not required or hard shell "pod" or "egg" style.
10c	Capacity	Obtain from unit. Verify sufficient size for all aboard.	Up to 2 digits	Leave blank if not required.
11	Is the life raft configured correctly?	Yes/No/Not Required. Visual inspection by observer.	Checkbox	Leave blank if life raft not required or raft has a buoyant apparatus.
12	Immersion suits and personal floatation devices	Yes/No.	Checkbox	Cannot be unknown.
13	Life rings	Yes/No/Not Required.	Checkbox	Cannot be unknown.
14	Fire extinguishers	Yes/No/Not Required.	Checkbox	Cannot be unknown.
15	Emergency signaling flares	Yes/No. Visual inspection of number, type, and expiration dates.	Checkbox	Cannot be unknown.
16	First aid material	Yes/No.	Checkbox	Cannot be unknown.
17	Radio(s)	Yes/No.	Checkbox	Cannot be unknown.
18	Stability concerns	Yes/No.	Checkbox	Cannot be unknown.
18a (back)	Stability comments	Comments related to stability concerns/issues, either because of fishing behavior or vessel design, during the trip.	Comment field	Leave blank if no concerns.
19	Additional comments	Yes/No.	Checkbox	Cannot be unknown.
19a (back)	Safety comments	Required for any blank fields or other safety related concerns.	Comment field	Leave blank if no concerns.
20 (back)	EPIRB Verification Method	Method used to answer #7.	Checkbox	Cannot be unknown.
20a (back)	EVIC number	Printed on issued EVIC.	5 characters	Leave blank if USCG documentation used.
20b (back)	EVIC date issued	Printed on issued EVIC.	MM/YY	Leave blank if USCG documentation used.

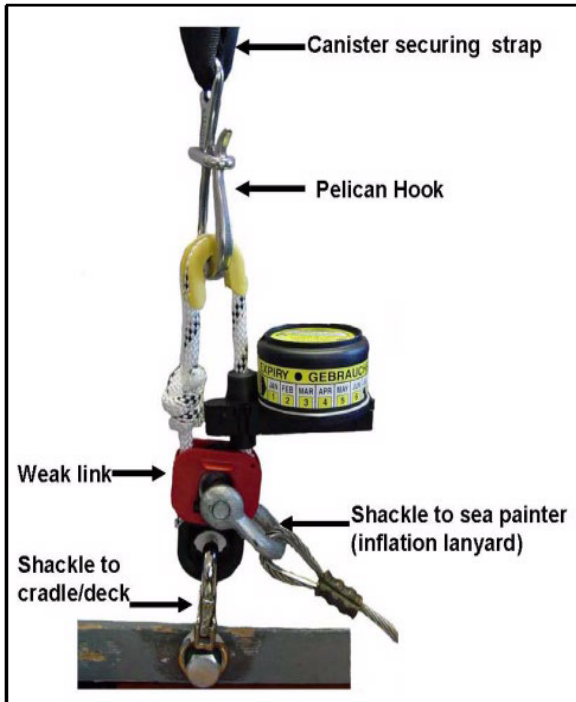
¹ When an EPIRB is correctly registered, it can greatly enhance Search and Rescue efforts.

The following is a suggested list of examples that you should check or consider while doing a vessel walk through. They are listed here to assist you in determining the relative safety of a particular vessel. A more comprehensive list is detailed in the program manual.

- Note potentially hazardous areas/conditions (e.g. winches, overhead wires, rusted or worn shackles and blocks, combustible items, exposed exhaust pipes/manifolds, drive chains, pulleys or belts)
- Visualize egress routes for all possible emergency scenarios (fire, flooding, dark, capsizing) and mentally note landmarks
- Is the life raft and EPIRB located in a float free area? Would you be able to access these items if conditions were icy or the wheelhouse was on fire?
- Is there a station bill posted and is your role clear during all shipboard emergencies?
- Discuss with the captain if safety drills are conducted on this vessel? (May include fire, flooding, abandon ship, etc.) Will one be conducted when you are on board?

The following are examples of things to consider related to the vessel design or fishing practices which may compromise vessel stability.

- Note the roll period of the vessel (quick, snappy roll is more stable than a slow or sluggish roll)
- Does the vessel list excessively?
- Do the fishing practices involve a pattern of towing heavy bags or dumping the catch to one side of the vessel?



Safety Comments

19a

Stability comments

18a

WHEN WAS THE LAST TIME YOU CHECKED YOUR PERSONAL SAFETY EQUIPMENT?

20 Check the appropriate box for the method that was used to verify EPIRB expiration dates:

- ☒ I visually inspected the EPIRB; Record EVIC information below if one was issued

EVIC number **20a**

0	3	1	5	4
---	---	---	---	---

 Date issued **20b**

0	5	2	2
---	---	---	---

 (MM/YY)

- ☐ I used a previously issued EVIC; Record EVIC information below

EVIC number **20a**

--	--	--	--	--

 Date issued **20b**

--	--	--	--

 (MM/YY)

- ☐ I used approved USCG documentation that was issued within the last 90 days (comments & expiration dates required)

Signature Observer Lee

Date 05/01/2022

Vessel and Trip Information Log

Each fishing trip is defined as the moment the vessel leaves the dock with the intent to fish and then returns to either the same port or a different port. A transit trip is defined as when the vessel is moving between ports with no intention to engage in fishing activities. An aborted trip occurs when the vessel leaves the dock with an intent to fish, but then returns to shore without fishing for any reason (e.g., weather, gear failure, illness). If any part of the gear hits the water, then the trip is not aborted. If a vessel moves from one dock to another within a port, that is not a transit trip. The time arrived is the time the observer arrives at the first dock. The time sailed is the time the vessel leaves the second dock with the intent to fish or transit to another port. The times sailed from the first dock to landed at the second dock should be recorded in the comments section. A single observer deployment may span multiple trips, depending on the vessel activity. Examples:

- Vessel leaves Port A with the intent to fish, goes fishing, then returns to Port A.
 - This is one observed trip and is recorded on a Vessel and Trip Information Log.
- Vessel leaves Port A with the intent to fish, goes fishing, offloads some catch at Port B, then offloads the rest of the catch at Port A.
 - The time from leaving Port A until landing in Port B is one observed trip and is recorded on a Vessel and Trip Information Log.
 - The transit time from leaving Port B to landing in Port A is a second observed trip and is recorded on a Transit Trip Log.
- Vessel leaves Port A with the intent to transit, picks up a crew member in Port B, leaves Port B with the intent to fish, goes fishing, docks at Port C due to weather, offloads all catch at Port B, then returns to Port A.
 - The transit time from leaving Port A until first landing in Port B is one observed trip and is recorded on a Transit Trip Log.
 - The time from leaving Port B to landing in Port C is a second observed trip and is recorded on a Vessel and Trip Information Log.
 - The time from leaving Port C to landing in Port B is a third observed trip and recorded on a Transit Trip Log.
 - The transit time from leaving Port B until landing in Port A is a fourth observed trip and is recorded on a Transit Trip Log.
- Vessel leaves Port A with the intent to fish, has mechanical malfunction at the fishing grounds prior to any fishing activity, returns back to Port A to fix the mechanical issue, leaves Port A 12 hours later with the intent to fish (same gear and target species), goes fishing, then returns to Port A to offload all catch.
 - The time from leaving Port A until landing back in Port A for the mechanical fix is an aborted trip and is recorded on a Vessel and Trip Information Log.
 - The time from leaving Port A after repairs until landing back in Port A after fishing is an observed trip and is recorded on a Vessel and Trip Information Log.

Comments

Record any additional information regarding the trip and associated expenditures below. Include a comment regarding training trip or non-"000" trips (i.e., write "training trip" in comments, etc.). If more room is needed, use the back of this log, making sure to write "See Back" on the front of the log. Reference each comment with its corresponding field name.

Anytime a trip ends within a deployment, explain the reason why and any time spent away from the vessel (e.g., "came in for weather, stayed in hotel from 2300 to 0400").

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1*	Observer/Trip Identifier	3-character Observer Identifier combined with 3-digit Trip Number (sequential by calendar year). "if your trip sails in December but lands on or after January first, it should be assigned trip number '001' since it is the first trip to land in the new calendar year"	6 characters	Cannot be unknown.
1a*	Trip Extension	See APPENDIX E – TRIP EXTENSIONS	1 character	Cannot be unknown.
2*	Program Code	See APPENDIX F – PROGRAM CODES	3-digit code	Cannot be unknown.
3*	Sector ID Code	Obtain from captain. Confirm that the captain notified in PTNS for a groundfish trip. See APPENDIX G1 – SECTOR ID CODES	3-digit code	Leave blank if not observing a groundfish trip (NEFOP and IFS only).
4	Fleet Code	Obtain from captain. See APPENDIX G2 – FLEET CODES	3-digit code	Leave blank if observing a groundfish trip (NEFOP and ASM only).
5*	Vendor ID Code	Obtain from the Observer Service Provider. See APPENDIX H – VENDOR ID CODES	2-digit code	Cannot be unknown.
6*	Incidental Takes	<u>N</u> one/ <u>S</u> eabird/ <u>M</u> arine Mammal/ <u>S</u> ea <u>T</u> urtle. Mark all that apply.	Checkbox	Cannot be unknown.
7	Age Structures	<u>E</u> nvelopes (scales or otoliths) or <u>F</u> rozen samples (heads) Record any special sample types in comments.	Checkbox	Leave blank if no samples taken.
8	Whole Fish	Yes/No.	Checkbox	Cannot be unknown.
9*	Field Diary	Yes/No.	Checkbox	Cannot be unknown.
10	Fishermen Comment Log	Yes/No. Only mark "Yes" if the log is physically in the trip.	Checkbox	Cannot be unknown.
11*	Vessel Name #1	Obtain from captain. Record correct spelling. If the vessel does not have a name, record as "No Name".	N/A	Cannot be unknown.
12*	Vessel Hull Number #1	Obtain from captain. Either the US Coast Guard Documentation Number or the state registration number.	Up to 8 characters	Cannot be unknown.
13*	Vessel Permit Number #1	Obtain from captain.	6 digits	Leave blank if vessel does not have a federal permit.
14*	Port Sailed	Include port name and state.	N/A	Cannot be unknown.
15	Port Code	Filled in by FMRD staff for data entry. Observers: leave blank.	6 digits	Cannot be unknown.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
16*	Date Sailed	When the vessel leaves the dock with the intention of leaving the port. Beach Seine: when the dory leaves the trailer and heads out through the surf to set the gear. Does not include vessel traveling from dock to dock within the same port, record in comments.	MM/DD/YY	Cannot be unknown.
17*	Time Sailed	Local time the vessel leaves the dock with the intention of leaving the port. Beach Seine: when the dory leaves the trailer and heads out through the surf to set the gear. Does not include vessel traveling from dock to dock within the same port, record in comments.	HH:MM (24hr)	Dash and record estimated time in comments.
18	Vessel Name #2	Obtain from captain.	N/A	Only filled in for pair trawl trips.
19	Vessel Hull Number #2	Obtain from captain. Either the US Coast Guard Documentation Number or the state registration number.	Up to 8 characters	Only filled in for pair trawl trips.
20	Vessel Permit Number #2	Obtain from captain. Only filled in for pair trawl and carrier trips.	6 digits	Leave blank if vessel does not have a federal permit.
21*	Port Landed	Include port name and state.	N/A	Cannot be unknown.
22	Port Code	Filled in by FMRD staff for data entry. Observers: leave blank.	6 digits	Cannot be unknown.
23*	Date Landed	When the vessel arrives at the dock ² . Beach Seine: when the fishing operations have ended and all fish have been picked and sorted.	MM/DD/YY	Cannot be unknown.
24*	Time Landed	Local time the vessel arrives at the dock.	HH:MM (24hr)	Dash and record estimated time in comments.
25	Home Port	Obtain from captain. Where vessel regularly ties up, not always port name on boat.	N/A	Record most specific location possible (county or state).
26	Port Code	Filled in by FMRD staff for data entry. Observers: leave blank.	6 digits	Cannot be unknown.
27	Expected Trip Duration	Ask before the vessel leaves port.	Up to 2 digits, whole	Dash.
28	Crew Size	Include captain.	Up to 2 digits	Dash.
29*	Dealer's Name	Obtain from captain. Record dealer where the majority of the catch is to be sold and list any additional dealers in comments. If no dealer, use "No Catch", "No Sale", "Bait", or "Home Consumption" as appropriate.	N/A	"Unknown".

² See top of page 7 for definition of an observed trip.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
30*	Vessel Trip Report (VTR) Serial Number	Obtain from captain. Record lowest sequential VTR in box, and record any additional VTRs in comments.	VTR = 8 digits, eVTR=14 digits	"00000000".
30a*	eVTR Trip ID	Obtain from captain. ASM logs/screens only. NEFOP and IFS: record in field #30.	14 digits	Dash if not used.
31	Steam Time	Time between vessel leaving the dock with the intention to fish and arriving at the location where the gear is first deployed/hailed. Does not include time spent waiting at the fishing grounds (e.g., weather, second vessel). On high volume trips, include time spent looking for fish before gear is deployed.	Hours, to the nearest tenth	Dash. Dash for all Beach Seine trips.
32	Trip Type	Single or Multiple Gear types used (based on gear code).	Check one	Cannot be unknown.
33*	Ice Used	Obtain from captain at end of trip. If none used, record "0.00". Includes ice made by the vessel. May include ice purchased for a previous trip. Pair trawl: Ice used on vessel to which observer was deployed.	Tons, to the nearest hundredth	Dash.
34*	Fuel Used	Obtain from captain at end of trip. Pair trawl: Fuel used by vessel to which observer was deployed.	Gallons, whole	Dash.
35*	Damage and Loss Estimated Cost	Obtain from captain at end of trip. Includes gear and/or equipment but does not include regular maintenance or normal wear and tear. Describe in comments. Pair trawl: Damage on vessel to which observer was deployed.	Dollars, whole	Check "Unknown".
36*	Supplies Cost	Obtain from captain Ex: gloves, boot liners, knives, picks, hooks, boxes, bags, ties, rags, tape, and normal wear and tear repair on gear. Describe in comments. Pair trawl: Supplies purchased by vessel to which observer was deployed.	Dollars, whole	Check "Unknown".
37*	Food Cost	Obtain from captain estimated amount consumed during trip. Include drinking water and observer's food, if paid by vessel. Pair trawl: Cost for food on vessel to which observer was deployed.	Dollars, whole	Check "Unknown".

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
38*	Ice Cost	Obtain from captain. If vessel makes its own ice, record "0.00". If no ice used, record "0.00". Pair trawl: Ice price paid by vessel to which observer was deployed.	Dollars, to the nearest cent	Check "Unknown".
39*	Fuel price per gallon	Obtain from captain. Pair trawl: Fuel price paid by vessel to which observer was deployed.	Dollars, to the nearest cent	Check "Unknown".
40*	Water Cost	Obtain from captain. If vessel makes its own water, record "0.00". Do not include drinking water. Pair trawl: Water cost paid by vessel to which observer was deployed.	Dollars, whole	Check "Unknown".
41*	Oil Cost	Obtain from captain. Lubricating oil used for vessel engine. May be purchased for more than one trip; only record the cost for this trip. Can be estimated from cost of oil change if get number of engine hours between oil changes. Pair trawl: Oil cost paid by vessel to which observer was deployed.	Dollars, whole	Check "Unknown".
42*	Bait Cost	Obtain from captain.	Dollars, whole	Check "Unknown".
43*	Primary Gear Name	Used on the majority of hauls. If tie, record gear with most nets (gillnet) or highest kept catch. On pair trawl, may be the other vessel's gear. See APPENDIX I – GEAR CODES	N/A	Cannot be unknown.
44*	Primary Gear Code	See APPENDIX I – GEAR CODES.	3-digit code	Cannot be unknown.
45*	Other Gear(s)	Any other fishing gear onboard the vessel, soaked, used, or secured. ASM: only record gear used. See APPENDIX I – GEAR CODES.	N/A	Leave blank if no other gear.
46*	Other Gear Code(s)	See APPENDIX I – GEAR CODES.	3-digit code	Leave blank if no other gear.
47	Hauled/Used	Yes/No. Used during trip. Set only trips: used = no.	Check one	Cannot be unknown if gear listed.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
48	Number Onboard	Obtain from captain at start of trip. Longline: nautical miles of mainline. Pots/traps: individual pots/traps. Gillnets: net panels (total for all strings). Trawls: nets. Dredge gears: dredges. Beach Seine: net panels onboard dory; only if observer present for set. Pair trawl: only nets onboard your vessel. Handline: # of entire gears.	Longline: Nautical miles, to the nearest tenth Other gears: whole number	Dash.
49	Number Soaking	Obtain from captain at start of trip. Record "0" for all mobile gears. For fixed gears, see #48. Beach Seine: number soaking prior to observer's arrival, if not present for set.	Longline: Nautical miles, to tenths Other gears: whole number	Dash.
50	Captain Experience	Obtain from captain. Gear-specific, not target. If less than 6 months, record "0".	Years, Whole number	Dash. Dash if gear not used.
51*	Target Species	Obtain from captain at beginning of trip, prior to start of fishing. Be as specific as possible. See APPENDIX T – SPECIES CODES AND LOGS . Cannot target dressed species (parts).	NEFOP and IFS: up to 5 unique species/group names per box ASM: record secondary target species under 51a	None. If trip is aborted, record intended target species.
*51a	Target Species 2	Obtain from captain at beginning of trip. ASM only. See APPENDIX T – SPECIES CODES AND LOGS .	N/A	Dash if no secondary target species.
52	Target Species Code	Filled in by FMRD staff for data entry. Observers: leave blank.	4-digit code	Cannot be unknown.
53	Time Lost Reason Code	See APPENDIX J – TIME LOST CODES . Describe in comments. Does not include projected time lost from the trip if vessel returns to dock sooner than planned.	2-digit code	Leave blank if no time lost.
54	Time Lost Amount	Per reason code. Only include time lost during the trip.	Hours, to the nearest tenth	Leave blank if no time lost.
55	Number of Trip Hauls	Total hauls.	Whole number	Cannot be unknown.
56	Number of Unobserved Hauls	Include off-watch hauls.	Whole number	Cannot be unknown.
57	Primary Species Landed	Greatest total number of pounds landed (kept and sold). See APPENDIX T – SPECIES CODES AND LOGS .	N/A	Cannot be unknown. If no sale, use "No sale" or "No catch" as appropriate.
58*	Photos	Yes/No.	Check one	Cannot be unknown.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
59	Soaked	Yes/No. In a solution other than seawater.	Check one	"g"
60	Number of Bags	Obtain from captain at end of trip. Shucked scallops.	Whole number	Dash. Comment if not shucked at sea.
61	Average Weight per Bag	Obtain from captain at end of trip.	Whole pounds Average	Dash.
62*	Date Arrived at Dock	When you arrived at the dock.	MM/DD/YY	Only filled in for first trip of deployment.
63*	Time Arrived at Dock	Local time when you arrived at the dock.	HH:MM (24hr)	Cannot be unknown. Comment if times are estimated.
64*	Date Disembarked	When you left the vessel and removed your gear.	MM/DD/YY	Only filled in for last trip of deployment.
65*	Time Disembarked	Local time when you left the vessel and removed your gear.	HH:MM (24hr)	Cannot be unknown. Comment if times are estimated.

Aborted Trips

If a trip is aborted, much of the information will be unknown. For the following fields, record the values indicated below. For all other fields, record as usual.

Field #	Name	Record on Aborted Trips
1a*	Trip Extension	A, D or M
29*	Dealer's Name	"No Catch".
31	Steam Time	Dash.
32-42*	Trip Costs	Record expenses incurred during the trip. Do not record expenses that would have been used had the trip not been aborted.
43-44*	Primary Gear	Record the name and code of the gear the captain intended to use.
51*	Target Species	Record the intended target species had the trip not been aborted.
53-54	Time Lost	Do not record any time lost.
57	Primary Species Landed	"None".
59	Soaked	"9" on the line next to "No".
60	Number of Bags	Dash.
61	Average Weight per Bag	Dash.

Transit Trips

The Transit Trip Log is a variation of the Vessel and Trip Information Log, with the non-required fields greyed out and appropriate "unknown" values pre-filled. One new field has been added to validate trip extension:

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
29*	Dealer Name	Obtain from Captain Record "No catch".	N/A	All dealers listed with fished trip.
30*	Vessel Trip Report (VTR) Serial Number	Obtain from Captain	Up to 15 Digits	00000000 unless the captain fills out a VTR for a transit trip (infrequent).
66*	Fish Onboard?	Confirm with captain. "Fish" refers to any catch product. If No, use trip extension T. If Yes, use trip extension U.	Check one	Cannot be unknown.

VESSEL AND TRIP INFORMATION LOG
NMFS FISHERIES OBSERVER PROGRAM
OBTRP OBTRG OBTRS 07/01/21

OBS/TRIP ID 1 1a		PROGRAM CODE 2	SECTOR ID 3	FLEET 4	VENDOR ID 5	INCIDENTAL TAKES 6	AGE STRUCTURES 7	WHOLE FISH 8	FIELD DIARY 9	COMMENT LOG 10																														
A 9 9 1 0 1 -		0 0 0		046	02	<input type="checkbox"/> N <input checked="" type="checkbox"/> B <input type="checkbox"/> M <input type="checkbox"/> T <input type="checkbox"/> Env. <input checked="" type="checkbox"/> Froz.	<input checked="" type="checkbox"/> N <input type="checkbox"/> Y	<input type="checkbox"/> N <input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N <input type="checkbox"/> Y																															
VESSEL NAME #1 11 Cormorant		VESSEL NUMBER #1 12 663242		VESSEL PERMIT #1 13 141859		PORT SAILED (CITY, STATE) 14 CODE 15 New Bedford, MA		DATE SAILED 16 mm/dd/yy 10 / 13 / 22		TIME SAILED 24 h 15 : 31 17																														
VESSEL NAME #2 81		VESSEL NUMBER #2 19		VESSEL PERMIT #2 20		PORT LANDED (CITY, STATE) 21 CODE 22 New Bedford, MA		DATE LANDED 23 mm/dd/yy 10 / 26 / 22		TIME LANDED 24 h 23 : 02 24																														
HOME PORT (CITY, STATE) CODE 25 Cape May, NJ		EXP. TRIP DUR 27 14 day(s)	CREW SIZE 28 (INCLUDE CAPT) 6	DEALER'S NAME 29 Bergies Seafood Inc.			VTR SERIAL NUMBER 30 10287421		STEAM TIME (calc) 31 12.3 hrs																															
TRIP TYPE 32 Single Gear <input checked="" type="checkbox"/> 1 Multiple Gear <input type="checkbox"/> 2		ICE USED 33 24.50 tn	FUEL USED 34 6500 gal	<table border="1"> <tr> <th colspan="10">TRIP COSTS</th> </tr> <tr> <td>DAMAGE/LOSS * 35 Unknown</td> <td>SUPPLIES * 36 Unknown</td> <td>FOOD 37 Unknown</td> <td>ICE (PER TON) 38 Unknown</td> <td>FUEL (PER GAL) 39 Unknown</td> <td>WATER 40 Unknown</td> <td>OIL 41 Unknown</td> <td>BAIT 42 Unknown</td> <td colspan="2"></td> </tr> <tr> <td>\$ 450.00</td> <td>\$ 1000.00</td> <td>\$.00</td> <td>\$ 60.00</td> <td>\$ 3.65</td> <td>\$ 50.00</td> <td>\$ 350.00</td> <td>\$ 0.00</td> <td colspan="2"></td> </tr> </table>							TRIP COSTS										DAMAGE/LOSS * 35 Unknown	SUPPLIES * 36 Unknown	FOOD 37 Unknown	ICE (PER TON) 38 Unknown	FUEL (PER GAL) 39 Unknown	WATER 40 Unknown	OIL 41 Unknown	BAIT 42 Unknown			\$ 450.00	\$ 1000.00	\$.00	\$ 60.00	\$ 3.65	\$ 50.00	\$ 350.00	\$ 0.00		
TRIP COSTS																																								
DAMAGE/LOSS * 35 Unknown	SUPPLIES * 36 Unknown	FOOD 37 Unknown	ICE (PER TON) 38 Unknown	FUEL (PER GAL) 39 Unknown	WATER 40 Unknown	OIL 41 Unknown	BAIT 42 Unknown																																	
\$ 450.00	\$ 1000.00	\$.00	\$ 60.00	\$ 3.65	\$ 50.00	\$ 350.00	\$ 0.00																																	
GEAR INFORMATION (IN USE & STOWED)										TIME LOST *																														
PRIMARY GEAR 43 Sea Scallop Dredge		CODE 44 1 3 2	USED? 47 No 0 Yes 1 <input checked="" type="checkbox"/>	# ONBRD 48 2	# SOAK 49 0	CAPT EXP (yrs) 50 20	TARGET SPECIES 51 CODE(S) 52 Sea Scallops		REASON 53 07	AMOUNT 54 12.8 hrs																														
OTHER GEAR 1 45 Handline		CODE 46 020	USED? 47 No 0 <input checked="" type="checkbox"/> Yes 1	# ONBRD 48 1	# SOAK 49 0	CAPT EXP (yrs) 50 —	TARGET SPECIES 51 CODE(S) 52 —		REASON 53 02	AMOUNT 54 3.5 hrs																														
OTHER GEAR 2 45		CODE 46	USED? 47 No 0 Yes 1	# ONBRD 48	# SOAK 49	CAPT EXP (yrs) 50	TARGET SPECIES 51 CODE(S) 52		REASON 53	AMOUNT 54																														
OTHER GEAR 3 45		CODE 46	USED? 47 No 0 Yes 1	# ONBRD 48	# SOAK 49	CAPT EXP (yrs) 50	TARGET SPECIES 51 CODE(S) 52		REASON 53	AMOUNT 54																														
# TRIP HAULS 55 273	# UNOBSERVED HAULS 56 130	PRIMARY SPECIES LANDED Sea Scallops				PHOTOS? 58 <input type="checkbox"/> N <input checked="" type="checkbox"/> Y	<table border="1"> <tr> <th colspan="3">SCALLOP TRIPS ONLY</th> </tr> <tr> <td>SOAKED? 59 No 0 <input checked="" type="checkbox"/> Yes 1</td> <td># OF BAGS 60 340</td> <td>AVERAGE WGT/BAG 61 48 lb</td> </tr> </table>				SCALLOP TRIPS ONLY			SOAKED? 59 No 0 <input checked="" type="checkbox"/> Yes 1	# OF BAGS 60 340	AVERAGE WGT/BAG 61 48 lb																								
SCALLOP TRIPS ONLY																																								
SOAKED? 59 No 0 <input checked="" type="checkbox"/> Yes 1	# OF BAGS 60 340	AVERAGE WGT/BAG 61 48 lb																																						
COMMENTS Damage = new sweep chain Supplies = scallop bags, wire ties, gloves, tape Time lost 02 (gear damage) = winch broke after haul 114. Crew worked on fixing it from 02:00 - 05:30. Fixed and started fishing again. Time lost 07 (weather) = strong winds ~30 mph 10/17 18:20 - 10/18 07:10						DATE ARRIVED AT DOCK mm/dd/yy 62 10 / 13 / 22		TIME ARRIVED 24 h 14 : 45 63																																
Only fill in for first trip of deployment						DATE DISEMBARKED mm/dd/yy 64 10 / 26 / 22		TIME DISEMBARKED 24 h 23 : 37 65																																
Only fill in for last trip of deployment																																								

* Fields that require a comment

 OMB Control No.: 0648-0593
 Expires On: 01/31/2024

TRANSIT TRIP LOG
NMFS FISHERIES OBSERVER PROGRAM
OBTRP OBTRG OBTRS 07/01/21

OBS/TRIP ID 1 A 9 9 1 0 4 T		PROGRAM CODE 2 0 0 0	SECTOR ID 3	FLEET 4 046	VENDOR ID 5 02	INCIDENTAL TAKES 6 X N B M T	AGE STRUCTURES 7 Env. Froz.	WHOLE FISH 8 N Y	FIELD DIARY 9 X N Y	COMMENT LOG 10 N Y		
VESSEL NAME # 1 11 Cormorant		VESSEL NUMBER # 1 12 663242		VESSEL PERMIT # 1 13 141859		PORT SAILED (CITY, STATE) 14 CODE 15 Fairhaven, MA		DATE SAILED 16 mm/dd/yy 11 / 03 / 22		TIME SAILED 24 h 04 : 45 17		
VESSEL NAME # 2 81		VESSEL NUMBER # 2 19		VESSEL PERMIT # 2 20		PORT LANDED (CITY, STATE) 21 CODE 22 New Bedford, MA		DATE LANDED 23 mm/dd/yy 11 / 03 / 22		TIME LANDED 24 h 05 : 02 24		
HOME PORT (CITY, STATE) CODE 25 Cape May, NJ		EXP. TRIP DUR 27 day(s)	CREW SIZE 28 (INCLUDE CAPT) 6	DEALER'S NAME 29 NO CATCH			VTR SERIAL NUMBER 30 00000000		STEAM TIME (calc) 31 hrs			
TRIP TYPE 32 Single Gear 1 X Multiple Gear 2		ICE USED 33 tn	FUEL USED 34 gal	TRIP COSTS								
DAMAGE/LOSS * Unknown X 35		SUPPLIES * Unknown X 36		FOOD Unknown X 37		ICE (PER TON) 38 Unknown X		FUEL (PER GAL) 39 Unknown X		WATER 40 Unknown X	OIL 41 Unknown X	BAIT 42 Unknown X
\$. 00		\$. 00		\$. 00		\$. 00		\$. 00		\$. 00	\$. 00	\$. 00
GEAR INFORMATION (IN USE & STOWED)										TIME LOST *		
PRIMARY GEAR 43 Sea Scallop Dredge		CODE 44 1 3 2	USED? 47 No 0 X Yes 1	# ONBRD 48 2	# SOAK 49 0	CAPT EXP (yrs) 50 20	TARGET SPECIES 51 CODE(S) 52 Sea Scallops		REASON 53	AMOUNT 54 hrs		
OTHER GEAR 1 45 Handline		CODE 46 020	USED? 47 No 0 X Yes 1	# ONBRD 48 1	# SOAK 49 0	CAPT EXP (yrs) 50 —	TARGET SPECIES 51 CODE(S) 52 —		—	— hrs		
OTHER GEAR 2 45		CODE 46	USED? 47 No 0 Yes 1	# ONBRD 48	# SOAK 49	CAPT EXP (yrs) 50	TARGET SPECIES 51 CODE(S) 52		—	— hrs		
OTHER GEAR 3 45		CODE 46	USED? 47 No 0 Yes 1	# ONBRD 48	# SOAK 49	CAPT EXP (yrs) 50	TARGET SPECIES 51 CODE(S) 52		—	— hrs		
# TRIP HAULS 55 0	# UNOBSERVED HAULS 56 0	PRIMARY SPECIES LANDED NONE				PHOTOS? 58 N X Y		SCALLOP TRIPS ONLY				
COMMENTS Transit to pick up ice before fishing Captain did not fill out VTR for this trip		FISH ONBOARD? 66 X N Y				SOAKED? 59 No 0 9 Yes 1		# OF BAGS 60	AVERAGE WGT/BAG 61 lb			
Only fill in for first trip of deployment						DATE ARRIVED AT DOCK mm/dd/yy 62 11 / 03 / 22		TIME ARRIVED 24 h 03 : 57 63				
						DATE DISEMBARKED mm/dd/yy 64 / /		TIME DISEMBARKED 24 h : 65				

* Fields that require a comment

Trip Data Release Form

PAPERWORK REDUCTION ACT STATEMENT: The information provided on this form will be used to ensure that the data for a specific trip is not provided to a person who does not have authority to obtain that data under the confidentiality requirements of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) and the Marine Mammal Protection Act (MMPA). Meeting those confidentiality requirements are critical for collecting information that is used in analyses that support the conservation and management of living marine resources and that are required under the MSA, the Endangered Species Act (ESA), the MMPA, the National Environmental Policy Act (NEPA), the Regulatory Flexibility Act (RFA), Executive Order 12866 (EO 12866), and other applicable laws. The public reporting burden for this form is estimated to average 2 minutes per response, including the time for completing, reviewing, and transmitting the information on the form. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Ryan Shama, National Marine Fisheries Service, Northeast Fisheries Science Center, Training and Data Quality Branch, 166 Water Street, Woods Hole, MA 02543-2266. Providing the requested information is required to deliver the copy of the trip to the requested location and to release the trip data. The information on this form will be kept confidential as required under Section 402(b) of the MSA (18 U.S.C. 1881a(b)) and regulations at 50 C.F.R Part 600, Subpart E. Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number. This is an approved information collection under OMB Control No. 0648-0593 through 01/31/2024.

Policy for Data Requests of NMFS Observer-Obtained Information

1. The only individuals who may request and receive data include: the owner(s), or the captain acting as an authorized representative for the owner(s), or a vessel participating in the National Marine Fisheries Service (NMFS) Northeast Fisheries Science Center (NEFSC) Observer Program. No other individuals may be issued any data under this policy.
2. Any data request must be submitted in writing on a form letter which may be obtained from a NMFS Observer, or the address below. Two signatures are required on this letter: that of the individual requesting the data, and that of the individual releasing the data. All letters must then be returned to the following address:

Chief, Training and Data Quality Branch
National Marine Fisheries Service
Northeast Fisheries Science Center
166 Water Street
Woods Hole, MA 02543-1097

Any questions or other requests relating to data release should also be directed to the above address.

3. It should be understood that upon release of the requested data, the recipient then becomes responsible for it.
4. The individual signing the letter as the "releaser" must issue the information in compliance with this policy.
5. Data may not be released upon an oral request, or without first completing and signing the authorized release letter mentioned above.
6. Field diaries do not meet the specifications of releasable data under the policy. No field diaries may be copied for, or reviewed by, vessel owners or captains.
7. Release of data for trips in which more than one vessel participated (i.e., pair trawl trips) may only occur if both vessel owners or captains complete and sign data release letters.
8. Any requests for historical data (i.e., data that an observer has already mailed in) should be forwarded to the address above.
9. All letters should be completed in pen, not pencil.

**NMFS FISHERIES OBSERVER PROGRAM
TRIP DATA RELEASE FORM**

Request Date ____/____/____

Observer Trip ID # _____

Vessel Name _____

USCG Doc # _____

Date Landed ____/____/____

PRINT Name

Signature

PRINT Mailing Address:

Copies Released By: _____ Date _____ Edited? Yes ___ No ___

(For NMFS Office Use)

TEAR AT PERFORATION AND RETAIN BELOW SECTION FOR YOUR RECORDS

The data you receive may be preliminary and not yet completely reviewed.

Observer Trip ID # _____

Date Requested _____

Mail Request To:

Chief, Training and Data Quality Branch

National Marine Fisheries Service

Northeast Fisheries Science Center

166 Water Street

Woods Hole, MA 02543-1097

**NMFS FISHERIES OBSERVER PROGRAM
TRIP DATA RELEASE FORM**Request Date 05 / 01 / 22Observer Trip ID # A99012LVessel Name JO JOUSCG Doc # 1234567Date Landed 05 / 01 / 22JOHN SMITHJohn SmithPRINT Name

Signature

PRINT Mailing Address:PO Box 1234GLOUCESTER, MA 01930

Copies Released By: _____ Date _____ Edited? Yes ___ No ___

(For NMFS Office Use)

TEAR AT PERFORATION AND RETAIN BELOW SECTION FOR YOUR RECORDS

The data you receive may be preliminary and not yet completely reviewed.

Observer Trip ID # A99012LDate Requested 05/01/22Mail Request To:

Chief, Training and Data Quality Branch

National Marine Fisheries Service

Northeast Fisheries Science Center

166 Water Street

Woods Hole, MA 02543-1097

Common Gear Log Instructions

This section contains fields that are common to all Gear Logs. Questions that pertain to each fishery are detailed in their respective sections. Each log contains detailed questions about the gear fished. Assign a new gear number for each uniquely configured gear **hauled** during a trip. These unique configurations are based on the variables collected for each gear type. Any changes/modifications in these fields will require a new GEAR NUMBER. Number each gear configuration sequentially.

If the gear is set out and hauled more than once during a trip, do not assign it a new gear number. Rather, record on the Haul Log which gear number is being hauled. In addition, record any other information necessary to understand the manner in which the gear was set/hauled in the comments section.

For instructions on completing Header Fields **A**, **B**, and **C** and GEAR CODE (**D**) refer to the [COMMON HAUL LOG DATA](#) section.

Comments

Record any additional information about each gear, including descriptions of any “Combination” or “Other” codes. Include any calculations used to answer any questions. If more room is needed, use the back of the log, making sure to write “See Back” on the front of the log. Reference each comment with its corresponding field name.

Common Haul Log Data

This section contains fields that are common to all Haul Logs. Questions that pertain to each fishery are detailed in their respective sections. Each log contains detailed questions about the setting and hauling of the gear, as well as the haul's catch. Complete a new log after each hauling of gear. If you feel that you cannot go on deck for weather-related safety reasons, record as much information on this log as possible (e.g., header information, depths, times, positions, kept catch estimates).

The species summary section should be used to record catches of all species (some exceptions listed below), debris, and shells. If any pelagic species (e.g., swordfish, billfish, large tuna species, sharks, etc.), sturgeons, rays, or tagged fish are caught on this haul, complete an [INDIVIDUAL ANIMAL LOG](#) to provide information on each animal. All marine mammals, sea turtles, and seabirds caught on this haul must be recorded on a [MARINE MAMMAL, SEA TURTLE, AND SEABIRD INCIDENTAL TAKE LOG](#). See [APPENDIX T – SPECIES CODES AND LOGS](#) for a list of species and the log(s) on which to record them. See the Incidental Takes and Sightings of Protected Species section of the [Observer Operations Manual](#) for a definition of incidental take.

The Haul Log will serve as a cover sheet for any [INDIVIDUAL ANIMAL LOG](#) (s), [LENGTH FREQUENCY LOG](#)(s), [CATCH COMPOSITION LOG](#)(s), [DISCARD LOG](#)(s), and [CRUSTACEAN SAMPLE LOG](#)(s) that also correspond to the same haul number.

If there are insufficient lines on one form for all species caught on a single haul, continue listing species on an additional [Haul Log](#), making sure to complete all of the Header Information (A-C), Gear Code (D), Gear Number (E), and Haul Number (F). Any fields labeled with a letter in the following sections refer to this list.

Comments

Record any additional information regarding this haul (e.g., unusual species caught, uncommon catches, gear damage, reason to expect the gear was not fishing properly). If more room is needed, use the back of this log, making sure to write "See Back" on the front of the log. Reference each comment with its corresponding field name.

Haul Information

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
A*	Observer/Trip Identifier	3-character Observer Identifier combined with 3-digit Trip Number (sequential by calendar year).	6 characters	Cannot be unknown.
B*	Date Landed	When the vessel arrives at the dock	MM/YY	Cannot be unknown.
C*	Page Number	See APPENDIX B – PAGE NUMBERING INSTRUCTIONS	Up to 3 digits	Cannot be unknown.
D*	Gear Code	Gear fished on this haul See APPENDIX I – GEAR CODES	3-digit code	Cannot be unknown.
E*	Gear Number	Unique gear identifier	2-digit code	Cannot be unknown.
F*	Haul Number	Sequential by order hauled	3-digit code	Cannot be unknown.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
G*	Haul Observed?	Yes/No. Observed: Record all catch. (All kept and discarded catch must be accounted for). Unobserved: Record kept catch. Only record discard information for IALs and Incidental Takes. Hauls with a DISCARD LOG : mark unobserved and record all catch. Marine mammal watch: observed = no.	Check one	Cannot be unknown.
H	On-Effort?	Yes/No. Intentionally present to witness haulback and any incidental takes, regardless of haul observed. Marine mammal watch: on effort = yes.	Check one	Cannot be unknown.
I	Catch?	Yes/No. Any living or non-living items entangled or entrapped by gear, regardless of status or disposition. If pumped to other vessel, catch = yes.	Check one	"9".
J*	Incidental Take?	Yes/No. If Yes, complete MARINE MAMMAL, SEA TURTLE, AND SEABIRD INCIDENTAL TAKE LOG .	Check one	Cannot be unknown.
K*	Weather	See APPENDIX K – WEATHER CODES . Beginning of haul.	2-digit code	"00".
L	Wind Speed	Estimated by observer and/or captain. Beginning of haul. Record "0" if no wind. This is not a range.	Whole knots	Dash.
M	Wind Direction	Estimated by observer and/or captain. Beginning of haul.	Compass degrees, 3 digits	Dash if unknown or no wind.
N*	Wave Height	Estimated by observer and/or captain. Beginning of haul; not a range. Record "0" if less than 6 inches.	Whole feet	Dash.
O	Bottom Depth	Obtained from depth sounder. Beginning of haul.	Whole fathoms	Dash.
P*	Gear Condition	At haulback. See APPENDIX L – GEAR CONDITION CODES .	3-digit code	"000".
Q*	Set/Haul Dates Begin Fish/Gear Onboard Dates	Dates collected specific to each fishery. See APPENDIX C – SET/HAUL TIME DEFINITIONS .	MM/DD/YY	Cannot be unknown.
R*	Set/Haul Times Begin Fish/Gear Onboard Times	Times collected specific to each fishery. See APPENDIX C – SET/HAUL TIME DEFINITIONS .	HH:MM (24hr)	Dash and record estimated time ³ in comments.

³ With the exception of Off-Watch Logs, times cannot come from the captain. If you cannot obtain the time yourself, dash the time field and record the captain's estimated time in the comments. Dates provided by the captain should be recorded in the date field, with a comment that it came from the captain.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
S*	Set/Haul Locations	See APPENDIX C – SET/HAUL TIME DEFINITIONS . See APPENDIX D – CONVERSION TABLES . Can be obtained from vessel electronics, FMRD-issued electronics, or captain's logbook. If locations cannot be obtained, record statistical area.	Latitude/ Longitude, to the nearest tenth of a minute OR LORAN station bearings (5 digits, no decimal)	Cannot be left blank. 3-digit statistical area. 000 if statistical area unknown. See APPENDIX A – NORTHEAST STATISTICAL AREAS .
S2*	Statistical Area	ASM only, if coordinates are not available.	3-digit code	Leave blank if coordinates entered. 000 if statistical area unknown
T	Water Temperature	Collected at the end of the haul (set begin for purse seine). Use a thermometer provided by NMFS or your observer provider, or vessel electronics after confirming accuracy with your issued thermometer. If an incidental take occurs in this haul, Water Temperature must be recorded. Longline: also taken at set begin, set end, and haul begin.	Degrees Fahrenheit, to the nearest tenth	Dash.
U*	Target Species	Obtain from captain before gear is hauled. Be as specific as possible. See APPENDIX T – SPECIES CODES AND LOGS . Cannot target dressed species (parts).	NEFOP and IFS: up to 5 unique species/group names per box ASM: record secondary target species under U2	"0000" if None (e.g., washing the net).
V	Target Species Code	Filled in by FMRD staff for data entry. Observers: leave blank.	4-digit code	Cannot be unknown.
W*	Sample Weight Multiplier	Calculated on the CATCH ESTIMATION WORKSHEET .	Unitless, to the nearest hundredth	Leave blank if not subsampling.

Catch Information

Record a new line for each unique species, disposition, and weight type (dressed vs. round) combination.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
A'*	Species Name	See APPENDIX T – SPECIES CODES AND LOGS .	N/A	Cannot be unknown.
B'	Species Code	Filled in by FMRD staff for data entry. Observers: leave blank.	4-digit code	Cannot be unknown.
C'*	Subsample Weight	Actual weight of species/disposition in subsample.	Pounds, to the nearest tenth	Leave blank if not subsampling.
D'*	Pounds	Observer actual weight preferred. Otherwise observer or captain's estimate, indicated by Estimation Method.	Pounds Actual or <1lb: to the nearest tenth Estimated >1lb: whole	Cannot be unknown.
E'*	Fish Disposition	Obtain reason from captain. Disregard any changes in final disposition after the trip (e.g., discarded by dealer) See APPENDIX M – FISH DISPOSITION CODES .	3-digit code	"900" and comment.
F'*	Dressed or Round	D/R Determined by the observer. Status of this species/disposition when weighed, regardless of final processing. Verify D/R if obtained from captain or crew. Dressed "parts" include fins, wings, tails, livers, cheeks, chunks, and claws.	D = Dressed R = Round U = Unknown	"U".
G'*	Estimation Method	Determined by the observer. Method used to estimate this species/disposition. See APPENDIX N – ESTIMATION METHOD CODES .	2-digit code	Cannot be unknown.

"GENERIC" HAUL LOG
NMFS FISHERIES OBSERVER PROGRAM
OBHAU OBSPP 07/01/21

OBS/ TRIP ID		A													
DATE LAND (mm/yy)		B /													
PAGE #		C <input type="checkbox"/> OF <input type="checkbox"/>													
GEAR CODE D	GEAR # E	HAUL # F	HAUL OBS? NO 0 YES 1 G	ON-EFFORT? NO 0 YES 1 H	CATCH? NO 0 YES 1 I	INC TAKE? NO 0 YES 1 J	WEATHER CODE K	WIND SPEED L DIRECTION M ° kn		WAVE HEIGHT N ft	DEPTH. HAUL BEGIN O fm	GEAR COND CODE P			
SET INFO		DATE AND TIME mm/dd/yy 24 hours		LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)				WATER TEMP		TARGET SPECIES		CODE(S)			
S BEGIN		Q / / R :		Station 1	Latitude / Bearing		Station 2	Longitude / Bearing		U		V			
E END		/ / :		9960 -	S		9960 -								
T END		/ / :		9960 -			9960 -								
HAUL INFO															
H BEGIN		/ / :		9960 -			9960 -								
A END		/ / :		9960 -			9960 -								
L END		/ / :		9960 -			9960 -								
COMMENTS															
SAMPLE WEIGHT MULTIPLIER W _ _ _															
SPECIES						WEIGHT		SPECIES				WEIGHT			
NAME		CODE	SUB-SAMPLE WEIGHT	POUNDS	DISP CODE	D/R	EST METHOD CODE	NAME		CODE	SUB-SAMPLE WEIGHT	POUNDS	DISP CODE	D/R	EST METHOD CODE
A'		B'	C'	D'	E'	F'	G'	11							
1								12							
2								13							
3								14							
4								15							
5								16							
6								17							
7								18							
8								19							
9								20							
10															

Fishermen's Comment Log

The purpose of this log is to provide fishermen an opportunity to document and record any significant information as it relates to an observed trip. This log will become part of the trip record. This log is used for all programs.

Observers are required to present this log to the captain at the beginning of every trip. This log is completely voluntary and should not be presented as an additional requirement. This log is not meant to be used for past trips; it should only pertain to the current trip.

Captains may either mail in the log separately or give to the observer to be included as part of the trip file. If the captain would prefer sending the log in at a later time, pre-fill out items A, B and C for the captain. If the log is returned to the observer for submission with the trip, it should be indicated on the [VESSEL AND TRIP INFORMATION LOG](#) by checking the "Y" box in the Fishermen's Comment Log field and placing the log at the end of the trip. Observers are also required to ask the captain if he would like a copy of the log.

If the back of the log is utilized, the standard trip header information should be filled out on both sides of the log.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Event Date	Filled out by observer or captain.	MM/DD/YY	Cannot be unknown.
2	Vessel Name	Filled out by observer or captain.	N/A	Cannot be unknown.
3	Vessel or Hull Number	Either the US Coast Guard Documentation Number or the state registration number.	Up to 8 characters	Cannot be unknown.
4	Comments Continued on Back?	Yes/No.	Check one	Cannot be unknown.
5	Comments	Filled out by captain. Can relate to gear particulars, unusual species caught, abnormal levels of bycatch, extrapolated weights, reasons gear was not fishing properly, etc. Continue on back if needed.	Comment field	Cannot be unknown.

FISHERMEN'S COMMENT LOG
NMFS FISHERIES OBSERVER PROGRAM
07/01/21

OBS/ TRIP ID	A	A99015-
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Record notes or details on observed tows, such as species composition, estimated or extrapolated weights, gear or fishing conditions that may be out of the ordinary. If notes pertain to a specific tow, or times, please include that information below.

VESSEL NAME	HULL NUMBER	COMMENTS CONTINUED ON BACK?
2 Cormorant	3 663242	NO 0 <u>X</u> YES 1 4

COMMENTS

5 Caught 700lbs of river herring on haul #4. All other hauls included 100lbs or less and were primarily Atlantic herring. I believe this was because of faulty gear.

PAPERWORK REDUCTION ACT STATEMENT: The information provided on this form will be used by the National Marine Fisheries Service (NMFS) to improve observer training under section 403(b) of the Magnuson-Stevens Act (16 U.S.C. 1801, et seq.), which will assist NMFS to collect information that is used in analyses that support the conservation and management of living marine resources and that are required under the Magnuson-Stevens Fishery Conservation and Management Act (MSA), the Endangered Species Act (ESA), the Marine Mammal Protection Act (MMPA), the National Environmental Policy Act (NEPA), the Regulatory Flexibility Act (RFA), Executive Order 12866 (EO 12866), and other applicable law. The public reporting burden for this form is estimated to average 15 minutes per response, including the time for completing, reviewing, and transmitting the information on the form. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Katherine McArdle, National Marine Fisheries Service, Northeast Fisheries Science Center, Fisheries Monitoring Operations Branch, 166 Water Street, Woods Hole MA 02543-1026.

Providing the requested information is voluntary. All identifying data submitted will be handled as confidential material in accordance with NOAA Administrative Order 216-100, Protection of Confidential Fishery Statistics. Other information collected on this form may be subject to public release under various statutes. Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number. This is an approved information collection under OMB Control No. 0648-0593 through 01/31/2024.

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COMMENTS
5

Gillnet Gear Characteristics Log

For NEFOP trips, if the vessel has two or more identical gears which are hauled separately, complete only one Gillnet Gear Characteristics Log and record the consecutively-assigned numbers of all identical gears described in GEAR NUMBER(S) (#1).

For ASM trips, if the vessel has two or more identical gears which are hauled separately, complete a separate Gillnet Gear Characteristics Log for each individual gear.

This log should be used to describe all types of gillnet gear except Beach Seine or Beach Anchored Gillnet.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1*	Gear Number	Unique identifier for each gillnet string configuration. NEFOP: Can be a list of gear numbers if all have identical characteristics.	2-digit code	Cannot be unknown.
2*	Number of Nets	Individual net panels, total for the string.	Whole number	Cannot be unknown.
3*	Net Length	Obtain from the captain. Length of a single net panel, not including spaces. Average if variable.	Whole feet	Dash.
4*	Net Height	Obtain from the captain. Do not calculate from vertical mesh count. Height of an un-stretched net panel, excluding tie downs. Average if variable.	Feet, to the nearest tenth	Dash.
5	Mesh Count, Vertical	Obtain from captain or count. Average if variable.	Whole number	Dash.
6	Hanging Ratio	Obtain from captain or measure ratio of floatline to stretched mesh (see Operations Manual for example). Average if variable.	Fraction	Dash.
7	Twine Size Number	Obtain from captain. Record 998 if variable and comment on all sizes. See APPENDIX D – CONVERSION TABLES .	3-digit number	“000”.
8	Floatline Material	Obtain from captain. Describe “other” on line 8A.	Check one	“0”.
9	Leadline Weight	Obtain from captain. Confirm weight is for reported net length; often quoted in spool weight (typically 600 ft). Weighted average per net.	Pounds, to the nearest tenth	Dash.
10	Floater Used?	Visually confirm.	Check one	“9”.
11	Distance Between Floats	Obtain from captain. Average.	Whole feet.	Dash. Leave blank if Floats Used = “No”.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
12*	Tiedowns Used?	Visually confirm. For ASM trips, only record Yes or No. If not all nets use tiedowns, mark "Yes" and comment on the number of nets using tiedowns.	Check one	"9".
13*	Tiedown Length	Obtain from captain. Average.	Feet, to the nearest tenth	Dash. Leave blank if Tiedown Used = "No".
14	Spaces Between Nets Used?	Visually confirm. Spaces \geq 2.5 feet between nets.	Check one	"9".
15	Number of Spaces Between Nets	Count or obtain from captain. Total.	Whole number	Dash. Leave blank if Spaces Used = "No".
16	Space Width	Measure or obtain from captain. Average.	Whole feet	Dash. Leave blank if Spaces Used = "No".
17	Droplines Used	Visually confirm.	Check one	"9".
18	Dropline Length	Obtain from captain. Float at surface to floatline. Average.	Whole feet	Dash. Leave blank if Droplines Used = "No".
19	Additional Weights Used?	Visually confirm.	Check one	"9".
20	Weight of Additional Weights	Obtain from captain. Total weight used on leadline. Do not include weight of leadline.	Whole pounds	Dash. Leave blank if Additional Weights Used = "No".
21	Anchors Used?	Visually confirm.	Check one	"9".
22	Number of Anchors	Count.	Whole number	Dash. Leave blank if Anchors Used = "No".
23	Anchor Weight	Read weight stamped on anchor or obtain from captain. Total weight (sum all anchors).	Whole pounds	Dash. Leave blank if Anchors Used = "No".
24	Anchor Type	Visually confirm. Describe "other" or "combination" on line 24A.	Check one	"0". Leave blank if Anchors Used = "No".
25	Securing Method	Visually confirm. If anchored net, can only be 2 (Ocean Bottom) or 3 (Vessel and Ocean Bottom). If drift net, can only be 1 (None) or 4 (Tied to Vessel Only).	Check one	"0".
26*	Active Marine Mammal Deterrent Devices (Pingers) Used?	Visually confirm. When gear was set.	Check one	"9".
27	Number of AMMDD (Pingers)	Count. Obtain from captain if set is not witnessed. When gear was set.	Whole number	Dash. Leave blank if AMMDD Used = "No".

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
28	AMMDD Frequency	Obtain from captain. Frequency used on majority of devices; if equal number, record highest frequency and comment.	Kilohertz	"000". Leave blank if AMMDD Used = "No".
29	AMMDD Brand(s)	Visually confirm. Describe "other" or "combination" on line 29A.	Check one	"00". Leave blank if AMMDD Used = "No".
30	Passive Marine Mammal Deterrent Devices Used?	Visually confirm. When gear was set.	Check one	"9".
31	Number of PMMDD	Count or obtain from captain if set is not witnessed. When gear was set.	Whole number	Dash. Leave blank if PMMDD Used = "No".
32*	Number of Nets at Each Mesh Size	Obtain from captain.	Whole number	If exact count/mesh size not available, leave blank and fill out Mesh Size Range.
33*	Corresponding Mesh Size	Obtain from captain. Stretched length.	Inches, to the nearest hundredth	
34*	Mesh Size Range	Obtain from captain. Minimum and maximum mesh sizes.	Inches, to the nearest hundredth	If exact count/mesh size is available, leave blank and fill out Number of Nets at Each Mesh Size.
35	Net Color	Visually confirm. Comment if combination or other. "Multicolor" refers to a mix of colors within 1 net; "combination" refers to nets of various colors connected in a string. Describe "other" or "combination" on line 35A.	Check one	"00".
36	Number of High Flyers	Count. Total (sum both sides).	Whole number	Dash.
37	Number of Buoys	Count. Total connected to the buoyline (sum both sides).	Whole number	Dash.
38	Surface Line Length	Obtain from captain. Average length between any high flyer(s) and/or buoy(s) on the same buoyline.	Whole feet	Dash if unknown or if no surface line used.
39	Surface Line Type Code	Obtain from captain.	Check one	"0".
40	Surface Line Diameter	Obtain from captain. Average.	Inches, in fractional form	Dash. Leave blank if no surface line used.
41	Surface System Mark?	Yes/No. Visually confirm.	Check one	"9".
42	Groundline Used?	Yes/No. Visually confirm.	Check one	"9".
43	Groundline Length	Obtain from captain. Total (sum both sides).	Whole feet	Dash. Leave blank if Groundline Used = "No".
44	Groundline Type Code	Obtain from captain..	Check one	"0".

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
45	Groundline Diameter	Obtain from captain. Average.	Inches, in fractional form	Dash. Leave blank if Groundline Used = "No".
46	Number of Buoylines	Count. Does not include line from vessel to gear.	Whole number	Dash.
47	Buoyline Length	Obtain from captain. Average.	Whole feet	Dash. Leave blank if Number of Buoylines = 0.
48	Buoyline Type Code	Obtain from captain.	Check one	"0".
49	Buoyline Percent Sinking/Neutrally Buoyant	Obtain from captain. Average. Comment if captain confirms Float > Sink.	Whole percent, #49 and #50 must add up to 100	Dash. Leave blank if Number of Buoylines = 0 or Buoyline Type Code ≠ "8".
50	Buoyline Percent Floating	Obtain from captain. Average.		
51	Buoyline Diameter	Obtain from captain. Average.	Inches, in fractional form	Dash. Leave blank if Number of Buoylines = 0.
52	Buoyline Mark?	Yes/No. Visually confirm. 4" colored mark mid-way on buoyline.	Check one	"9". Leave blank if Number of Buoylines = 0.
53	Weak Links Used on Surface?	Yes/No. Visually confirm.	Check one	"9".
54	Number of Surface Weak Links	Obtain from captain. Total (sum both sides of gear).	Whole number	Dash. Leave blank if Surface Weak Links Used = "No".
55	Surface Weak Link Type Code	Visually confirm.	Check one	"0". Leave blank if Surface Weak Links Used = "No".
56	Weak Links Used on String?	Yes/No. Visually confirm.	Check one	"9".
57	Number of String Weak Links	Obtain from captain. Total on entire string (all net panels).	Whole number	Dash. Leave blank if String Weak Links Used = "No".
58	String Weak Link Type Code	Visually confirm.	Check one	"0". Leave blank if String Weak Links Used = "No".

GILLNET GEAR CHARACTERISTICS LOG
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OBGGG OBMSZ 07/01/21

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GEAR CODE 1 0 0 D		GEAR NUMBER(S) 1 1, 2, 3, 4		NUMBER OF NETS 2 15		MESH SIZE(S) # OF NETS 32 MESH SIZE (inches) 33 15 12 . 0 0 OR MESH SIZE RANGE 34		NET COLOR 35 Unknown 00 Clear 01 White 02 Pink 03 Black 04 Green 05 Blue 06 Multi-color 07 Red 08 Orange 09 Purple 10 Combination 98 X Other 99 35A see comments	
AVERAGE NET:		USED? NO YES		MEASUREMENTS					
LENGTH 3 300 ft		FLOATS 10 0 1 X		Dist Between 11 5 ft					
HEIGHT (endline) 4 8 . 5 ft		TIE DOWNS 12 0 1 X (all nets) 2 (not all nets)		Length 13 4 . 0 ft					
MESH COUNT		SPACE(S)		Number 15 14					
VERTICAL 5 25		BETWEEN NETS 14 0 1 X		Width 16 3 ft					
HANGING		DROPLINES 17 0 X 1		Length 18 ft					
RATIO 6 1 / 2		ADDITIONAL WGTs 19 0 X 1		Weight 20 lbs					
TWIN SIZE 7 24		ANCHOR(S) 21 0 1 X		Type 24					
		Number 22 2		Unknown 0					
		Weight (total) 23 100 lbs		Danforth-style 1 X					
FLOATLINE MATERIAL 8		SECURING METHOD(S)		Dead Weight 2					
Unknown 0		None 25 1		Combination 8					
Floating (foam core) 1		Ocean Bottom 2 X		Other 9					
Twisted Polypropylene 2 X		Vessel/Ocean Bottom 3							
Other 9		Vessel Only 4							
8A		MM DETERRENT DEVICES 26		Brand(s) 29					
		ACTIVE USED? 0 1 X		Unknown 00					
		Number 27 16		Dukane 01 X					
		Frequency 28 10 kHz		Aimar 02					
		PASSIVE USED? 0 X 1		Fumunda 03					
LEADLINE WEIGHT 9		30		Future Oceans LED 04					
32 . 5 lbs/ net		Number 31		Fishtek 05					
				Combination 98					
				Other 99					
				29A					
COMMENTS Net Color = 5 blue, 5 pink and 5 clear.									
SURFACE SYSTEM					BUOYLINE				
# of High Flyer(s) 36 2					# of Buoyline(s) 46 2				
# of Buoy(s) 37 2					Length (avg) 47 200 ft				
Surface Line Length (avg) 38 3 ft					Type Code 48 8				
Type Code 39 1					Percent of Type 49 75% / 25% 50				
Diameter 40 5 / 8 in					(sinking / floating)				
Mark? 41 NO 0 YES 1 X					Diameter 51 5 / 8 in				
					Mark? 52 NO 0 YES 1 X				
					WEAK LINKS 53 NO YES				
GROUNDLINE NO YES					USED ON SURFACE? 0 1 X				
USED? 42 0 1 X					Number (total) 54 4				
Length (total) 43 6 ft					Type Code 55 1				
Type Code 44 1					USED ON STRING? 56 0 1 X				
Diameter 45 3 / 8 in					Number (total) 57 75				
					Type Code 58 2				

OMB Control No.: 0648-0593
Expires on: 01/31/2024

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WEAK LINK TYPE CODES:	LINE TYPE CODES:
0 = Unknown	0 = Unknown
1 = Rope of Appropriate Breaking Strength	1 = Sinking / Neutrally Buoyant
2 = Off the Shelf	2 = Floating
3 = Overhand Knot	8 = Combination
4 = Hog Rings	9 = Other
8 = Combination	
9 = Other	

ADDITIONAL COMMENTS

DIAGRAMS FOR REFERENCE ONLY

Surface System

High Flyer

Buoy

Dist Btwn

Water Line

Floats attached to Floatline

Space

Leadline

Endline

Anchor

Groundline

Legend:

- = 1/2" Loop (Bridle)
- = Weak Link
- = Flinger

Photo Credit: NOAA Fisheries Service Northeast Regional Office (Original image modified to include additional information).

Tie Down

FOR OFFICE USE ONLY

Gillnet Haul Log

In the gillnet fisheries, the following IAL species should be recorded in the Gillnet Haul Log species summary section:

- Bonito,
- Skipjack tuna,
- False albacore, and
- King mackerel.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Marine Mammal Haul Watch?	Yes/No. These will be conducted during every haul of a "limited fish sampling" trip.	Check one	Cannot be unknown.
2	Depth, Leadline	Obtain from captain. If sink gillnet, should be the same as Bottom Depth.	Whole fathoms	Dash.
3*	Soak Duration	Obtain from captain if set date/time not available.	Hours, to the nearest tenth	Dash. Leave blank if Set Begin/End times entered.
4	Number of Nets Set	Should agree with total Number of Nets (panels) on GILLNET GEAR CHARACTERISTICS LOG .	Whole number	Dash.
5*	Number of Nets Hauled	Visually confirm. If net is partially hauled, round to nearest whole net.	Whole number Rounded to nearest whole net ⁵	Dash.
6	Number of Nets Lost	Should be Number of Nets Set minus Number of Nets Hauled; comment if different.	Whole number	Dash.
7*	Number of Active Marine Mammal Deterrent Devices (Pingers) Hauled	Count only those devices on the portion of gear hauled, regardless of functioning status (see PINGER TESTER WORKSHEET).	Whole number	Dash. Leave blank if not used on this gear.
8*	Number of Active Marine Mammal Deterrent Devices (Pingers) Lost	Do not count devices not seen because gear was not hauled. Comment if this is different from used minus hauled. Verify with captain if pingers absent prior to gear being set.	Whole number	Dash. Leave blank if not used on this gear.
9	Number of Passive Marine Mammal Deterrent Devices Hauled	Count only those devices on the portion of gear hauled.	Whole number	Dash. Leave blank if not used on this gear.
10	Number of Passive Marine Mammal Deterrent Devices Lost	Do not count devices not seen because gear was not hauled.	Whole number	Dash. Leave blank if not used on this gear.
11	Set Method	Obtain from captain. "Past success in area" should be marked as Compass/LORAN. Describe "other" or, "mixed" on line 11A. Depth = bottom contours Visual = echosounder, surface feeding	Check one	"00".

GILLNET HAUL LOG
NMFS FISHERIES OBSERVER PROGRAM
OBGGH OBHAU OBSPP 07/01/21

OBS/ TRIP ID	A A99089C
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GEAR CODE D	GEAR # E	HAUL # F	HAUL OBS? G	ON-EFFORT? H	MM WATCH? I	CATCH? I	INC TAKE? J	WEATHER CODE	WIND	WAVE HEIGHT	DEPTH, HAUL BEGIN
1 0 0	0 2	0 0 2	NO 0 YES 1 X	NO 0 YES 1 X	NO 0 X YES 1	NO 0 YES 1 X	NO 0 X YES 1	01 K	SPEED L 5 kn	DIRECTION ° 270 M	BOTTOM ° 90 fm

SET INFO	DATE AND TIME	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)	ESTIMATED SOAK DURATION	TARGET SPECIES U	CODE(S) V	GEAR COND CODE P
S BEGIN	Q / /	R	9960 -	S	9960 -	3
E END	/ /	:	9960 -		9960 -	72.0 hrs
T						
HAUL INFO						
H BEGIN	10 / 07 / 22	07 : 54	9960 -	40° 48.3	9960 -	71° 26.8
A END	10 / 07 / 22	09 : 05	9960 -	40° 48.4	9960 -	71° 26.5
U						
L						

COMMENTS	SET METHOD 11
Captain said net was set 3 days ago	Unknown 00 Temperature 01 Bottom Contours 02 X Compass/Loran 03 Tide/Current 04
Captain gutting larger monks	Visual 05 Mixed 98 Other 99 11A
SAMPLE WEIGHT MULTIPLIER W	

SPECIES		SUB-SAMPLE WEIGHT	POUNDS	DISP CODE	WEIGHT		SPECIES		SUB-SAMPLE WEIGHT	POUNDS	DISP CODE	WEIGHT	
NAME	CODE				D/R	EST METHOD CODE	NAME	CODE				D/R	EST METHOD CODE
1	A' Monkfish (tail)	B'	C'	D' 59	E' 100	F' D	G' 01	11					
2	Monkfish (liver)			12	100	D	01	12					
3	Monkfish			350	100	D	03	13					
4	Monkfish			24	012	R	01	14					
5	Winter Skate (wings)			35	100	D	04	15					
6	Little Skate			100	001	R	03	16					
7	Jonah Crab			50	001	R	06	17					
8	American Lobster			7.2	100	R	01	18					
9	Atlantic Cod			17.5	012	R	01	19					
10								20					

Alternative Platform Sampling Trips

All information will refer to the commercial vessel that you are watching rather than the vessel you are on. If these fields are not available, document estimated values in the COMMENTS section whenever possible.

[GILLNET GEAR CHARACTERISTICS LOG](#): Record gear characteristics **only for gear retrievals that are witnessed**. Do not record gear characteristics for gears that may have been hauled prior to the arrival of the alternative platform vessel. Individual gear characteristics for all gears used may not be available; fill this log out as completely as possible including any combined information in the COMMENTS section.

[GILLNET HAUL LOG](#): **If a haul is already in progress** when the alternative platform vessel arrives at the fishing vessel, **do not record any information for this haul**. Record any information in COMMENTS (ex: "F/V hauled two strings prior to the arrival of the alternative platform vessel, kept about 100 lbs of Spanish mackerel."), and wait until the next haul commences to begin collecting data.

Conduct a Marine Mammal Watch for all hauls. Only record kept catch information on each haul of the trip. Discard catch may be noted in COMMENTS.

[VESSEL AND TRIP INFORMATION LOG](#): In the NUMBER OF TRIP HAULS and NUMBER OF UNOBSERVED HAULS fields, record **only the number of hauls that you witness from HAUL BEGIN to HAUL END**. Do not include hauls that the fishing vessel completed prior to the arrival of the alternative platform vessel or partially witnessed hauls. If possible, obtain the total pounds landed by the fishing vessel at the dock and record them in COMMENTS.

Beach Seine/Beach Anchored Gillnet Gear Characteristics Log

If the beach-based fishery operator has two or more identical gears which are hauled separately, complete only one Beach Seine / Beach Anchored Gillnet Gear Characteristics Log and record the consecutively assigned numbers of all identical gears described in GEAR NUMBER(S) (#1).

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Gear Number	Unique identifier for each beach seine or beach anchored gillnet configuration. Can be a list of gear numbers if all have identical characteristics.	2-digit code	Cannot be unknown.
2	Number of Nets	Individual nets in the wing, total for the gear. Do not include bunt or wash net.	Whole number	Cannot be unknown.
3	Bunt Used?	Yes/No.	Check one	"9".
4	Bunt Length	Obtain from the captain. Total length along float line. Do not include the length of the wing or wash net.	Whole feet	Dash.
5	Bunt Height	Obtain from the captain. Do not calculate from vertical mesh count. Height of the endline.	Feet, to the nearest tenth	Dash.
6	Bunt Mesh Size	Obtain from the captain.	Inches, to the nearest hundredth	Dash.
7	Bunt Mesh Count, Vertical	Obtain from captain or count.	Whole number	Dash.
8	Bunt Hanging Ratio	Obtain from captain or measure ratio of floatline to stretched mesh (see Operations Manual for example).	Fraction	Dash.
9	Bunt Twine Size Number	Obtain from captain. Record 998 if variable and comment on all sizes. See APPENDIX D – CONVERSION TABLES .	3-digit number	"000".
10	Bunt Twine Number of Strands	Obtain from captain. Total number of individual strands used to make up the bunt webbing. Monofilament = 1 strand.	Whole number	Dash.
11	Bunt Twine Color Code	Visually confirm. Describe "other" or "combination" in comments.	2-digit code	"00".
12	Bunt Material	Obtain from captain or visually confirm. Describe "other" on line 12A.	Check one	"0".
13	Floatline Material	Obtain from captain. Describe "other" on line 13A.	Check one	"0".
14	Wash Net Used?	Yes/No.	Check one	"9".
15	Wash Net Length	Obtain from captain.	Whole Feet	Dash.
16	Floats Used?	Yes/No.	Check one	"9".
17	Distance Between Floats	Obtain from captain.	Whole Feet	Dash.
18	Anchors Used?	Visually confirm.	Check one	"9".

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
19	Number of Anchors	Count.	Whole number	Dash. Leave blank if Anchors Used = "No".
20	Anchor Type	Visually confirm. Describe "other" or "combination" on line 20A.	Check one	"0". Leave blank if Anchors Used = "No".
21	Anchor Weight	Read weight stamped on anchor or obtain from captain. Total weight (sum all anchors).	Whole pounds	Dash. Leave blank if Anchors Used = "No".
22	Leadline Weight	Obtain from captain. Weighted average.	Pounds, to the nearest tenth	Dash.
23	Active Marine Mammal Deterrent Devices (Pingers) Used?	Visually confirm. When gear was set.	Check one	"9".
24	Number of AMMDD (Pingers)	Count or obtain from captain if set is not witnessed. When gear was set.	Whole number	Dash. Leave blank if AMMDD Used = "No".
25	AMMDD Brand(s)	Visually confirm. Describe "other" or "combination" on line 25A.	Check one	"00". Leave blank if AMMDD Used = "No".
26	AMMDD Frequency	Obtain from captain. Majority, or highest frequency if equal number and add to comments.	Kilohertz	Dash. Leave blank if AMMDD Used = "No".
27	Passive Marine Mammal Deterrent Devices Used?	Visually confirm. When gear was set.	Check one	"9".
28	Number of PMMDD	Count or obtain from captain if set is not witnessed. When gear was set.	Whole number	Dash. Leave blank if PMMDD Used = "No".
29	Wing Net Number	Starting with the net closest to the beach.	Whole number	Cannot be unknown for first net.
30	Wing Net Length	Obtain from captain. Total length along floatline. Do not include the length of the bunt or wash net.	Whole feet	Dash.
31	Wing Net Height	Obtain from captain. Do not calculate from vertical mesh count. Height of the endline.	Feet, to the nearest tenth	Dash.
32	Wing Net Mesh Size	Obtain from captain.	Inches, to the nearest hundredth	Dash.
33	Wing Mesh Count, Vertical	Obtain from captain or count.	Whole number	Dash.
34	Wing Hanging Ratio	Obtain from captain or measure ratio of floatline to stretched mesh.	Fraction	Dash.
35	Wing Twine Size Number	Obtain from captain. Record 998 if variable and comment on all sizes. See APPENDIX D – CONVERSION TABLES .	3-digit number	"000".

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
36	Wing Twine Number of Strands	Obtain from captain. Total number of individual strands used to make up the bunt webbing. Monofilament has one strand.	Whole number	Dash.
37	Wing Twine Color Code	Visually confirm. Describe "other" or "combination" in comments.	2-digit code	"00".
38	Wing Net Material	Obtain from captain or visually confirm. Describe "other" on line 38A.	Check one	"0".

BEACH SEINE GEAR / BEACH ANCHORED GILLNET GEAR CHARACTERISTICS LOG
NMFS FISHERIES OBSERVER PROGRAM
OBBSG OBBSW 07/01/21

OBS/ TRIP ID	A	A99011-
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GEAR CODE D 0 7 0		GEAR NUMBER(S) 1		NUMBER OF NETS 2	
BUNT CHARACTERISTICS: 3 USED? No (0) Yes(1) X		GEAR CHARACTERISTICS: USED ? NO YES MEASUREMENTS		WING CHARACTERISTICS: 29 Net # 1 Net # 2 Net # Net # Net #	
LENGTH 4 <u>30</u> ft HEIGHT 5 <u>8.0</u> ft MESH SIZE 6 <u>4 . 0 0</u> in MESH COUNT, VERTICAL 7 <u>25</u> HANGING RATIO 8 <u>1 / 2</u> TWINE SIZE 9 <u>10</u> # STRANDS <u>3</u> 10 COLOR CODE <u>04</u> 11 NET MATERIAL 12 Unknown 0 Nylon 1 X Other 9 12A		WASH NET 14 0 X 1 Length 15 ft FLOATS 16 0 X 1 Dist Between 17 <u>5</u> ft ANCHOR (S) 18 0 X 1 Number 19 <u>4</u> Type 20 Unknown 0 Danforth-style 1 Dead Weight 2 Combination 8 X Other 9 Weight (total) 21 <u>110</u> lb LEADLINE WEIGHT 22 <u>37</u> lbs / net 20A danforth + sandbags MM DETERRENT DEVICES USED? ACTIVE 23 0 X 1 Brand(s) 25 Number 24 <u> </u> Unknown 00 Dukane 01 Airmar 02 Fumunda 03 Future Oceans LED 04 Fishtek 05 Combination 98 Other 99 Frequency 26 <u> </u> kHz PASSIVE 27 0 X 1 Number 28 <u> </u> 25A		LENGTH (ft) 30 <u>200</u> <u>250</u> HEIGHT (ft) 31 <u>10.0</u> <u>12.5</u> . . . MESH SIZE (in) 32 <u>4.50</u> <u>4.25</u> . . . MESH COUNT, VERTICAL 33 <u>25</u> <u>20</u> HANGING RATIO 34 <u>1/2</u> <u>1/2</u> / / / TWINE SIZE 35 <u>10</u> <u>10</u> # STRANDS 36 <u>1</u> <u>1</u> COLOR CODE 37 <u>05</u> <u>02</u> NET MATERIAL 38 Unknown 0 Nylon 1 X Other 9 38A	
FLOATLINE MATERIAL Unknown 13 0 Floating (foam core) 1 Twisted polypropylene 2 X Other 9 13A		COLOR CODES Unknown 00 Multi-color 07 Clear 01 Red 08 White 02 Orange 09 Pink 03 Purple 10 Black 04 Combination 98 Green 05 Other 99 Blue 06		COMMENTS <p>Anchors: 2 (25 lb) danforths on beach and 2 (30 lb) sand bags on end of net</p> <p>LL Weight: 50 lbs / 600 ft * 450 ft = 37.5 lbs</p>	

Beach Seine/Beach Anchored Gillnet Haul Log

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Marine Mammal Haul Watch?	Yes/No.	Check one	Cannot be unknown.
2	Soak Duration	Obtain from captain if set is not witnessed.	Hours, to the nearest tenth	Dash.
3	Number of Nets Set	Should agree with total Number of Nets on BEACH SEINE/BEACH ANCHORED GILLNET GEAR CHARACTERISTICS LOG .	Whole number	Dash.
4	Number of Nets Hauled	Visually confirm.	Whole number Rounded up	Dash.
5	Number of Nets Lost	Should be Number of Nets Set minus Number of Nets Hauled; comment if different.	Whole number	Dash.
6	Number of Active Marine Mammal Deterrent Devices (Pingers) Hauled	Count only those devices on the portion of gear hauled. Regardless of functioning status.	Whole number	Dash. Leave blank if not used on this gear.
7	Number of Active Marine Mammal Deterrent Devices (Pingers) Lost	Do not count devices not seen because gear was not hauled.	Whole number	Dash. Leave blank if not used on this gear.
8	Number of Passive Marine Mammal Deterrent Devices Hauled	Count only those devices on the portion of gear hauled	Whole number	Dash. Leave blank if not used on this gear.
9	Number of Passive Marine Mammal Deterrent Devices Lost	Do not count devices not seen because gear was not hauled.	Whole number	Dash. Leave blank if not used on this gear.

BEACH SEINE / BEACH ANCHORED GILLNET HAUL LOG
NMFS FISHERIES OBSERVER PROGRAM
OBBSH OBHAU OBSPP 07/01/21

OBS/ TRIP ID	A	A99011-
DATE LAND (mm/yy)	B	06 / 22
PAGE #	C	1 OF 2

GEAR CODE D	GEAR # E	HAUL # F	HAUL OBS? G	MM WATCH? 1	CATCH? I	INC TAKE? J	WEATHER CODE K	WIND L	DIRECTION M	WAVE HEIGHT N	GEAR COND CODE P
0 7 0	0 1	0 0 1	NO 0 YES 1 X	NO 0 YES 1 X	NO 0 YES 1 X	NO 0 YES 1 X	02	7 kn	45 °	1 ft	

HAUL INFO	DATE (mm/dd/yy)	TIME (24 hrs)	LATITUDE/LONGITUDE (DD MMM) - LORAN (XXXXX)				EST SOAK DUR	WATER TEMP	TARGET SPECIES	CODE(S)
BEGIN	06/26/22	05 : 16					2	°	Weakfish	
END	06/26/22	06 : 03	9960- S	35 13.8	9960-	75 32.8	14.3 hrs	16 .0 F		

COMMENTS	NUMBER OF NETS	IF MM DETERRENTS USED
		ACTIVE PASSIVE
	SET 2 3	
	HAULED 2 4	HAULED 6 8
	LOST 0 5	LOST 7 9

SAMPLE WEIGHT MULTIPLIER											
W											

SPECIES		C'	D'	E'	WEIGHT		SPECIES		SUB-SAMPLE WEIGHT	POUNDS	DISP CODE	WEIGHT	
A'	B'	SUB-SAMPLE WEIGHT			F'	EST G'	NAME	CODE				D/R	EST METHOD CODE
1	Weakfish		172	100	R	01							
2	Bluefish		75	100	R	01							
3	Northern Kingfish		18	100	R	01							
4	Butterfish		8	100	R	01							
5	Atlantic Menhaden		10	001	R	01							
6	Horseshoe Crab		12	001	R	01							
7													
8													
9													
10													

Longline Gear Characteristics Log

Demersal Longline (Bottom Longline, Tub Trawl)

Changes in gear configuration (e.g., number of hooks, number of floats, distance between gangions, mainline material, etc.) requires the completion of a new Longline Gear Characteristics Log. The following fields should be filled out in the Demersal Longline fishery: A, B, C, D, 1–48, 57–58, 60. Leave all other fields blank.

Pelagic Longline

Changes in numbers of items used such as hooks and floats are factored into the estimated average and do not require a separate Longline Gear Characteristics Log. A change in gear configuration (e.g., use of light sticks, hooks between floats, or fishing depth) towards another target species does require the completion of a new Longline Gear Characteristics Log. The following fields should be filled out in the Pelagic Longline fishery: A, B, C, D, 1–60 (ALL FIELDS).

Other Line Fishing Gears (Rod & Reel, Trolling Gears)

For other line fishing gears, assign each separate physical gear its own gear number. If there are physical gears with the same configuration used, complete only one Longline Gear Characteristics Log and record the consecutively assigned numbers of all gears with the same configuration. For these gears, complete only the following fields on the Longline Gear Characteristics Log: A, B, C, D, 1, 2, 5–16. Leave all other fields blank.

ASM Trips - All Gear Types

Complete all fields on the ASM Longline Gear Characteristics Log. If the vessel has two or more identical gears which are hauled separately, complete a separate Longline Gear Characteristics Log section for each individual gear.

Color	Field applies to
	Demersal Longline, Pelagic Longline, Other Line Gears
	Demersal Longline, Pelagic Longline
	Pelagic Longline only

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1*	Gear Number	Unique identifier for each longline string, rod and reel, or troll line configuration. NEFOP: Can be a list of gear numbers if all have identical characteristics.	2-digit code	Cannot be unknown.
2*	Number of Hooks	Obtain from captain. Hooks with more than one point are still considered one hook.	Whole number	Dash.
3	Section Length	Distance from highflyer/buoy to highflyer/buoy. Obtain from captain or calculate by dividing the mainline length by the number of sections fished.	Nautical miles, to the nearest tenth	Dash.
4	Number of Sections	Obtain from captain or count. One section may consist of several "tubs" of gear tied together.	Whole number	Dash.
5	Mainline Number of Strands	Obtain from captain or count. If "multi-strand" and the strands are not counted then record a dash (—) and COMMENT.	Whole number	Dash.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
6	Mainline Diameter	Obtain from captain.	Millimeter, to the nearest tenth	Dash.
7	Mainline Test	Obtain from captain.	Whole pounds	Dash.
8	Mainline Material	Visually confirm or obtain from captain.	1-digit code	"0".
9	Mainline Color	Visually confirm.	2-digit code	"00".
10	Leaders Used?	Yes/No. Visually confirm.	Check one	"9".
11	Leader Length	Obtain from captain.	Whole feet	Dash.
12	Leader Test	Obtain from captain.	Whole pounds	Dash.
13	Leader Material	Visually confirm or obtain from captain.	1-digit code	"0".
14*	Hook Brand	Obtain from captain or from hook box. If more than 2 hook types, record additional in comments.	Brand name	Dash. Dash secondary line if only 1 hook type.
15*	Hook Model/Pattern Number	Obtain from captain or from hook box. Record in order of most used. If more than 2 hook types, record additional in comments.	Model or pattern number	Dash. Dash secondary line if only 1 hook type.
16*	Hook Size	Obtain from captain or from hook box. If more than 2 hook types, record additional in comments.	Hook size	Dash. Dash secondary line if only 1 hook type.
17	Anchors Used?	Visually confirm.	Check one	"9".
18	Anchor Weight	Read weight stamped on anchor or obtain from captain. Total weight (sum all anchors).	Whole pounds	Dash. Leave blank if Anchors Used = "No".
19	Distance Between Gangions	Obtain from captain. Average distance between gangions.	Whole feet	Dash.
20	Gangion Diameter	Obtain from captain.	Millimeter to the nearest tenth	Dash.
21	Gangion Test	Obtain from captain.	Whole pounds	Dash.
22	Gangion Length	Obtain from captain. Do not include leader length. If more than 2 gangion lengths, record additional in comments.	Whole feet	Dash.
23	Gangion Count	Obtain from captain. Number of gangion at given length.	Whole number	Dash.
24	Gangion Material	Visually confirm or obtain from captain Describe "other" in comments.	1-digit code	"0".
25	Gangion Color	Visually confirm.	2-digit code	"00".
26	Number of Buoylines	Count. Does not include line from vessel to gear.	Whole number	Dash.
27	Buoyline Length	Obtain from captain. Average.	Whole feet	Dash. Leave blank if Number of Buoylines = 0.
28	Buoyline Type Code	Obtain from captain.	Check one	"0".
29	Buoyline Percent Sinking/Neutrally Buoyant	Obtain from captain. Average. Record comment if captain confirms Float > Sink.	Whole percent, #29 and #30 must add up to 100	Dash. Leave blank if Number of Buoylines = 0 or Buoyline Type Code ≠ "8".

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
30	Buoyline Percent Floating	Obtain from captain. Average.		
31	Buoyline Diameter	Obtain from captain. Average.	Inches, in fractional form	Dash. Leave blank if Number of Buoylines = 0.
32	Buoyline Mark?	Yes/No. Visually confirm. 4" colored mark mid-way on buoyline.	Check one	"9". Leave blank if Number of Buoylines = 0.
33	Groundline Used?	Yes/No. Visually confirm.	Check one	"9".
34	Groundline Length	Obtain from captain. Total (sum both sides).	Whole feet	Dash. Leave blank if Groundline Used = "No".
35	Groundline Type Code	Obtain from captain.	Check one	"0".
36	Groundline Diameter	Obtain from captain. Average.	Inches, in fractional form	Dash. Leave blank if Groundline Used = "No".
37	Number of High Flyers	Count. Total (sum both sides).	Whole number	Dash.
38	Number of Buoys	Count. Total connected to the buoyline (sum both sides).	Whole number	Dash.
39	Surface Line Length	Obtain from captain. Average length between any high flyer(s) and/or buoy(s) on the same buoyline.	Whole feet	Dash if unknown or if no surface line used.
40	Surface Line Type Code	Obtain from captain. Comment if combination or other.	Check one	"0".
41	Surface Line Diameter	Obtain from captain. Average.	Inches, in fractional form	Dash. Leave blank if no surface line used.
42	Surface System Mark?	Yes/No. Visually confirm.	Check one	"9".
43	Weak Links Used on Surface?	Yes/No. Visually confirm.	Check one	"9".
44	Number of Surface Weak Links	Obtain from captain. Total (sum both sides of gear).	Whole number	Dash. Leave blank if Surface Weak Links Used = "No".
45	Surface Weak Link Type Code	Visually confirm.	Check one	"0". Leave blank if Surface Weak Links Used = "No".
46	Weak Links Used on String?	Yes/No. Visually confirm.	Check one	"9".
47	Number of String Weak Links	Obtain from captain. Total (all nets).	Whole number	Dash. Leave blank if String Weak Links Used = "No".

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
48	String Weak Link Type Code	Visually confirm.	Check one	"0". Leave blank if String Weak Links Used = "No".
49	Floats Used?	Yes/No. Visually confirm each type of float used.	Check one	"9".
50	Number of Floats	Obtain from captain.	Whole number	Dash.
51	Average number of Hooks between	Obtain from captain. If floats are only used at beginning and end of string, this value should equal the total number of hooks.	Whole number	Dash.
52	Light Sticks Used	Yes/No. Visually confirm.	Check one	"9".
53	Light Stick Color	Visually confirm.	2-digit code	"00".
54	Light Stick Number	Obtain from captain.	Whole number	Dash.
55	Dropline Length	Obtain from captain. Average.	Whole feet	Dash.
56	Distance between Droplines	Obtain from captain.	Whole feet	Dash.
57	Swivels Used?	Yes/No. Visually confirm.	Check one	"9".
58	Number of Swivels per Gangions	Obtain from captain.	Whole number	Dash.
59	Number of Radio Beacons	Count. Total (sum both sides). If high flyer is also a radio beacon, then record count for both fields.	Whole number	Dash.
60	Number of Radar Reflectors	Count. Total (sum both sides). If high flyer is also a radar reflector, then record count for both fields.	Whole number	Dash.

LOGLINE GEAR CHARACTERISTICS LOG
NMFS FISHERIES OBSERVER PROGRAM
OBLLG 07/01/21

OBS/TRIP ID	A A99015-
DATE LANDED mm/yy	B 11/22
PAGE #	C 1 OF 1

GEAR CODE D 0 1 0		GEAR NUMBER(S) 1 1, 2, 3		NUMBER OF HOOKS 2 900		SECTION LENGTH 3 0-9 nm		NUMBER OF SECTIONS 4 1					
MAINLINE 5 # OF STRANDS _____ DIAMETER 6 5.0 mm TEST 7 900 lbs MATERIAL 8 04 COLOR 9 06		LEADERS USED? 10 NO 0 <input checked="" type="checkbox"/> YES 1 _____ LENGTH 11 _____ ft TEST 12 _____ lbs MATERIAL 13 _____		BUOYLINE # of Buoylines 26 2 Length (avg) 27 200 ft Type Code 28 8 Percent of Type (sinking/floating) 29 75 % / 25 % 30		SURFACE SYSTEM # of High Flyers 37 2 # of Buoys 38 2 Surface Line Length (avg) 39 20 ft Type Code 40 1 Diameter 41 5/8 in Mark? 42 NO 0 <input checked="" type="checkbox"/> YES 1 <input checked="" type="checkbox"/>		FLOATS ** USED? NO YES TYPE 49 50 51 Unknown 0 1 Polyball 0 1 Bullet/Daub 0 1 Other 0 1		LIGHT STICKS USED? ** NO 0 YES 1 52 COLOR 53 NUMBER 54		DROPLINE ** LENGTH 55 _____ ft DISTANCE BETWEEN 56 _____ ft	
HOOKE BRAND 14 Mustad MODEL/PATTERN 15 39977 SIZE 16 12/0 ANCHOR USED? 17 NO 0 YES <input checked="" type="checkbox"/> X WEIGHT 18 25 lbs		GANGIONS LENGTH 22 1 ft COUNT 23 900 DISTANCE BETWEEN 19 6 ft DIAMETER 20 2.0 mm TEST 21 400 lbs MATERIAL 24 01 COLOR 25 06		GROUNDLINE NO YES USED? 33 0 1 <input checked="" type="checkbox"/> X Length (total) 34 20 ft Type Code 35 1 Diameter 36 3/8 in		WEAK LINKS NO YES USED ON SURFACE? 0 <input checked="" type="checkbox"/> 43 1 Number (total) 44 Type Code 45 USED ON STRING? 0 <input checked="" type="checkbox"/> 46 1 Number (total) 47 Type Code 48		SWIVELS USED? NO 0 <input checked="" type="checkbox"/> YES 1 57 # OF SWIVELS/GANGION 58		RADIO BEACONS ** COUNT 59 RADAR REFLECTORS COUNT 60 2			
COMMENTS Mainline is braided nylon - number of strands unknown.										COLOR Unknown 00 Multi-Color 07 Clear 01 Red 08 White 02 Orange 09 Pink 03 Purple 10 Black 04 Combination 98 Green 05 Other 99 Blue 06		MATERIAL Unknown 0 Mono-filament Nylon 1 Cotton 2 Steel Wire 3 Multi-strand Nylon 4 Other 9	
All Gears		Complete for all gears											
Bottom & Pelagic		Complete only for Bottom Longline and Pelagic Longline											
Pelagic		Complete only for Pelagic Longline											

** only record for Pelagic Longline

OBS/ TRIP ID	A
DATE LAND (mm/yy)	B /
PAGE #	C <input type="checkbox"/> OF <input type="checkbox"/>

WEAK LINK TYPE CODES: 0 = Unknown 1 = Rope of Appropriate Breaking Strength 2 = Off the Shelf 3 = Overhand Knot 4 = Hog Rings 8 = Combination 9 = Other	LINE TYPE CODES: 0 = Unknown 1 = Sinking / Neutrally Buoyant 2 = Floating 8 = Combination 9 = Other	ADDITIONAL COMMENTS
<p>DIAGRAMS FOR REFERENCE ONLY</p> <p>The diagram illustrates a section of a longline gear. At the top, a horizontal line is labeled 'Section' with a double-headed arrow. Below this, a wavy line represents the 'Buoyline'. To the right, a 'High Flyer & Buoy' is shown. Below the buoyline, a horizontal line represents the 'Mainline'. From the mainline, several vertical lines labeled 'Gangions' hang down. At the bottom, a line represents the 'Groundline' with an 'Anchor' at the right end. The diagram is enclosed in a rectangular frame.</p>		
<p>FOR OFFICE USE ONLY</p>		

Longline Haul Log

If rod and reel or other line fishing gears are used, the following fields on the Longline Haul Log may be omitted: MAINLINE LENGTH (#2), ITEMS USED: RATTLERS (#5) and SURFACE LIGHTS (#7), NUMBER OF ITEMS USED: RATTLERS (#6) and SURFACE LIGHTS (#8), NUMBER OF HOOKS TENDED (#15) and NUMBER OF HOOKS REBAITED (#16).

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1*	Soak Duration	Obtain from captain if set is not witnessed. Only on ASM trips using demersal longline gear.	Hours, to the nearest tenth	Dash. Dash for rod and reel. Leave blank if Set Begin/End times entered.
2	Mainline Length	Obtain from captain. Account for all of tubs that are tied together to form a single string.	Nautical miles, to the nearest tenth	Dash. Leave blank if not demersal or pelagic.
3	Set Speed	Obtain from captain. Average vessel setting or trolling speed.	Knots, to the nearest tenth	Dash. Dash if rod and reel used and not trolling.
4	Set Method	Obtain from captain. Describe "mixed" or "other" on line 4A.	Check one	"00".
5	Rattlers Used?	Yes/No. Visually confirm.	Check one	"9". Always "No" if not demersal or pelagic.
6	Number Rattlers	Visually confirm or obtain from captain.	Whole number	Dash. Dash if not demersal or pelagic.
7	Surface Lights Used?	Yes/No. Visually confirm.	Check one	"9". Always "No" if not demersal or pelagic.
8	Number Surface Lights	Visually confirm or obtain from captain.	Whole number	Dash. Dash if not demersal or pelagic.
9	Additional Weights Used?	Yes/No. Visually confirm.	Check one	"9".
10	Number Additional Weights	Visually confirm or obtain from captain.	Whole number	Dash.
11	Weight of Additional Line Weights	Obtain from captain.	Whole pounds	Dash.
12	Hooks Set	Obtain from captain. Total for string.	Whole number	Dash.
13	Hooks Hauled	Obtain from captain. Total for string. Do not include hooks that were lost.	Whole number	Dash.
14	Hooks Lost	Obtain from captain. Total for string. Do not include # hooks cut off by crew. If different than number lost minus number set, explain in COMMENTS.	Whole number	Dash.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
15	Hooks Tended	Obtain from captain. Hooks pulled during "hotlining" (vessel runs the line and only pulls hooks where floats are submerged).	Whole number	Dash. "0" if not demersal or pelagic. "0" if hooks are not tended.
16	Hooks Rebaited	Obtain from captain. Hooks pulled, rebaited, and reset.	Whole number	Dash. "0" if not demersal or pelagic. "0" if hooks are not rebaited.
17	Pounds of Bait	Obtain from captain. Total for hauled pots, amount of each bait put in gear when set. Up to three major baits used recorded in order by weight (heaviest to lightest). Comment on any additional baits used.	Whole pounds	Dash. Dash if artificial bait.
18	Kinds of Bait	Obtain from captain. Record for the three most used bait types by weight when gear was set. Comment on any additional baits used. Handline= set begin. See APPENDIX P1 – BAIT KIND CODES	2-digit code	"00".
19	Type of Bait	Obtain from captain. Record for the three most used bait types by weight when gear was set. Comment on any additional baits used. See APPENDIX P2 – BAIT TYPE CODES	1-digit code	"0".
20	Condition of Bait	Obtain from captain. Record for the three most used bait types by weight when gear was set. Comment on any additional baits used. See APPENDIX P3 – BAIT CONDITION CODES	1-digit code	"0".
21	Depth Range of Hooks	Obtain from captain or calculate as sum of dropline, gangion, leader, and shank lengths. Shallowest to deepest. Fishing depth from surface, not the entire water column. May be same value in demersal longline.	Whole fathoms	Dash.

LONGLINE HAUL LOG
NMFS FISHERIES OBSERVER PROGRAM
OBLH OBHAU OBSPP 07/01/21

OBS/ TRIP ID	A	A99015-
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GEAR CODE D	GEAR # E	HAUL # F	HAUL OBS? G	ON-EFFORT? H	CATCH? I	INC TAKE? J	WEATHER CODE K	WIND	WAVE HEIGHT	DEPTH	GEAR COND	
0 1 0	0 1	1 0 0	NO 0 YES 1 X	NO 0 YES 1 X	NO 0 YES 1 X	NO 0 X YES 1	01	SPEED L 20 kn	DIRECTION M 0 o	3 ft	36 O 610	
SET/HAUL INFO	DATE Q AND TIME R	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX) S				WATER TEMP T	TARGET SPECIES U		CODE(S) V			
S BEGIN	11/ 05 / 22 05:30	9960 -	42 00.2	9960 -	67 38.7	54.3 °F	Haddock					
T END **	11/ 05 / 22 05:42	9960 -	41 59.4	9960 -	67 38.2	54.3 °F	MAINLINE LENGTH ** 2		SET METHOD 4			
H BEGIN **	11/ 05 / 22 07:38	9960 -	41 59.6	9960 -	67 39.0	54.8 °F			Unknown 00 Temperature 01 Bottom Contours 02 X Compass/Loran 03			
U END	11/ 05 / 22 08:16	9960 -	42 00.4	9960 -	67 38.4	55.0 °F	6.9 nm		Tide/Current 04 Visual 05 Eddy 06 Mixed 98 Other 99			
ITEMS USED?			NUMBER OF HOOKS		BAIT		SET SPEED 3		HOOK DEPTH RANGE 21			
TYPE NO YES NUMBER			SET 12 900		#1 30 10 4 6		5.2 kn					
Rattlers ** 5 0 X 1 6			HAULED 13 895		#2		10 36 fm					
Surface Lights ** 7 0 X 1 8			LOST 14 5		#3							
Additional Line Wts 9 0 1 X 2 10			TENDE ** 15 0		SAMPLE WEIGHT							
WEIGHT OF ADDITIONAL LINE WEIGHTS 11 10 lbs			REBATED ** 16 0		MULTIPLIER W							
SPECIES			C' SAMP. WEIGHT		D' POUNDS		E' DISP CODE		F' WEIGHT		ESTIMATION METHOD CODE G'	
A' NAME			B' CODE									
1 Haddock					50		100		D		05	
2 Winter Skate					250		001		R		05	
3 Spiny Dogfish					300		001		R		05	
4 Monkfish					10		100		R		05	
5 Haddock					3.2		012		R		11	
6 Atlantic Cod					12.1		012		R		11	
7												
8												
9												
10												

Was not able to obtain actual weights or length frequencies due to time constraints

Lobster, Crab, and Fish Pot Gear Characteristics Log

If the vessel has two or more identical gears which are hauled separately, complete only one Lobster, Crab, and Fish Pot Gear Characteristics Log and record the consecutively assigned numbers of all identical gears described in GEAR NUMBER(S) (#1). See “Aggregating trawls of traps” in the Pot and Trap Fisheries section in the Observer Operations Manual for when and how to aggregate traps.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Gear Number	Unique identifier for each configuration of pots or traps. Can be a list of gear numbers if all have identical characteristics.	2-digit code	Cannot be unknown.
2	Number of Pots	Individual pots, total for the string/aggregate.	Whole number	Cannot be unknown.
3	Pot Shape	Visually confirm. Describe “other” in comments.	2-digit code	“00”.
4	Pot Side Construction	Visually confirm. Describe “other” or “combination” in comments.	1-digit code	“0”.
5	Pot Top Length	Measure or obtain from captain.	Whole inches	Dash.
6	Pot Top Width	Measure or obtain from captain.	Whole inches	Dash.
7	Pot Bottom Length	Measure or obtain from captain.	Whole inches	Dash.
8	Pot Bottom Width	Measure or obtain from captain.	Whole inches	Dash.
9	Pot Height	Measure or obtain from captain.	Whole inches	Dash.
10	Groundline Length Between Pots	Obtain from captain.	Whole feet	Dash.
11	Groundline Type Code	Obtain from captain.	1-digit code	“0”.
12	Groundline Diameter	Obtain from captain.	Fraction of an inch	Dash.
13	Escape Vent Used?	Yes/No.	Check one	“9”.
14	Escape Vent Number	Visually confirm.	Whole number, weighted average per pot	Dash.
15	Escape Vent Shape	Visually confirm. Vent type with largest opening. Comment if other.	2-digit code	“00”.
16	Escape Vent Length	Obtain inside measurement with calipers.	Inches, to the nearest tenth	Dash.
17	Escape Vent Height	Obtain inside measurement with calipers.	Inches, to the nearest tenth	Dash.
18	Escape Vent Location	Visually confirm. Describe “other” or “combination” on line 18A.	Check one	“0”.
19	Entrance Number	Visually confirm.	Whole number, weighted average	Dash.
20	Entrance Ring Size	Obtain inside measurement with calipers. Comment dimensions if not circular or no defined inside ring.	Inches, to the nearest tenth	Dash.
21	Entrance Location	Visually confirm. Describe “other” or “combination” on line 21A.	Check one	“0”.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
22	Biodegradable Panel Used?	Yes/No.	Check one	"9".
23	Biodegradable Panel Attachment Type	Visually confirm. Describe "other" or "combination" on line 23A.	Check one	"0".
24	Bait Method	Visually confirm. No bait = other. Describe "other" or "combination" on line 24A.	Check one	"0".
25	Number of High Flyers	Count. Total (sum both sides and of aggregate).	Whole number	Dash.
26	Number of Buoys	Count. Total connected to the buoyline (sum both sides and of aggregate).	Whole number	Dash.
27	Surface Line Length	Obtain from captain. Average length between any high flyer(s) and/or buoy(s) on the same buoyline.	Whole feet	Dash if unknown or if no surface line used.
28	Surface Line Type Code	Obtain from captain.	Check one	"0".
29	Surface Line Diameter	Obtain from captain. Average.	Inches, in fractional form	Dash. Leave blank if no surface line used.
30	Surface System Mark?	Yes/No. Visually confirm.	Check one	"9".
31	Weak Links Used on Surface?	Yes/No. Visually confirm.	Check one	"9".
32	Number of Surface Weak Links	Obtain from captain. Total (sum both sides of gear).	Whole number	Dash. Leave blank if Surface Weak Links Used = "No".
33	Surface Weak Link Type Code	Visually confirm.	Check one	"0". Leave blank if Surface Weak Links Used = "No".
34	Gangions Used?	Yes/No.	Check one	"9".
35	Gangions Length	Obtain from captain.	Whole feet, average	Dash.
36	Gangions Type Code	Obtain from captain.	1-digit code	"0".
37	Gangions Diameter	Obtain from captain.	Fraction of an inch, average	Dash. Leave blank if not used
38	Number of Buoylines	Count. Does not include line from vessel to gear.	Whole number	Dash.
39	Buoyline Length	Obtain from captain. Average.	Whole feet	Dash. Leave blank if Number of Buoylines = 0.
40	Buoyline Type Code	Obtain from captain.	Check one	"0".

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
41	Buoyline Percent Sinking/Neutrally Buoyant	Obtain from captain. Average.	Whole percent, #41 and #42 must add up to 100	Dash. Leave blank if Number of Buoylines = 0 or Buoyline Type Code ≠ "8".
42	Buoyline Percent Floating	Obtain from captain. Average. Record comment if captain confirms Float > Sink.		
43	Buoyline Diameter	Obtain from captain. Average.	Inches, in fractional form	Dash. Leave blank if Number of Buoylines = 0.
44	Buoyline Mark?	Yes/No. Visually confirm. 4" colored mark mid-way on buoyline.	Check one	"9". Leave blank if Number of Buoylines = 0.
45	Anchors Used?	Visually confirm.	Check one	"9".
46	Number of Anchors	Count.	Whole number	Dash. Leave blank if Anchors Used = "No".
47	Anchor Weight	Read weight stamped on anchor or obtain from captain. Total weight (sum all anchors).	Whole pounds	Dash. Leave blank if Anchors Used = "No".
48	Anchor Type	Visually confirm. Describe "other" or "combination" on line 48A.	Check one	"0". Leave blank if Anchors Used = "No".
49	Length of Line Between Anchor and Gangion	Obtain from captain.	Whole feet, average	Dash.
50	Anchor Line Type Code	Obtain from captain.	1-digit code	"0".
51	Anchor Line Diameter	Obtain from captain.	Fraction of an inch, average	Dash.

LOBSTER, CRAB, & FISH POT GEAR CHARACTERISTICS LOG
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GEAR CODE D 2 0 0		GEAR NUMBER(S) 1 1, 2, 9, 10, 13, 15-19, 21, 25, 28, 32-35, 37-40		NUMBER OF POTS 2 10		COMMENTS	
POT CHARACTERISTICS Shape Code 3 05 Side Construction Code 4 1 DIMENSIONS Length (in) Width (in) Top 5 48 26 6 Bottom 7 48 32 8 Height 9 18 in		ENTRANCE Number 19 2 Inside Ring Size 20 7 . 0 in Location 21 Unknown 0 Top 1 Side 2 X End 3 Combination 8 Other 9 21A		SURFACE SYSTEMS # of High Flyer(s) 25 2 # of Buoys 26 2 Surface Line Length (avg) 27 5 ft Type Code 28 1 Diameter 29 5 / 8 in Mark? 30 NO 0 YES 1 X			ANCHOR(S) USED? NO 0 YES 1 X 45 Number 46 2 Weight (total) 47 44 lbs Type 48 Unknown 0 Danforth-style 1 X Dead Weight 2 Combination 8 Other 9
GROUNDLINE Length of Line Btw Pots (avg) 10 138 ft Type code 11 1 Diameter 12 3 / 8 in		BIODEGRADABLE PANEL USED? NO 0 YES 1 X 22 Attachment Type 23 Unknown 0 Iron Hog Rings 1 Degradable Plastic 2 Softwood Lathe 3 X Uncoated Wire 4 Combination 8 Other 9 23A		WEAK LINKS NO YES USED ON SURFACE? 0 31 1 X Number (total) 32 5 Type Code 33 2 GANGIONS USED? 34 NO 0 YES 1 X Length (avg) 35 4 ft Type Code 36 1 Diameter 37 3 / 8 in			Anchor Line Length of Line Btw Anchor & Gangion (avg) 49 10 ft Type Code 50 1 Diameter 51 3 / 8 in
ESCAPE VENT NO YES USED? 13 0 1 X Number 14 3 Shape Code 15 01 Length 16 5 . 8 in Height 17 1 . 8 in Location 18 Unknown 0 Top 1 X Side 2 End 3 Combination 8 Other 9 18A		BAIT METHOD 24 Unknown 0 String 1 Bait Bag 2 X Metal Ring 3 Not Attached 7 Combination 8 Other 9 24A		BUOYLINE # of Buoyline(s) 38 2 Length (avg) 39 100 ft Type Code 40 8 Percent of Type 41 67 % / 42 33 % (sinking/floating) Diameter 43 5 / 8 in Mark? 44 NO 0 YES 1 X			RECTANGULAR LOBSTER TRAP WIRE CONSTRUCTION

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DIAGRAM FOR REFERENCE ONLY		ADDITIONAL COMMENTS	
<p>⊙ = Weak Link</p> <p>Photo Credit: NOAA Fisheries Service Northeast Regional Office (Original image modified to include additional information).</p>			
<p>SHAPE CODES:</p> <p>00 = Unknown 01 = Rectangular 02 = Round / Oval 03 = 1/2 Round 04 = Cone 05 = Trapezoid 99 = Other</p>			
<p>LINE / GANGION TYPE CODES:</p> <p>0 = Unknown 1 = Sinking / Neutrally Buoyant 2 = Floating 8 = Combination 9 = Other</p>		<p>WEAK LINK TYPE CODES:</p> <p>0 = Unknown 1 = Rope of Appropriate Breaking Strength 2 = Off the Shelf 3 = Overhand Knot 4 = Hog Rings 8 = Combination 9 = Other</p>	

FOR OFFICE USE ONLY

Lobster, Crab, and Fish Pot Haul Log

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Soak Duration	Obtain from captain if set is not witnessed.	Hours, to the nearest tenth	Dash. Leave blank if set is witnessed (fill in Set Begin/End times).
2	Number of Pots Set	Should agree with total Number of pots on LOBSTER, CRAB, AND FISH POT GEAR CHARACTERISTICS LOG .	Whole number	Dash.
3	Number of Pots Hauled	Visually confirm.	Whole number Rounded up	Dash.
4	Number of Pots Lost	Should be Number of Pots Set minus Number of Pots Hauled; comment if different.	Whole number	Dash.
5	Pounds of Bait	Obtain from captain. Total for hauled pots, amount of each bait put in gear when set. Up to two major baits used recorded in order by weight (heaviest to lightest). Comment on any additional baits used.	Whole pounds	Dash. Dash if no bait used.
6	Kind of Bait	Obtain from captain. Record for the two most used bait types by weight when gear was set. Comment on any additional baits used. See APPENDIX P1 – BAIT KIND CODES	2-digit code	“00”. Dash if no bait used.
7	Type of Bait	Obtain from captain. Record for the two most used bait types by weight when gear was set. Comment on any additional baits used. See APPENDIX P2 – BAIT TYPE CODES	1-digit code	“0”. Dash if no bait used.
8	Condition of Bait	Obtain from captain. Record for the two most used bait types by weight when gear was set. Comment on any additional baits used. See APPENDIX P3 – BAIT CONDITION CODES	1-digit code	“0”. Dash if no bait used.
9	Set Method	Obtain from captain. Describe “mixed” or “other” on line 9A.	Check one	“00”.

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GEAR CODE		D	GEAR #		E	HAUL #		F	HAUL OBS?		G	ON-EFFORT?		H	CATCH?		I	INC TAKE?		J	WEATHER CODE		K	WIND		L	DIRECTION		M	WAVE HEIGHT		N	DEPTH,		O	HAUL BEGIN		P	GEAR COND CODE	
<div>200</div>			<div>13</div>			<div>013</div>			NO 0 YES 1 X			NO 0 YES 1 X			NO 0 YES 1 X			NO 0 YES 1 X			02			5 kn			225 °			2 ft			122 fm			410				
SET INFO			DATE AND TIME mm/dd/yy 24 hours						LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)								ESTIMATED SOAK DURATION		TARGET SPECIES U CODE(S) V																					
S	BEGIN	Q		R																1		American Lobster																		
A	/	/		:		9960 - S								9960 -																										
T	END	/		:		9960 -								9960 -								168.0 hrs		NUMBER OF POTS BAIT																
HAUL INFO																	WATER TEMP		SET 40 2 LBS 5 KIND 6 TYPE 7 COND 8																					
H	BEGIN	06 / 17 / 22		21 : 52		9960 - 41 ° 32.3								9960 - 69 ° 35.8								T o		HAULED 40 3 #1 150 05 2 3																
U	END	06 / 17 / 22		23 : 21		9960 - 41 ° 32.7								9960 - 69 ° 35.5								58.0 F		LOST 0 4 #2 150 03 1 1																
COMMENTS																									SET METHOD 9 Unknown 00 Visual 05 Temperature 01 Mixed 98 Bottom Contours 02 Other 99 Compass/Loran 03 X Tide/Current 04															
																									SAMPLE WEIGHT MULTIPLIER W															
SPECIES															SUB-SAMPLE WEIGHT		POUNDS	DISP CODE	WEIGHT		SPECIES					SUB-SAMPLE WEIGHT	POUNDS	DISP CODE	WEIGHT											
NAME A'										CODE B'	C'	D'	E'	D/R F'	ESTIMATION METHOD CODE G'	NAME					CODE	D/R	ESTIMATION METHOD CODE																	
1	American Lobster																C'	75	100	R				01	11															
2	American Lobster											C'	1	022	R	01	12																							
3	American Lobster											C'	3	012	R	01	13																							
4	Jonah Crab											C'	80	100	R	01	14																							
5	Black Whiting											C'	22	170	R	01	15																							
6	Jonah Crab											C'	9	001	R	01	16																							
7												C'					17																							
8												C'					18																							
9												C'					19																							
10												C'					20																							

Bottom Trawl Gear Characteristics Log

If two or more **identical** gears are used, assign each gear its own gear number and record them on separate Bottom Trawl Gear Characteristics Logs with 10 random codend mesh size measurements and 10 random liner mesh measurements (if present) collected for each codend/liner used during a deployment.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1*	Gear Number	Unique identifier for each trawl net configuration.	2-digit code	Cannot be unknown.
2*	Net Name	Obtain from captain. See APPENDIX O1 – NET NAME CODES	N/A	Record “Unknown”.
3*	Net Type	Obtain from captain or confirm with captain. See APPENDIX O2 – NET TYPE CODES	N/A	Record “Unknown”.
4	Net Builder	Obtain from captain. See APPENDIX O3 – NET BUILDER CODES	N/A	Record “Unknown”.
5*	Liner Used?	Yes/No.	Check one	“9”.
6	Doors Used?	Yes/No.	Check one	“9”.
7	Weight of one door	Obtain from captain. Total weight of one door.	Whole kilograms	Dash.
8	Net Body Construction Material	Obtain from captain. ⁴ Describe “other” or combination” on line 8A.	Check one	“00”.
9	Codend Construction Material	Obtain from captain. ⁷ Describe “other” or “combination” on line 9A.	Check one	“00”.
10	Liner Construction Material	Obtain from captain. ⁷ Describe “other” or “combination” on line 10A.	Check one	“00”. Leave blank if Liner used? = “No”.
11	Kites Used?	Yes/No. The bag that holds the gear mounted electronics is not considered a kite.	Check one	“9”.
12	Number of Kites	Count or obtain from captain.	Whole number	Dash. Leave blank if Kites Used? = “No”.
13	Kite Width	Obtain from captain. Length parallel to headrope.	Whole inches, Average	Dash. Leave blank if Kites Used? = “No”.
14	Kite Length	Obtain from captain. Length perpendicular to headrope.	Whole inches, Average	Dash. Leave blank if Kites Used? = “No”.
15	Fishing Circle Number of Meshes	Obtain from captain. Total, including meshes of all sizes.	Whole number	Dash.
16	Fishing Circle Mesh Size	Obtain from captain. Largest mesh measurement.	Inches, to the nearest tenth	Dash.
17	Head Rope Length	Obtain from captain.	Whole feet	Dash.
18	Footrope/Sweep Length	Obtain from captain.	Whole feet	Dash.
19	Ground Cable Length	Obtain from captain.	Whole fathoms	Dash.

⁴ Dyneema® should be marked as Spectra® (04).

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
20	Bridle Length	Obtain from captain. Length of upper bridle on one side of the net.	Whole fathoms	Dash.
21	Strengthened Used?	Yes/No.	Check one	"9".
22	Chafing Gear Used?	Yes/No.	Check one	"9".
23	Ground Cable Ground Gear	Visually confirm ⁵ . Describe "other" on line 23A.	Check one	"00".
24	Bridle/Leg Ground Gear	Visually confirm ⁸ . Describe "other" on line 24A.	Check one	"00".
25	Sweep Ground Gear	Visually confirm ⁸ . Describe "other" on line 25A.	Check one	"00".
26	Sweep Gear Number	Count or obtain from captain. Total number of largest piece of gear on sweep.	Whole number	Dash. Dash if largest piece of sweep gear is chain or cable.
27	Sweep Gear Diameter	Measure or obtain from captain. Diameter of the largest piece of gear present on the sweep.	Whole inches	Dash. Dash if largest piece of sweep gear is chain or cable.
28	Floats Numbers	Count or obtain from captain. Total number of floats.	Whole number	Dash.
29	Float Diameter	Measure or obtain from captain. Record diameter of majority of floats.	Whole inches	Dash.
30*	Codend Hung	Visually confirm. Describe "combination" in comments.	Check one	"0".
31*	Liner Hung	Visually confirm Describe "combination" in comments.	Check one	"0". Leave blank if no liner used.
32*	Codend Twine Type	Visually confirm. Braided line is single twine. Describe "other" in comments.	Check one	"0".
33*	Liner Twine Type	Visually confirm. Describe "other" in comments	Check one	"0". Leave blank if no liner used.
34*	Codend Mesh Size	Obtain inside measurement with calipers.	Whole millimeters	Dash.
35*	Liner Mesh Size	Obtain inside measurement with calipers.	Whole millimeters	Dash. Leave blank if no liner used.
36	Gear Mounted Electronics Used?	Yes/No. Transducers used.	Check one	"9".
37	Gear Mounted Electronics number of transducers	Obtain from captain.	Whole number	Dash.
38	Gear Mounted Electronics Type	Obtain from captain.	Check one	"0".
39	Gear Mounted Electronics Brand	Obtain from captain. Describe "other" or "combination" on line 39A.	Check one	"0".

⁵ Note: If more than one type of gear is used on a ground gear piece, record the type of gear with the LARGEST diameter. This is not always the longest piece.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
40	Gear Mounted Electronics Location	Obtain from captain. Describe "other" on line 40A.	Check all that apply	"0".
41*	Excluder/Separator Device Used?	Visually confirm.	Check one	"9".
42	Excluder/Separator Device Type Code	Visually confirm. Describe "other" or "combination" in comments.	2-digit code	"00".
43	T.E.D. Extension Mesh Size	Measure with calipers or obtain from captain.	Inches, to the nearest tenth	Dash. Leave blank if T.E.D. not used.
44*	Escape Outlet Used	Yes/No. For openings, like on haddock separator gear, ask captain to let you know if opening is switched between open and sewn shut.	Check one	"9".
45	Escape Outlet Type	Visually confirm. Describe "other" on line 45A.	Check one	"0".
46	Escape Outlet Mesh Size	Obtain from captain.	Whole inches	Dash.
47	Escape Outlet Length Number of Meshes	Obtain from captain. Counted from the front of the net towards the codend. Triangular outlet: front to back. Trapezoid outlet: longer length.	Whole number	Dash. Fill out either number of meshes or outlet dimensions.
48	Escape Outlet Width Number of Meshes	Obtain from captain. Counted from side to side of the net. T.E.D. outlet: leading edge of opening. Triangular outlet: side to side. Trapezoid outlet: wider width.	Whole number	Dash. Fill out either number of meshes or outlet dimensions.
49	Escape Outlet Length	Obtain from captain. Measured from the front of the net towards the codend. Triangular outlet: front to back. Trapezoid outlet: longer length.	Whole inches	Dash. Fill out either number of meshes or outlet dimensions.
50	Escape Outlet Width	Obtain from captain. Measured from side to side of the net. T.E.D. outlet: leading edge of opening. Triangular outlet: side to side. Trapezoid outlet: wider width.	Whole inches	Dash. Fill out either number of meshes or outlet dimensions.
51	Escape Outlet Shape Type Code	Visually confirm. Describe "other" in comments.	2-digit code	"00".
52	Escape Outlet Location Type Code	Visually confirm. Describe "other" in comments.	1-digit code	"0".

BOTTOM TRAWL GEAR CHARACTERISTICS LOG
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GEAR CODE D		GEAR NUMBER 1	NET NAME 2	NET TYPE 3	NET BUILDER 4	CODEND/LINER		GEAR MOUNTED	EXCLUDER/SEPARATOR DEVICE	
<div>0 5 0</div>		1	Bottom Trawl	2 Seam Flounder Net	Northeastern Trawl Systems, Inc	HUNG CODEND LINER 30 31 Unknown 0 Diamond 1 Square 2 X Square, wrapped 3 Combination 8		ELECTRONICS USED ? 36 NO 0 YES 1 X	USED? NO 0 YES 1 X Type Code 08 42 T.E.D. EXTENSION Mesh Size . in 43	
LINER USED? 5		CONSTRUCTION MATERIAL			LENGTH MEASUREMENTS		TWINE TYPE		NUMBER OF TRANSDUCERS	
NO 0 X YES 1		TYPE NET BODY CODEND LINER Unknown 00 8 9 10 Nylon 01 Poly 02 X X Kevlar® 03 Spectra® 04 Tenex® 05 Nomex® 06 Combination 98 Other 99			Headrope 17 60 ft Footrope/Sweep 18 72 ft Ground Cable 19 30 fm Bridle 20 8 fm		CODEND LINER 32 33 Unknown 0 Single 1 Double 2 X Single on Top/ Double on Bottom 3 Other 9			
DOORS USED? 6		WEIGHT OF ONE DOOR 7			STRENGTHENER USED?		CODEND MESH SIZE		BRAND	ESCAPE OUTLET
NO 0 YES 1 X		900 kg 8A 9A 10A			NO 0 X YES 1 21		161 mm 160 mm 162 mm 163 mm 158 mm 162 mm 157 mm 164 mm 163 mm 157 mm		Unknown 0 Furuno® 1 Simrad® 2 X Northstar Tech 3 Notus 4 Marport 5 Scanmar 6 Combination 8 Other 9	
KITE PANEL		FISHING CIRCLE			CHAFING GEAR USED?		LINER MESH SIZE		LOCATION	MESH SIZE
KITE USED? 11 NO 0 Width 13 39 in YES 1 X Length 14 39 in		# MESHES 15 480 MESH SIZE 16 5.0 in			NO 0 YES 1 X 22		35 mm mm mm mm mm mm mm mm mm mm		(check all that apply) Unknown 0 Headrope 1 Wings 2 Footrope 3 Door 5 X Codend 6 Other 9	
COMMENTS		GROUND GEAR			FLOATS		SHAPE		SHAPE Type Code	
Doors are 1980 lbs each.		TYPE GROUND CABLE BRIDLE/ LEG SWEEP Unknown 00 Chain 01 Cable / Wire 02 X Wrapped Cable 03 Rock Hopper 04 Roller 05 Rubber Cookie 06 X X Bobbin 07 Plate Gear 08 None 98 Other 99			Number 30 26 Diameter 16 in 27		15 28 Diameter 8 in 29		05 51 LOCATION Type Code 1 52	

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ADDITIONAL COMMENTS	EXCLUDER/SEPARATOR DEVICE TYPE CODES:		ESCAPE OUTLET SHAPE CODES:	ESCAPE OUTLET LOCATION CODES:
	00 = Unknown 01 = Nordmore Grate 03 = Separator Panel 04 = Guiding Device 05 = Raised Footrope 06 = Compound Nordmore Grate 07 = Double Nordmore Grate 08 = Large Mesh 20 = T.E.D., Unknown 21 = Standard T.E.D. 22 = Weedless T.E.D. 23 = Flounder T.E.D.	24 = Bent Rod T.E.D. 25 = Conch T.E.D. 26 = Flat Bottom T.E.D. 27 = Whelk T.E.D. 28 = Flexible T.E.D. 29 = Parker Soft T.E.D. 30 = Experimental T.E.D. 31 = Northeast Modified T.E.D. 32 = Large Flat Bar T.E.D. 98 = Combination (Comment) 99 = Other (Comment)	00 = Unknown 01 = Rectangular 05 = Trapezoid 06 = Square 07 = Diamond 08 = Triangular 09 = Semi-Circle 11 = Horizontal Cut 99 = Other (Comment)	0 = Unknown 1 = Net Top 2 = Net Bottom 3 = Net Side 4 = Codend Top 5 = Codend Bottom 8 = Combination (Comment) 9 = Other (Comment)

FOR OFFICE USE ONLY

Bottom Trawl Haul Log

If the gear is set out, and only partially hauled back, the time spent hauling and resetting the net should be included in the haul's time.

Comments

Record if a bottom trawl is fished just off the bottom. This is different from mid-water gear which is configured for pelagic fishing (no chaffing gear or sweep gear).

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Number of Turns	Count or obtain from captain. Only include turns greater than 90 degrees. One large circular path = 1 turn.	Whole number	Dash. Record "0" if no turns made.
2	Tow Speed	Obtain from captain. Average speed during tow.	Knots, to the nearest tenth	Dash.
3	Wire Out	Obtain from captain. Wire from towing blocks to trawl doors, if doors are present, for the majority of the haul.	Whole fathoms	Dash.
4	Pumping Begin/End Date	Comment on pumping to other vessel(s). If there is an observer on the other vessel, do not include time spent pumping to their vessel.	MM/DD/YY	If pumping occurs, cannot be unknown Leave blank if not pumping.
5	Pumping Begin/End Time	Comment on pumping to other vessel(s). If there is an observer on the other vessel, do not include time spent pumping to their vessel.	HH:MM (24hr)	Dash. Leave blank if not pumping.
6	Net Vertical Opening	Obtain from captain. Top of mouth to bottom of mouth. Average while the net is fishing.	Whole feet	Dash. Leave blank if no gear mounted electronics.
7	Net Horizontal Opening	Obtain from captain. Wing tip to wing tip. Average while the net is fishing.	Whole feet	Dash. Leave blank if no gear mounted electronics.
8	Door Spread	Obtain from captain. One door to the other. Average while the net is fishing. If two sets of doors, add door spread from both nets together.	Whole feet	Dash. Leave blank if no gear mounted electronics. Dash if no doors.

BOTTOM TRAWL HAUL LOG
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GEAR CODE D	GEAR # E	HAUL # F	HAUL OBS? G	ON-EFFORT? H	CATCH? I	INC TAKE? J	WEATHER CODE K	WIND SPEED L DIRECTION M	WAVE HEIGHT N	DEPTH, HAUL BEGIN O	GEAR COND CODE P
0 5 0	0 1	0 2 3	NO 0 YES 1 X	NO 0 YES 1 X	NO 0 YES 1 X	NO 0 X YES 1	01	5 kn 320	3 ft	20 fm	010
HAUL/FISHING INFO	DATE mm/dd/yy	TIME 24 hours	LATITUDE / LONGITUDE (DD MMM) - LORAN (XXXXX)				NUMBER OF TURNS	TOW SPEED	WIRE OUT		
BEGIN HAUL	Q 10 / 16 / 22	R 13:07	Station 1 9960 -	Latitude / Bearing S 35 ° 38.3	Station 2 9960 -	Longitude / Bearing 75 ° 17.3	1	2 . 7 kn	75 fm		
BEGIN FISHING	10 / 16 / 22	13:14					WATER TEMP T 54 . 0 ° F	TARGET SPECIES U Summer Flounder	CODE V		
END HAUL	10 / 16 / 22	15:07	9960 -	35 ° 34.2	9960 -	75 ° 19.9					
GEAR ONBOARD	10 / 16 / 22	15:14	COMMENTS Catch was dumped, therefore no pumping information						VERTICAL OPENING ** 7 ft 6		
FISH PUMPING									HORIZONTAL OPENING ** 38 ft 7		
BEGIN	4 - / - / -	5 - / - / -							DOOR SPREAD ** ft 8		
END	- / - / -	- / - / -							SAMPLE WEIGHT MULTIPLIER W 6 . 2 1 ft		

** Only fill in if gear mounted electronics are used

SPECIES					WEIGHT		SPECIES					WEIGHT	
NAME	CODE	SUB-SAMPLE WEIGHT	POUNDS	DISP CODE	D/R	ESTIMATION METHOD CODE	NAME	CODE	SUB-SAMPLE WEIGHT	POUNDS	DISP CODE	D/R	ESTIMATION METHOD CODE
1 Summer Flounder	A' B'	C' 44.0	D' 273	E' 100	F' R	G' 02	11						
2 Summer Flounder			3.4	012	R	01	12						
3 Spiny Dogfish		8.6	53	015	R	02	13						
4 Smooth Dogfish		3.3	20	001	R	02	14						
5 Clearnose Skate		30.4	189	001	R	02	15						
6 Seastar, Starfish, nk		4.1	25	001	R	02	16						
7 Witch Flounder			1.5	100	R	01	17						
8 Shells, nk		0.7	4	054	R	02	18						
9 Debris, Fishing Gear			15	053	R	06	19						
10 Conch, nk		4.8	30	001	R	02	20						

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Twin Trawl Gear Characteristics Log

A Twin Trawl gear is defined as a distinct combination of trawl nets (port and starboard) deployed during the trip. If, during a trip, one of the nets is not fished, complete a [BOTTOM TRAWL GEAR CHARACTERISTICS LOG](#) for the net fished singly.

For NEFOP trips, the port and starboard nets will each be described on their own Twin Trawl Gear Characteristics Log using the same gear number.

For ASM trips, fill out the labeled section for each net.

If the vessel has two or more **identical** gears which are hauled during the trip, assign each gear its own gear number and record them on separate Twin Trawl Gear Characteristics Logs with 10 random codend mesh size measurements and 10 random liner (if present) mesh measurements collected for each codend/liner.

For instructions on completing all fields not listed below refer to the [BOTTOM TRAWL GEAR CHARACTERISTICS LOG](#).

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
70*	Net Location	Visually confirm. On ASM trips, fill out the correct portion of the log. Describe "other" in comments.	Check one.	Cannot be unknown.
71*	Nets Connected?	Yes/No.	Check one.	"9".

TWIN TRAWL GEAR CHARACTERISTICS LOG
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GEAR CODE D 0 5 3	GEAR NUMBER 1 01	NET NAME 2 Twin Trawl	NET TYPE 3 2-Seam Groundfish Trawl	NET BUILDER 4 Custom Built	CODEND/LINER HUNG CODEND LINER Unknown 0 Diamond 1 X Square 2 Square, wrapped 3 Combination 8	GEAR MOUNTED ELECTRONICS USED ? 36 NO 0 YES 1 X NUMBER OF 37 TRANSDUCERS 2 TYPE 38 Unknown 0 Wired 1 Wireless 2 X Both 3	EXCLUDER/SEPARATOR DEVICE USED? NO 0 X YES 1 41 Type Code 42 T.E.D. EXTENSION Mesh Size . in 43	
NET LOCATION 70 Port 1 X Starboard 2 Other 9	CONSTRUCTION MATERIAL TYPE NET BODY CODEND LINER Unknown 00 8 9 10 Poly 02 X X Kevlar® 03 Spectra® 04 Tenex® 05 Nomex® 06 Combination 98 Other 99		LENGTH MEASUREMENTS Headrope 17 100 ft Footrope/Sweep 18 170 ft Ground Cable 19 55 fm Bridle 20 50 fm STRENGTHENER USED? 21 NO 0 X YES 1 CHAFING GEAR USED? 22 NO 0 YES 1 X		TWINE TYPE CODEND LINER Unknown 0 Single 1 Double 2 X Single on Top/ Double on Bottom 3 Other 9			
DOORS USED? 6 NO 0 YES 1 X WEIGHT OF ONE DOOR 7 270 kg	NETS CONNECTED? 71 NO 0 YES 1 X		KITE PANEL KITE USED? 11 NO 0 Width 13 39 in YES 1 X Length 14 39 in		FISHING CIRCLE # MESHES 15 600 MESH SIZE 16 6.0 in	CODEND MESH SIZE 34 154 mm 160 mm 162 mm 161 mm 158 mm 160 mm 157 mm 157 mm 159 mm 162 mm LINER MESH SIZE 35 mm mm mm mm mm mm mm mm	BRAND 39 Unknown 0 Furuno® 1 Simrad® 2 X Northstar Tech 3 Notus 4 Marport 5 Scanmar 6 Combination 8 Other 9 LOCATION 40 (check all that apply) Unknown 0 <input type="checkbox"/> Headrope 1 <input type="checkbox"/> Wings 2 <input type="checkbox"/> Footrope 3 <input type="checkbox"/> Door 5 X Codend 6 <input type="checkbox"/> Other 9 <input type="checkbox"/> 40A	ESCAPE OUTLET USED? NO 0 X YES 1 44 TYPE 45 Unknown 0 Panel 1 Opening 2 Single Flap 3 Double Flap 4 Other 9 MESH SIZE in 46 LENGTH 47 49 in # MESHES OR WIDTH 48 50 in # MESHES OR SHAPE Type Code 51 LOCATION Type Code 52
COMMENTS		GROUND GEAR 23 TYPE GROUND CABLE BRIDLE/LEG SWEEP Unknown 00 Chain 01 Cable / Wire 02 Wrapped Cable 03 Rock Hopper 04 Roller 05 Rubber Cookie 06 X X Bobbin 07 Plate Gear 08 None 98 Other 99 23A 24A 25A		SWEEP GEAR Number 120 26 Diameter 18 in 27		FLOATS Number 70 28 Diameter 8 in 29		

OBS/TRIP ID	A	
DATE LANDED mm/yy	B	/
PAGE #	C	<input type="checkbox"/> OF <input type="checkbox"/>

ADDITIONAL COMMENTS	EXCLUDER/SEPARATOR DEVICE TYPE CODES:	ESCAPE OUTLET SHAPE CODES:	ESCAPE OUTLET LOCATION CODES:
	00 = Unknown 01 = Nordmore Grate 03 = Separator Panel 04 = Guiding Device 05 = Raised Footrope 06 = Compound Nordmore Grate 07 = Double Nordmore Grate 08 = Large Mesh 20 = T.E.D., Unknown 21 = Standard T.E.D. 22 = Weedless T.E.D. 23 = Flounder T.E.D. 24 = Bent Rod T.E.D. 25 = Conch T.E.D. 26 = Flat Bottom T.E.D. 27 = Whelk T.E.D. 28 = Flexible T.E.D. 29 = Parker Soft T.E.D. 30 = Experimental T.E.D. 31 = Northeast Modified T.E.D. 32 = Large Flat Bar T.E.D. 98 = Combination (Comment) 99 = Other (Comment)	00 = Unknown 01 = Rectangular 05 = Trapezoid 06 = Square 07 = Diamond 08 = Triangular 09 = Semi-Circle 11 = Horizontal Cut 99 = Other (Comment)	0 = Unknown 1 = Net Top 2 = Net Bottom 3 = Net Side 4 = Codend Top 5 = Codend Bottom 8 = Combination (Comment) 9 = Other (Comment)
<div>FOR OFFICE USE ONLY</div>			

Twin Trawl Haul Log

If the gear is set out, and only partially hauled back, the time spent hauling and resetting the net should be included in the haul's time.

For instructions on completing numbered fields not listed below, refer to the [BOTTOM TRAWL HAUL LOG](#) section.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
9*	Net Observed	If both catch from both nets cannot be observed, then the haul is unobserved.	Check one	"9".

TWIN TRAWL HAUL LOG
NMFS FISHERIES OBSERVER PROGRAM
OBTTH OBHAU OBSPP 07/01/21

OBS/ TRIP ID A										A99006-																													
DATE LAND (mm/yy) B										06 / 22																													
PAGE # C										1 OF 2																													
GEAR CODE D		GEAR # E		HAUL # F		HAUL OBS? G		ON-EFFORT? H		CATCH? I		INC TAKE? J		WEATHER CODE K		WIND		WAVE HEIGHT		DEPTH, HAUL BEGIN		GEAR COND CODE																	
0 5 3		0 1		0 0 7		NO 0 YES 1 X		NO 0 YES 1 X		NO 0 YES 1 X		NO X YES 1		02		15 kn 320 °		4 ft		35 O fm		010																	
HAUL INFO		DATE mm/dd/yy Q		TIME 24 hours R		LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)										NUMBER OF TURNS		TOW SPEED		WIRE OUT		WATER TEMP																	
BEGIN HAUL		06 / 08 / 22		21:52		9960 -		Latitude / Bearing S 40 ° 00.3		9960 -		Longitude / Bearing 71 ° 18.2		0		2 . 7 kn		120 fm		43 . 0 F																			
BEGIN FISHING		06 / 08 / 22		22:01												TARGET SPECIES U Atlantic Longfin Squid		CODE V		NET OBSERVED 9 Port 1 Starboard 2 Both 3 X																			
END HAUL		06 / 09 / 22		01:16		9960 -		40 ° 12.1		9960 -		71 ° 16.5																											
GEAR ONBOARD COMMENTS		06 / 09 / 22		01:32												**Only fill in if gear mounted electronics are used																							
																				VERTICAL OPENING ** 6 8 ft																			
																				HORIZONTAL OPENING ** 7 40 ft																			
																				DOOR SPREAD ** 8 85 ft																			
																				SAMPLE WEIGHT MULTIPLIER W 5 . 3 7																			
SPECIES										WEIGHT										SPECIES										WEIGHT									
NAME		CODE		SUB-SAMPLE WEIGHT		POUNDS		DISP CODE		D/R		EST METHOD CODE		NAME		CODE		SUB-SAMPLE WEIGHT		POUNDS		DISP CODE		D/R		EST METHOD CODE													
1 Atlantic Longfin Squid A'		B'		C'		D'		E'		F'		G'		11																									
2 Silver Hake				84.7		455		100		R		02		12																									
3 Monkfish						82		100		R		01		13																									
4 Spiny Dogfish				10.5		56		001		R		02		14																									
5 Barndoor Skate						22		001		R		01		15																									
6 Redfish, Acadian						2		001		R		06		16																									
7 Jonah Crab						5		001		R		06		17																									
8 Rock Crab						5		001		R		06		18																									
9 Seastar, Starfish, nk						2		001		R		06		19																									
10 Conch, nk						5		001		R		06		20																									

Pair and Single Mid-water Trawl Gear Characteristics Log

On pair trawl trips with observers on each boat, each observer is to collect information for gear(s) used from their own vessel, and after the trip, observers are to exchange gear information.

If the vessel has two or more **identical** gears which are hauled during the trip, assign each gear its own gear number and record them on separate Pair and Single Mid-water Trawl Gear Characteristics Logs with 10 random codend mesh size measurements and 10 random liner (if present) mesh measurements collected for each codend/liner used during a deployment. See “Mesh Sizes” under Trawl Fisheries section of Observer Operations Manual for more mesh measuring protocols.

With the captain’s permission, you may use the net plans to obtain many of the net dimensions. Codend/liner mesh sizes must be taken with calipers; do not use the net plans for these fields.

For instructions on completing all fields not listed below refer to the [BOTTOM TRAWL GEAR CHARACTERISTICS LOG](#).

Comments

Always record the name of the vessel to which the described gear belongs, regardless of whether it is onboard your vessel or the paired vessel. (Ex: “Gear onboard F/V Western Venture”). Always comment on dimensions of the net opening obtained from the captain.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
54	Year Net Made	Obtain from captain. Verify if more than 5 years old.	4-digit year	“0000”.
55	Gear Fished	Record captain intention, not how the gear performed ⁶ . Describe “other” on line 55A.	Check one	“0”.
56	Net Construction	Obtain from captain. Describe “other” on line 56A.	Check one	“0”.
57	Net Design	Obtain from captain. Equal panels means all panels equal, top=bottom=sides and is uncommon. Describe “other” on line 57A.	Check one	“0”.
58	Minimum Mesh Size	Obtain from captain. Not including codend/liner/brailer	Inches to the nearest tenth	Dash.
59	Maximum Mesh Size	Obtain from captain.	Inches to the nearest tenth	Dash.
60	Weights Used?	Yes/No. Typically on bottom bridle.	Check one	“9”.
61	Total Weight Pounds	Obtain from captain. Total for gear; combined weight for both vessels on pair trawl.	Whole pounds	Dash.
62	Floats Used?	Yes/No.	Check one	“9”.
63	Blowout Section Used?	Yes/No.	Check one	“9”.
64	Top Bridle Length	Obtain from captain. Record for only one side .	Whole fathoms	Dash. Dash if not used.
65	Wing Bridle Length	Obtain from captain. Record for only one side .	Whole fathoms	Dash. Dash if not used.

⁶ Gear intended to be fished in continual contact with the bottom should be recorded as Bottom Trawl.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
66	Bottom Bridle Length	Obtain from captain. Record for only one side .	Whole fathoms	Dash. Dash if not used.
67	Bridles per Warp	Obtain from captain or net plans.	Whole number	Dash.
68	Bridles per Side	Obtain from captain or net plans. Record for only one side .	Whole number	Dash.
69	Warps per Boat	Obtain from captain or net plans.	Whole number	Dash. Dash if not pair trawl.

PAIR and SINGLE MID-WATER TRAWL GEAR CHARACTERISTICS LOG
NMFS FISHERIES OBSERVER PROGRAM
OBPRG 07/01/21

OBS/TRIP ID	A	A99052-
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GEAR CODE 1 7 0	GEAR NUMBER 1	NET NAME Semi-Pelagic Trawl	NET TYPE Four Seam Squid Trawl	NET BUILDER Swan Net Gundry	YEAR NET MADE 2005 54	CODEND/LINER HUNG Unknown Diamond Square Square, wrapped Combination TWINE TYPE Unknown Single Double Single on Top/ Double on Bottom Other CODEND MESH SIZE 190 mm 170 mm 210 mm 192 mm 191 mm LINER MESH SIZE 57 mm 58 mm 61 mm 59 mm 62 mm	CODEND 30 31 32 33 34 35	LINER 31 32 33 34 35	GEAR MOUNTED ELECTRONICS USED? 36 NO 0 YES 1 X NUMBER OF TRANSDUCERS ** 37 1 TYPE Unknown Wired 1 X Wireless 2 Both 3 BRAND Unknown 0 Furuno® 1 Simrad® 2 X Northstar Tech 3 Notus 4 Marport 5 Scanmar 6 Combination 8 Other 9 39A LOCATION 40 (check all that apply) Unknown 0 Headrope 1 X Wings 2 Footrope 3 Door 5 Codend 6 Other 9	EXCLUDER/SEPARATOR DEVICE 41 USED? NO 0 X YES 1 Type Code 42 T.E.D. EXTENSION 43 Mesh Size . in ESCAPE OUTLET 44 USED? NO 0 X YES 1 TYPE Unknown 0 Panel 1 Opening 2 Single Flap 3 Double Flap 4 Other 9 45A MESH SIZE in 46 LENGTH 47 49 # MESHES OR in WIDTH 48 50 # MESHES OR in SHAPE Type Code 51 LOCATION Type Code 52
GEAR FISHED 55		CONSTRUCTION MATERIAL		LENGTH MEASUREMENTS						
Unknown 0		TYPE NET BODY CODEND LINER		Headrope 17 400 ft						
Pelagic 1 X		Unknown 00 8 9 10		Footrope/Sweep 18 400 ft						
Semi-Pelagic 2		Nylon 01 X		Top Bridle 64 15 fm						
Bottom 3		Poly 02		Wing Bridle 65 15 fm						
Other 55A		Kevlar® 03		Bottom Bridle 66 15 fm						
		Spectra® 04 X X		BRIDLES NUMBER						
		Tenex® 05		BRIDLES/WARP 67 2						
NET CONSTRUCTION 56		Nomex® 06		BRIDLES/SIDE 68 2						
Unknown 0		Combination 98		WARPS/BOAT* 69 1						
Rope/Large Mesh 1 X		Other 99		FISHING CIRCLE # MESHES 15 90						
Parallel Rope Trawl 2				MESH SIZE 16 457 in						
Other 56A		8A 9A 10A		STRENGTHENER USED? 21 NO 0 YES 1 X						
		BUOYANCY/RELEASE DEVICES		CHAFING GEAR USED? 22 NO 0 YES 1 X						
DESIGN 57		USED? NO YES								
Unknown 0		FLOATS 62 0 X 1								
2 Seam 1		BLOWOUT 63 0 X 1								
4 Seam, Equal Panels 2 X		KITE 11 0 X 1								
4 Seam, Unequal Panels 3		KITE PANEL								
Other 57A		Number 12								
		Length in 14								
NET BODY MESH SIZE		Width in 13								
Minimum 58 1 5 in		FLOATS 28 29								
Maximum 59 120 1 in		Number Diameter in								
LINER USED? 5		COMMENTS								
NO 0		Gear onboard F/V Western Venture								
YES 1 X										
DOORS 6										
USED? NO 0 X YES 1 7										
WEIGHT kg										
WEIGHTS (TOTAL) 60										
USED? NO 0 YES 1 X		Codend = "Coversheet"								
WEIGHT 61 4000 lb		Liner = "Brailer"								
		* Fill in only on pair trawl trips.		** Include all sensors on the gear						

OBS/TRIP ID	A
DATE LANDED mm/yy	B /
PAGE #	C <input type="checkbox"/> OF <input type="checkbox"/>

ADDITIONAL COMMENTS	EXCLUDER/SEPARATOR DEVICE TYPE CODES:		ESCAPE OUTLET SHAPE CODES:	ESCAPE OUTLET LOCATION CODES:
	00 = Unknown 01 = Nordmore Grate 03 = Separator Panel 04 = Guiding Device 05 = Raised Footrope 06 = Compound Nordmore Grate 07 = Double Nordmore Grate 08 = Large Mesh 20 = T.E.D., Unknown 21 = Standard T.E.D. 22 = Weedless T.E.D. 23 = Flounder T.E.D.	24 = Bent Rod T.E.D. 25 = Conch T.E.D. 26 = Flat Bottom T.E.D. 27 = Whelk T.E.D. 28 = Flexible T.E.D. 29 = Parker Soft T.E.D. 30 = Experimental T.E.D. 31 = Northeast Modified T.E.D. 32 = Large Flat Bar T.E.D. 98 = Combination (Comment) 99 = Other (Comment)	00 = Unknown 01 = Rectangular 05 = Trapezoid 06 = Square 07 = Diamond 08 = Triangular 09 = Semi-Circle 11 = Horizontal Cut 99 = Other (Comment)	0 = Unknown 1 = Net Top 2 = Net Bottom 3 = Net Side 4 = Codend Top 5 = Codend Bottom 8 = Combination (Comment) 9 = Other (Comment)
<div style="border: 1px solid black; height: 400px; width: 100%;"></div>				
FOR OFFICE USE ONLY				

Pair and Single Mid-water Trawl Haul Log

If the gear is set, and only partially hauled back, include the time spent hauling and resetting the net in this haul's time.

Generally pair and single mid-water trawling occurs in high volume fisheries. Review the [DISCARD LOG](#) and [CATCH COMPOSITION LOG](#) protocols before deploying. All [Pair and Single Mid-water Trawl Haul Logs](#) with catch (kept or discarded) must have an accompanying [DISCARD LOG](#), unless no catch exists (kept or discarded). If **any** catch is discarded, record details on the [DISCARD LOG](#) and record the species on the corresponding [Haul Log](#).

For instructions on completing numbered fields not listed below, refer the [Bottom Trawl Haul Log](#) section.

Comments

If any catch is pumped or transferred to another vessel, record the vessel name in COMMENTS, even if that vessel is already listed as VESSEL #2 on the [VESSEL AND TRIP INFORMATION LOG](#). For any vessel not documented on the [VESSEL AND TRIP INFORMATION LOG](#), also record the USCG hull number.

Comment if a Triplex (triple roller system) is used.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
10	Depth Range, Headrope	Obtain from captain or from transducer screen.	Whole fathoms	Dash.
11	Distance Range Between Boats	Obtain from captain. Shortest and longest distance while towing. Does not include passing warps or coming together to complete a turn.	Whole feet	Dash.

PAIR and SINGLE MID-WATER TRAWL HAUL LOG
NMFS FISHERIES OBSERVER PROGRAM
OBPRH OBHAU OBSPP 07/01/21

OBS/ TRIP ID		A A99012-	
DATE LAND (mm/yy)		B 10 / 22	
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GEAR CODE D	GEAR # E	HAUL # F	HAUL OBS? G	ON-EFFORT? H	CATCH? I	INC TAKE? J	WEATHER CODE K	WIND		WAVE HEIGHT	DEPTH	GEAR COND CODE
1 7 0	0 1	0 0 1	NO 0 YES 1 X	NO 0 YES 1 X	NO 0 YES 1 X	NO 0 X YES 1	02	SPEED L 10 kn	DIRECTION M 225 °	2 ft	48 fm	010

HAUL/FISHING DATE	TIME	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)		NUMBER OF TURNS	TOW SPEED	WIRE OUT	WATER TEMP
INFO mm/dd/yy	24 hours	Station 1 Latitude / Bearing	Station 2 Longitude / Bearing				
BEGIN	Q 23 : 28	9960 - S	9960 -	5	3.2 kn	210 fm	55.2 ° F
HAUL	10 / 11 / 22	43° 37.4	69° 42.7	TARGET SPECIES CODE			
BEGIN				Atlantic Herring U V			
FISHING	10 / 11 / 22 23 : 32			DEPTH RANGE, HEADROPE			
END				10 22 28 fm			
HAUL	10 / 12 / 22 05 : 04			DISTANCE BETWEEN BOATS *			
GEAR ONBOARD	10 / 12 / 22	9960 - 43° 34.6	9960 - 69° 43.2	11 200 300 ft			

FISH PUMPING	VERTICAL **	HORIZONTAL **	DOOR SPREAD **
BEGIN	4 5	6 7	8
END	10 / 12 / 22 07 : 45		
	10 / 12 / 22 09 : 14		

COMMENTS

Haddock pulled out at grate and weighed. Spiny dogfish estimated as tally, crew tossed over before I could weigh them.
See Discard Log about details about Fish, NK.

SAMPLE WEIGHT MULTIPLIER W

SPECIES		SUB-SAMPLE WEIGHT	POUNDS	DISP CODE	WEIGHT		SPECIES		SUB-SAMPLE WEIGHT	POUNDS	DISP CODE	WEIGHT	
NAME	CODE				D/R	ESTIMATION METHOD CODE	NAME	CODE				D/R	ESTIMATION METHOD CODE
A Atlantic Herring	B	C	D 295,000	E 100	F R	G 10							
Spiny Dogfish			150	001	R	05							
Haddock			100	172	R	01							
Fish, NK			1,000	049	R	04							
Atlantic Mackerel			2,750	100	R	10							

Purse Seine Gear Characteristics Log

If the vessel has two or more identical gears which are set, complete only one Purse Seine Gear Characteristics Log and record the consecutively assigned numbers of all the identical gears described in GEAR NUMBER(S) (#1).

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Gear Number	Unique identifier for each purse seine configuration.	2-digit code	Cannot be unknown.
2	Net Length	Obtain from captain. Do not include length of bunt.	Whole fathoms	Dash.
3	Bunt Length	Obtain from captain.	Whole fathoms	Dash.
4	Net Depth	Obtain from captain. For deepest section of the net.	Whole fathoms	Dash.
5	Bunt Depth	Obtain from captain. For deepest section of the bunt.	Whole fathoms	Dash.
6	Mesh Size of Net	Obtain from captain.	Inches, to the nearest hundredth	Dash.
7	Mesh Size of Bunt	Obtain from captain.	Inches, to the nearest hundredth	Dash.
8	Twine Size of Net	Obtain from captain. Different from gillnet twine size chart.	Whole millimeters	Dash.
9	Twine Size of Bunt	Obtain from captain. Different from gillnet twine size chart.	Whole millimeters	Dash.
10	Construction Material of Net	Obtain from captain. Describe "other" or "combination" on line 10A.	Check one	"00".
11	Construction Material of Bunt	Obtain from captain. Describe "other" or "combination" on line 11A.	Check one	"00".
12	Floatline Length	Obtain from captain.	Whole fathoms	Dash.
13	Floatline Diameter	Obtain from captain.	Inches to the nearest hundredth	Dash.
14	Leadline Length	Obtain from captain.	Whole fathoms	Dash.
15	Leadline Diameter	Obtain from captain.	Inches, to the nearest hundredth	Dash.
16	Purse Line Length	Obtain from captain.	Whole fathoms	Dash.
17	Purse Line Diameter	Obtain from captain.	Inches, to the nearest hundredth	Dash.
18	Leadline Weight	Obtain from captain. Do not include weight of additional weights.	Whole pounds	Dash.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
19	Additional Weights Used?	Yes/No. Includes Tom weights.	Check one	"9".
20	Additional Weights Weight	Obtain from captain. Total additional weight used on leadline. Does not include weight of leadline.	Whole pounds	Dash.
21	Hauling Device	Obtain from captain. Describe "other" on line 21A.	Check one	"0".
22	Purse Ring Type	Obtain from captain. Describe "other" or "combination" on line 22A.	Check one	"0".
23	Purse Ring Material	Obtain from captain. Describe "other" on line 23A.	Check one	"0".

80

Purse Seine Gear Characteristics Log

Purse Seine Set Log

Generally purse seining occurs in high volume fisheries. Review the [DISCARD LOG](#) and [CATCH COMPOSITION LOG](#) protocols before deploying. All Purse Seine Set Logs with catch (kept or discarded) must have an accompanying [DISCARD LOG](#), unless no catch exists (kept or discarded). If **any** catch is discarded, record details on the [DISCARD LOG](#), and record the species on the corresponding Purse Seine Set Log.

Comments

If any catch is pumped or transferred to another vessel, record the vessel name in COMMENTS, even if that vessel is already listed as VESSEL #2 on the [VESSEL AND TRIP INFORMATION LOG](#). For any vessel not documented on the [VESSEL AND TRIP INFORMATION LOG](#), also record the USCG hull number.

If FISH LOST (#10) is “Yes”, describe the amount and situation in COMMENTS but **do not** record those fish weights in the species section of the [Haul Log](#) or on the [DISCARD LOG](#). If SUCCESSFUL SET (#9) is “No”, describe the situation in COMMENTS.

Comment if a Triplex (triple roller system) is used.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Set Speed	Obtain from captain. Speed of main vessel setting net during the set.	Knots, to the nearest tenths	Dash.
2	Pumping Begin/End Date	Comment on pumping to other vessel(s). If there is an observer on the other vessel, do not include time spent pumping to their vessel.	MM/DD/YY	If pumping occurs, cannot be unknown. Leave blank if not pumping.
3	Pumping Begin/End Time	Comment on pumping to other vessel(s). If there is an observer on the other vessel, do not include time spent pumping to their vessel.	HH:MM (24hr)	Dash. Leave blank if not pumping.
4	Plane Used?	Yes/No. Visually confirm or obtain from captain.	Check one	“9”.
5	Plane Time Up	Obtain from captain. Time plane took off.	HH:MM (24hr)	Dash.
6	Plane Time Down	Obtain from captain. Time plane landed.	HH:MM (24hr)	Dash.
7	Set By Plane?	Yes/No. Visually confirm or obtain from captain.	Check one	“9”.
8	Set On Debris?	Yes/No. Visually confirm or obtain from captain.	Check one	“9”.
9	Successful Set?	Yes/No. Obtain from captain.	Check one	“9”.
10	Fish Lost?	Yes/No. Obtain from captain. “Yes” = fish escaped, unintentionally, any time before SET END.	Check one	“9”.

PURSE SEINE SET LOG
NMFS FISHERIES OBSERVER PROGRAM
OBPSH OBHAU OBSPP 07/01/21

OBS/TRIP ID	A	A99024-
DATE LAND (mm/yy)	B	09 / 22
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GEAR CODE D	GEAR # E	HAUL # F	HAUL OBS? G	ON-EFFORT? H	CATCH? I	INC TAKE? J	WEATHER CODE K	WIND SPEED L	WIND DIRECTION M	WAVE HEIGHT N	DEPTH, HAUL BEGIN O	GEAR COND CODE P
1 2 1	0 1	0 0 1	NO 0 <input checked="" type="checkbox"/> YES 1 <input type="checkbox"/>	NO 0 <input type="checkbox"/> YES 1 <input checked="" type="checkbox"/>	NO 0 <input type="checkbox"/> YES 1 <input checked="" type="checkbox"/>	NO 0 <input checked="" type="checkbox"/> YES 1 <input type="checkbox"/>	03	10 kn	225 °	2 ft	69 fm	510
SET INFO	DATE mm/dd/yy	TIME 24 hours	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXXX)				SET SPEED	TARGET SPECIES CODE(S)				
BEGIN	09 / 14 / 22	20 : 42	Station 1	Latitude / Bearing	Station 2	Longitude / Bearing	1	Atlantic Herring				
END	09 / 14 / 22	20 : 58	9960 -	45 ° 51.3	9960 -	70 ° 28.7	6.0 kn					
FISH PUMPING			PLANE USED? 4	TIME UP 5	WATER TEMP (Fahrenheit) T		NO 0 YES 1	NO 0 YES 1				
BEGIN	09 / 14 / 22	21 : 15	NO 0 <input checked="" type="checkbox"/> YES 1 <input type="checkbox"/>	:	o		SET BY PLANE? 7 <input checked="" type="checkbox"/>	SUCCESSFUL SET? 9 <input type="checkbox"/>		X		
END	09 / 14 / 22	21 : 56		TIME DOWN 6	57 . 8 F		SET ON DEBRIS? 8 <input checked="" type="checkbox"/>	FISH LOST? 10 <input checked="" type="checkbox"/>		X		

COMMENTS

Vessel filled to capacity - only part of this catch was pumped onboard. Remaining catch released = fish, nk, captain estimated ~1000 lbs released

SPECIES			POUNDS	DISP CODE	WEIGHT			POUNDS	DISP CODE	WEIGHT	
NAME	CODE				D/R	ESTIMATION METHOD CODE				D/R	ESTIMATION METHOD CODE
1 Fish, nk	A' B'		D' 1,000	E' 048	F' R	G' 04	11				
2 Atlantic Herring			59,549	100	R	10	12				
3 Alewife			451	100	R	10	13				
4							14				
5							15				
6							16				
7							17				
8							18				
9							19				
10							20				

Scallop Trawl Gear Characteristics Log

A Scallop Trawl gear is defined as a distinct combination of scallop trawl nets (port and/or starboard or aft) deployed during the trip. The port and starboard nets will each be described on their own Scallop Trawl Gear Characteristics Log using the same gear number.

If the vessel has two or more **identical** gears which are hauled during the trip, assign each gear its own gear number and record them on separate Scallop Trawl Gear Characteristics Logs with 10 random codend mesh size measurements and 10 random liner (if present) mesh measurements collected for each codend/liner.

For instructions on completing all fields not listed below refer to the [BOTTOM TRAWL GEAR CHARACTERISTICS LOG](#).

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
70	Net Location	Visually confirm.	Check one	Cannot be unknown.
71	Nets Connected?	Yes/No.	Check one	"9".

SCALLOP TRAWL GEAR CHARACTERISTICS LOG
NMFS FISHERIES OBSERVER PROGRAM
OBSTG 07/01/21

OBS/TRIP ID	A	A99062-
DATE LANDED mm/yy	B 06 / 22	
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GEAR CODE D 0 5 2	GEAR NUMBER 1 01	NET NAME 2 Twin Trawl	NET TYPE 3 4-Seam Scallop Trawl	NET BUILDER 4 Superior Trawl	CODEND/LINER HUNG Unknown 0 Diamond 1 X Square 2 Square, wrapped 3 Combination 8 TWINE TYPE Unknown 0 Single 1 Double 2 X Single on Top/ Double on Bottom 3 Other 9 CODEND 30 LINER 31 CODEND 32 LINER 33 CODEND MESH SIZE 34 141 mm 143 mm 145 mm 147 mm 145 mm 142 mm 143 mm 150 mm 146 mm 149 mm LINER MESH SIZE 35 mm mm mm mm mm mm mm mm mm mm	GEAR MOUNTED ELECTRONICS USED ? NO 0 X YES 1 NUMBER OF TRANSDUCERS 37 TYPE Unknown 0 Wired 1 Wireless 2 Both 3 BRAND Unknown 0 Furuno® 1 Simrad® 2 Northstar Tech 3 Notus 4 Marport 5 Scanmar 6 Combination 8 Other 9 39A LOCATION (check all that apply) Unknown 0 Headrope 1 Wings 2 Footrope 3 Door 5 Codend 6 Other 9 40A	EXCLUDER/SEPARATOR DEVICE 41 USED? NO 0 X YES 1 Type Code 42 T.E.D. EXTENSION Mesh Size in 43 ESCAPE OUTLET USED? NO 0 X YES 1 TYPE Unknown 0 Panel 1 Opening 2 Single Flap 3 Double Flap 4 Other 9 45 MESH SIZE in 46 LENGTH 47 # MESHES OR in WIDTH 48 # MESHES OR in SHAPE Type Code 51 LOCATION Type Code 52
NET LOCATION 70 Port 1 X Starboard 2 Aft 3 Other 9		CONSTRUCTION MATERIAL TYPE NET BODY CODEND LINER Unknown 00 8 9 10 Nylon 01 Poly 02 X X Kevlar® 03 Spectra® 04 Tenex® 05 Nomex® 06 Combination 98 Other 99		LENGTH MEASUREMENTS Headrope 17 70 ft Footrope/Sweep 18 70 ft Ground Cable 19 25 fm Bridle 20 25 fm STRENGTHENER USED? 21 NO 0 X YES 1 CHAFING GEAR USED? 22 NO 0 X YES 1		DOORS USED? 6 NO 0 YES 1 X WEIGHT OF ONE DOOR 270 kg 8A 9A 10A	
LINER USED? 5 NO 0 X YES 1		NETS CONNECTED? 71 NO 0 YES 1 X		KITE PANEL KITE USED? 11 Number 12 3 Width 13 39 in Length 14 39 in YES 1 X		FISHING CIRCLE # MESHES 15 60 MESH SIZE 16 5.5 in	
COMMENTS		GROUND GEAR 23 24 25 TYPE GROUND CABLE BRIDLE/ LEG SWEEP Unknown 00 Chain 01 X Cable / Wire 02 X X Wrapped Cable 03 Rock Hopper 04 Roller 05 Rubber Cookie 06 Bobbin 07 Plate Gear 08 None 98 Other 99 23A 24A 25A		SWEEP GEAR Number 26 Diameter in 27		FLOATS Number 30 28 Diameter 10 in 29	

ADDITIONAL COMMENTS	EXCLUDER/SEPARATOR DEVICE TYPE CODES:	ESCAPE OUTLET SHAPE CODES:	ESCAPE OUTLET LOCATION CODES:
	00 = Unknown 01 = Nordmore Grate 03 = Separator Panel 04 = Guiding Device 05 = Raised Footrope 06 = Compound Nordmore Grate 07 = Double Nordmore Grate 08 = Large Mesh 20 = T.E.D., Unknown 21 = Standard T.E.D. 22 = Weedless T.E.D. 23 = Flounder T.E.D.	24 = Bent Rod T.E.D. 25 = Conch T.E.D. 26 = Flat Bottom T.E.D. 27 = Whelk T.E.D. 28 = Flexible T.E.D. 29 = Parker Soft T.E.D. 30 = Experimental T.E.D. 31 = Northeast Modified T.E.D. 32 = Large Flat Bar T.E.D. 98 = Combination (Comment) 99 = Other (Comment)	00 = Unknown 01 = Rectangular 05 = Trapezoid 06 = Square 07 = Diamond 08 = Triangular 09 = Semi-Circle 11 = Horizontal Cut 99 = Other (Comment)
			0 = Unknown 1 = Net Top 2 = Net Bottom 3 = Net Side 4 = Codend Top 5 = Codend Bottom 8 = Combination (Comment) 9 = Other (Comment)

Scallop Trawl Haul Log

If the gear is set out, and only partially hauled back, the time spent hauling and resetting the net should be included in the haul's time.

Use a [SCALLOP TRAWL OFF-WATCH HAUL LOG](#) to document all hauls that occur during your off-watch period. Do not record off-watch hauls on a [Scallop Trawl Haul Log](#).

For instructions on completing numbered fields not listed below, refer the [BOTTOM TRAWL HAUL LOG](#) section.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
9	Net Observed	If both catch from both nets cannot be observed, then the haul is unobserved.	Check one	"9".
12	Sea Scallop Clappers Observed?	Yes/No. If yes, a weight must be provided in the species section.	Check one	"9".

SCALLOP TRAWL HAUL LOG
NMFS FISHERIES OBSERVER PROGRAM
OBSTH OBHAU OBSPP 07/01/21

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GEAR CODE D	GEAR # E	HAUL # F	HAUL OBS? G	ON-EFFORT? H	CATCH? I	INC TAKE? J	WEATHER CODE K	WIND		WAVE HEIGHT	DEPTH, HAUL BEGIN	GEAR COND CODE
0 5 2	0 1	0 2 1	NO 0 YES 1 X	NO 0 YES 1 X	NO 0 YES 1 X	NO 0 X YES 1	01	SPEED L 10 kn	DIRECTION M 90 °	2 ft	35 fm	010

HAUL INFO	DATE mm/dd/yy	TIME 24 hours	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)			NET OBSERVED	TOW SPEED	WIRE OUT	
BEGIN HAUL	06 / 12 / 22	21:47	Station 1	Latitude / Bearing	Station 2	Longitude / Bearing	9	2	3
BEGIN FISHING	06 / 12 / 22	22:01	9960 -	35 ° 38.3	9960 -	75 ° 17.3	Port 1 Starboard 2 Both 3 X Aft 4	3.1 kn	75 fm
END HAUL	06 / 12 / 22	01:16	9960 -	35 ° 34.2	9960 -	75 ° 19.9			
GEAR ONBOARD	06 / 12 / 22	01:32				SEA SCALLOP CLAPPERS OBS?			NUMBER OF TURNS
COMMENTS						12			1
						NO 0 YES 1 X			WATER TEMP
									60 . 0 F
						SAMPLE WEIGHT MULTIPLIER W	VERTICAL OPENING **	HORIZONTAL OPENING **	DOOR SPREAD **
							6 ft	12 ft	15 ft

** Only fill in if gear mounted electronics are used.

SPECIES		SUB-SAMPLE WEIGHT	POUNDS	DISP CODE	WEIGHT		SPECIES		SUB-SAMPLE WEIGHT	POUNDS	DISP CODE	WEIGHT	
NAME	CODE				D/R	ESTIMATION METHOD CODE	NAME	CODE				D/R	ESTIMATION METHOD CODE
1 A* Sea Scallops	B* 8009	C*	D* 49	E* 100	F* D	G* 03	11						
2 Sea Scallops			16	002	R	04	12						
3 Monkfish (tails)			26	100	D	01	13						
4 Yellowtail Flounder			13	100	R	01	14						
5 Sand Dollar			70	001	R	06	15						
6 Clappers, Scallop			10	054	R	06	16						
7 Little Skate			22	001	R	01	17						
8							18						
9							19						
10							20						

Scallop Trawl Off-Watch Haul Log

This log is to be used for recording dates, times, locations, and the amount of kept sea scallops for **off-watch** hauls on scallop trawl gear trips. Complete a single section for each off-watch period.

If you are aware of an incidental take of a marine mammal, sea turtle, or seabird during an off-watch period, complete as many fields as possible on a [SCALLOP TRAWL HAUL LOG](#) in addition to completing a [MARINE MAMMAL, SEA TURTLE, AND SEABIRD INCIDENTAL TAKE LOG](#).

Fields 1, 2, 4, 6, and 8 should be completed **before** going off watch. Fields 3, 5, 7, 9, and 10 should be completed **after** your off-watch ends (i.e., before coming back on-watch).

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Watch Number	Sequential by order off-watch number.	2-digit code	Cannot be unknown.
2	First Haul Number	First haul of off-watch period.	3-digit code	Cannot be unknown.
3	Last Haul Number	Last haul of off-watch period. If only one haul in off-watch, record that haul for both first and last haul of off-watch.	3-digit code	Cannot be unknown.
4	First Haul Begin Date	See APPENDIX C – SET/HAUL TIME DEFINITIONS	MM/DD/YY	Cannot be unknown.
5	Last Haul End Date	See APPENDIX C – SET/HAUL TIME DEFINITIONS	MM/DD/YY	Cannot be unknown.
6	First Haul Begin Time	See APPENDIX C – SET/HAUL TIME DEFINITIONS	HH:MM (24hr)	Dash.
7	Last Haul End Time	See APPENDIX C – SET/HAUL TIME DEFINITIONS	HH:MM (24hr)	Dash.
8	First Haul Begin Position	See APPENDIX C – SET/HAUL TIME DEFINITIONS Can be obtained from vessel electronics, FMRD-issued electronics, or captain's logbook.	Latitude/Longitude, to the nearest tenth of a minute OR LORAN station bearings	3-digit statistical area. 000 if statistical area unknown. See APPENDIX A – NORTHEAST STATISTICAL AREAS .
9	Last Haul End Position	See APPENDIX C – SET/HAUL TIME DEFINITIONS Can be obtained from vessel electronics, FMRD-issued electronics, or captain's logbook.	Latitude/Longitude, to the nearest tenth of a minute OR LORAN station bearings	3-digit statistical area. 000 if statistical area unknown. See APPENDIX A – NORTHEAST STATISTICAL AREAS .
10	Average Number of Basket Kept	Obtain from captain. Average per haul during off-watch period.	Whole baskets	Dash.

SCALLOP TRAWL OFF-WATCH HAUL LOG
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OBSTO OBHAU 07/01/21

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WATCH #	WATCH	DATE	TIME	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)				SEA SCALLOPS
01	INFO	mm/dd/yy	24 hours	Station 1	Latitude / Bearing	Station 2	Longitude / Bearing	# OF BASKETS
FIRST HAUL	9	BEGIN	05 / 06 / 22	00:00	9960-	41° 07.2	9960-	69° 22.8
LAST HAUL	15	END	05 / 07 / 22	06:00	9960-	41° 08.3	9960-	69° 25.6
								30
02	INFO	mm/dd/yy	24 hours	Station 1	Latitude / Bearing	Station 2	Longitude / Bearing	# OF BASKETS
FIRST HAUL	21	BEGIN	05 / 07 / 22	12:00	9960-	41° 08.3	9960-	69° 25.6
LAST HAUL	27	END	05 / 07 / 22	18:00	9960-	41° 07.4	9960-	69° 22.3
								40
03	INFO	mm/dd/yy	24 hours	Station 1	Latitude / Bearing	Station 2	Longitude / Bearing	# OF BASKETS
FIRST HAUL	33	BEGIN	05 / 08 / 22	00:00	9960-	41° 07.4	9960-	69° 22.3
LAST HAUL	39	END	05 / 08 / 22	06:00	9960-	41° 07.9	9960-	69° 24.9
								35
04	INFO	mm/dd/yy	24 hours	Station 1	Latitude / Bearing	Station 2	Longitude / Bearing	# OF BASKETS
FIRST HAUL	45	BEGIN	05 / 08 / 22	12:00	9960-	41° 07.9	9960-	69° 24.9
LAST HAUL	51	END	05 / 08 / 22	18:00	9960-	41° 06.9	9960-	69° 21.5
								35
05	INFO	mm/dd/yy	24 hours	Station 1	Latitude / Bearing	Station 2	Longitude / Bearing	# OF BASKETS
FIRST HAUL	57	BEGIN	05 / 09 / 22	00:00	9960-	41° 06.9	9960-	69° 21.5
LAST HAUL	63	END	05 / 09 / 22	06:00	9960-	41° 07.6	9960-	69° 23.4
								50
06	INFO	mm/dd/yy	24 hours	Station 1	Latitude / Bearing	Station 2	Longitude / Bearing	# OF BASKETS
FIRST HAUL	69	BEGIN	05 / 09 / 22	12:00	9960-	41° 07.6	9960-	69° 23.4
LAST HAUL	75	END	05 / 09 / 22	18:00	9960-	41° 07.2	9960-	69° 22.8
								45
07	INFO	mm/dd/yy	24 hours	Station 1	Latitude / Bearing	Station 2	Longitude / Bearing	# OF BASKETS
FIRST HAUL	81	BEGIN	05 / 10 / 22	00:00	9960-	41° 06.9	9960-	69° 21.5
LAST HAUL	87	END	05 / 10 / 22	06:00	9960-	41° 07.2	9960-	69° 22.8
								55
08	INFO	mm/dd/yy	24 hours	Station 1	Latitude / Bearing	Station 2	Longitude / Bearing	# OF BASKETS
FIRST HAUL	93	BEGIN	05 / 10 / 22	12:00	9960-	41° 07.9	9960-	69° 24.9
LAST HAUL	99	END	05 / 10 / 22	18:00	9960-	41° 07.2	9960-	69° 22.8
								55
09	INFO	mm/dd/yy	24 hours	Station 1	Latitude / Bearing	Station 2	Longitude / Bearing	# OF BASKETS
FIRST HAUL	105	BEGIN	05 / 11 / 22	06:00	9960-	41° 06.9	9960-	69° 21.5
LAST HAUL	111	END	05 / 11 / 22	12:00	9960-	41° 07.9	9960-	69° 24.9
								50
10	INFO	mm/dd/yy	24 hours	Station 1	Latitude / Bearing	Station 2	Longitude / Bearing	# OF BASKETS
FIRST HAUL	117	BEGIN	05 / 11 / 22	18:00	9960-	41° 08.3	9960-	69° 25.6
LAST HAUL	123	END	05 / 11 / 22	00:00	9960-	41° 06.9	9960-	69° 21.5
								45

OMB Control No.: 0648-0593
Expires on: 01/31/2024

Scallop Dredge Gear Characteristics Log

A Scallop Dredge gear is defined as a distinct combination of scallop dredges (port and/or starboard or aft) deployed during the trip. If two dredges are deployed at the same time (i.e., port and starboard), describe both dredges on a single Scallop Dredge Gear Characteristics Log. If dredges are used in different configurations (i.e., both together and then one individually), assign each configurations its own gear number and record them on separate Scallop Dredge Gear Characteristics Logs.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Gear Number	Unique identifier for each configuration of dredge or pair of dredges fished together.	2-digit code	Cannot be unknown.
2	Dredge Fished Aft	Visually confirm dredge was fished off the stern. Complete gear information fields under port dredge.	Check box	Cannot be unknown. Leave blank if not fished aft.
3	Frame Type	Visually confirm and verify with captain. Describe "other" in comments.	Check one	"0".
4	Frame Height	Measure. Does not include shoes.	Whole inches	Dash.
5	Frame Width	Measure.	Whole feet	Dash.
6	Rock Chains Used?	Yes/No.	Check one	"9".
7	Number of Rock Chains	Count. If some chains do not fully extend from frame to sweep (e.g., spider chains), dash and comment on number of rock chains between each tickler chain.	Whole number	Dash.
8	Tickler Chains Used?	Yes/No.	Check one	"9".
9	Number of Tickler Chains Used?	Count. Comment if tickler chains hung from other tickler chains.	Whole number	Dash.
10	Chain Configuration	Visually confirm and verify with captain. No chains = Standard (i.e., not Turtle Chain Mat). Comment if gear does not meet criteria of type captain calls it and record type as you see it.	Check one	"0".
11	Twine Top Mesh Size	Obtain inside measurement with calipers.	Whole millimeters	Dash.
12	# Meshes Wide	Count. Horizontally parallel to cutting bar of frame and club stick.	Whole number	Dash.
13	# Meshes Long	Count of whole meshes. Vertically from frame to club stick.	Whole number Do not include partial meshes	Dash.
14	Twine Top Hung	Visually confirm. Describe "combination" in comments.	Check one	"0".

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
15	# Rings on Which Twine Top Hangs	Count. If hung from chains, record the number of chains and comment.	Whole number	Dash.
16	Chafing Gear Used?	Yes/No.	Check one	"g".
17	# Rows of rings in Apron	Count vertically from club stick to twine top.	Whole number	Dash.
18	Inside ring size, Top of Bag	Measure with calipers. Do not measure warped rings.	Whole millimeters	Dash.
19	Inside ring size, Bottom of Bag	Measure with calipers. Do not measure warped rings.	Whole millimeters	Dash.
20	Turtle Chain Mat Verification	Check yes or no for each verification comment.	Check one for each	Leave blank if not turtle chain mat.

SCALLOP DREDGE GEAR CHARACTERISTICS LOG
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GEAR CODE <div style="border: 1px solid black; display: inline-block; padding: 2px;">1 3 2</div> D	GEAR NUMBER(s) 1	If the dredge is fished off the stern, check box here AFT (A) <input checked="" type="checkbox"/> 2
---	---------------------	--

PORT DREDGE (P)		
DREDGE FRAME FRAME TYPE 3 Unknown 0 FRAME HEIGHT 4 19 in Standard 1 TDD 2 X FRAME WIDTH 5 13 ft Other 9	CHAINS USED? NO YES NUMBER ROCK 6 0 1 X 7 9 TICKLER 8 0 1 X 9 6 CONFIGURATION 10 STANDARD 1 TURTLE CHAIN MAT 2 X	TWINE TOP MESH SIZE 11 258 mm 254 mm 261 mm 256 mm 255 mm 259 mm 254 mm 259 mm 254 mm 257 mm # MESHES WIDE 75 12 LONG 6 13 HUNG 14 Unknown 0 Diamond 1 X Square 2 Combination 8 # RINGS ON WHICH TWINE TOP HANGS 15 32
PORT DREDGE COMMENTS TURTLE CHAIN MAT VERIFICATION NO YES 20 Captain confirmed turtle chain mat <input checked="" type="checkbox"/> X Intersections connected with links <input checked="" type="checkbox"/> X All openings 14" or less <input checked="" type="checkbox"/> X Captain said squares equal 12 inches on each side See photos for TDD dredge. Dredge had 2 outside bail bars and 1 center bar. Cutting bar as positioned forward of the pressure plate.		
CHAIN BAG CHAFING GEAR USED? 16 NO 0 YES 1 X INSIDE RING SIZE (mm) (5 random measurements) TOP OF BAG 18 102 105 103 103 105 BOTTOM OF BAG 19 106 106 104 103 104 # ROWS IN APRON 9 17		

STARBOARD DREDGE (S)		
DREDGE FRAME FRAME TYPE Unknown 0 FRAME HEIGHT 19 in Standard 1 TDD 2 X FRAME WIDTH 13 ft Other 9	CHAINS USED? NO YES NUMBER ROCK 0 0 1 X 9 TICKLER 0 0 1 X 5 CONFIGURATION STANDARD 1 TURTLE CHAIN MAT 2 X	TWINE TOP MESH SIZE 254 mm 255 mm 254 mm 255 mm 257 mm 256 mm 255 mm 260 mm 255 mm 259 mm # MESHES WIDE 77 LONG 7 HUNG Unknown 0 Diamond 1 X Square 2 Combination 8 # RINGS ON WHICH TWINE TOP HANGS 32
STARBOARD DREDGE COMMENTS TURTLE CHAIN MAT VERIFICATION NO YES Captain confirmed turtle chain mat <input checked="" type="checkbox"/> X Intersections connected with links <input checked="" type="checkbox"/> X All openings 14" or less <input checked="" type="checkbox"/> X Same comments as port dredge		
CHAIN BAG CHAFING GEAR USED? NO 0 YES 1 X INSIDE RING SIZE (mm) (5 random measurements) TOP OF BAG 103 105 102 105 105 BOTTOM OF BAG 102 103 105 104 103 # ROWS IN APRON 9		

OBS/TRIP ID	A	
DATE LANDED mm/yy	B	/
PAGE #	C	<input type="checkbox"/> OF <input type="checkbox"/>

ADDITIONAL COMMENTS, PORT DREDGE

ADDITIONAL COMMENTS, STARBOARD DREDGE

FOR OFFICE USE ONLY

Scallop Dredge Haul Log

If the gear is set out, and only partially hauled back, the time spent hauling and resetting the net should be included in the haul's time.

Use a [SCALLOP DREDGE OFF-WATCH HAUL LOG](#) to document all hauls that occur during your off-watch period. Do not record off-watch hauls on a [Scallop Dredge Haul Log](#).

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Dredge Observed	Visually confirm. If two dredges are deployed, complete catch from both dredges must be recorded to be an observed haul.	Check one	"0".
2	Tow Speed	Obtain from captain average tow speed during tow.	Knots, to the nearest tenth	Dash.
3	Wire Out	Obtain from captain. Wire from towing blocks to trawl dredge for the majority of the haul.	Whole Fathoms	Dash.
4	Sea Scallop Clappers Observed?	Yes/No. Visually confirm and obtain weight estimate.	Check one	Record "9" if haul is unobserved.
5	Grey Meats or Parasites Observed?	Yes/No. Visually confirm and obtain weight estimate.	Check one	Record "9" if haul is unobserved.

SCALLOP DREDGE HAUL LOG
NMFS FISHERIES OBSERVER PROGRAM
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GEAR CODE D	GEAR # E	HAUL # F	HAUL OBS? G	ON-EFFORT? H	CATCH? I	INC TAKE? J	WEATHER CODE K	WIND L	WAVE HEIGHT N	DEPTH, HAUL BEGIN O	GEAR CONDITION CODE P
1 3 2	0 1	1 4 5	NO 0 YES 1 <input checked="" type="checkbox"/>	NO 0 YES 1 <input checked="" type="checkbox"/>	NO 0 YES 1 <input checked="" type="checkbox"/>	NO 0 <input checked="" type="checkbox"/> X YES 1	01	SPEED 5 kn DIRECTION 0 °	3 ft	35 fm	710

HAUL INFO	DATE mm/dd/yy	TIME 24 hours	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXX)		DREDGE OBSERVED	TOW SPEED	WIRE OUT	WATER TEMP			
BEGIN HAUL	05 / 12 / 22	05 : 00	Station 1	Latitude / Bearing	Station 2	Longitude / Bearing	1	2	3	T	°
BEGIN FISHING	05 / 12 / 22	05 : 06	9960 -	41 ° 07.2	9960 -	69 ° 22.8	Port 1 Starboard 2 Both 3 <input checked="" type="checkbox"/> X Aft 4	3 . 5 kn	100 fm	58 . 0	F
END HAUL	05 / 12 / 22	05 : 55	9960 -	41 ° 07.3	9960 -	69 ° 23.0	TARGET SPECIES U Sea Scallops		CODE V 8009		
GEAR ONBOARD	05 / 12 / 22	06 : 08					SEA SCALLOP CLAPPERS OBS? 4 NO 0 YES 1 <input checked="" type="checkbox"/> X	GREY MEATS OR PARASITES OBS? 5 NO 0 <input checked="" type="checkbox"/> X YES 1			

COMMENTS

SAMPLE WEIGHT MULTIPLIER W									
5 . 4 2									

SPECIES		SUB-SAMPLE WEIGHT	POUNDS	DISP CODE	WEIGHT		SPECIES		SUB-SAMPLE WEIGHT	POUNDS	DISP CODE	WEIGHT	
NAME	CODE				D/R	EST METHOD CODE	NAME	CODE				D/R	EST METHOD CODE
1 Sea Scallops A'	8009 B'	C'	169 D'	100 E'	F'	G'	11						
2 Monkfish (tail)			29	100	D	01	12						
3 Monkfish			18	012	R	01	13						
4 Yellowtail Flounder			6.4	100	R	01	14						
5 Shells, nk		26 . 0	141	054	R	02	15						
6 Starfish, Seastar, nk		12 . 5	68	001	R	02	16						
7 Debris, Rock			1,000	053	R	06	17						
8 Little Skate		7 . 3	40	001	R	02	18						
9 Clappers, Scallop		14 . 0	76	054	R	02	19						
10 Jonah Crab		1 . 6	9	001	R	02	20						

Scallop Dredge Off-Watch Haul Log

This log is to be used for recording dates, times, locations, and the amount of kept sea scallops for **off-watch** hauls on scallop dredge gear trips. Complete a single section for each off-watch period.

If you are aware of an incidental take of a marine mammal, sea turtle, or seabird during an off-watch period, complete as many fields as possible on a [SCALLOP DREDGE HAUL LOG](#) in addition to completing a [MARINE MAMMAL, SEA TURTLE, AND SEABIRD INCIDENTAL TAKE LOG](#).

Fields 1, 2, 4, 6, and 8 should be completed **before** going off watch. Fields 3, 5, 7, 9, and 10 should be completed **after** your off-watch ends (i.e., before coming back on-watch).

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Watch Number	Sequential by order off-watch number.	2-digit code	Cannot be unknown.
2	First Haul Number	First haul of off-watch period.	3-digit code	Cannot be unknown.
3	Last Haul Number	Last haul of off-watch period. If only one haul in off-watch, record that haul for both first and last haul of off-watch.	3-digit code	Cannot be unknown.
4	First Haul Begin Date	See APPENDIX C – SET/HAUL TIME DEFINITIONS .	MM/DD/YY	Cannot be unknown.
5	Last Haul End Date	See APPENDIX C – SET/HAUL TIME DEFINITIONS .	MM/DD/YY	Cannot be unknown.
6	First Haul Begin Time	See APPENDIX C – SET/HAUL TIME DEFINITIONS .	HH:MM (24hr)	Dash.
7	Last Haul End Time	See APPENDIX C – SET/HAUL TIME DEFINITIONS .	HH:MM (24hr)	Dash.
8	First Haul Begin Position	See APPENDIX C – SET/HAUL TIME DEFINITIONS . Can be obtained from vessel electronics, FMRD-issued electronics, or captain's logbook.	Latitude/Longitude, to the nearest tenth of a minute OR LORAN station bearings	3-digit statistical area. 000 if statistical area unknown. See APPENDIX A – NORTHEAST STATISTICAL AREAS .
9	Last Haul End Position	See APPENDIX C – SET/HAUL TIME DEFINITIONS . Can be obtained from vessel electronics, FMRD-issued electronics, or captain's logbook.	Latitude/Longitude, to the nearest tenth of a minute OR LORAN station bearings	3-digit statistical area. 000 if statistical area unknown. See APPENDIX A – NORTHEAST STATISTICAL AREAS .
10	Average Number of Basket Kept	Obtain from captain. Average per haul during off-watch period.	Nearest whole basket	Dash.

SCALLOP DREDGE OFF-WATCH HAUL LOG
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WATCH #	WATCH INFO	DATE mm/dd/yy	TIME 24 hours	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)			SEA SCALLOPS
01				Station 1	Latitude / Bearing	Station 2	# OF BASKETS KEPT (AVERAGE)
FIRST HAUL	BEGIN	05 / 06 / 22	00:00	9960-	41° 07.2	9960-	30
LAST HAUL	END	05 / 07 / 22	06:00	9960-	41° 08.3	9960-	
02				Station 1	Latitude / Bearing	Station 2	# OF BASKETS KEPT (AVERAGE)
FIRST HAUL	BEGIN	05 / 07 / 22	12:00	9960-	41° 08.3	9960-	40
LAST HAUL	END	05 / 07 / 22	18:00	9960-	41° 07.4	9960-	
03				Station 1	Latitude / Bearing	Station 2	# OF BASKETS KEPT (AVERAGE)
FIRST HAUL	BEGIN	05 / 08 / 22	00:00	9960-	41° 07.4	9960-	35
LAST HAUL	END	05 / 08 / 22	06:00	9960-	41° 07.9	9960-	
04				Station 1	Latitude / Bearing	Station 2	# OF BASKETS KEPT (AVERAGE)
FIRST HAUL	BEGIN	05 / 08 / 22	12:00	9960-	41° 07.9	9960-	35
LAST HAUL	END	05 / 08 / 22	18:00	9960-	41° 06.9	9960-	
05				Station 1	Latitude / Bearing	Station 2	# OF BASKETS KEPT (AVERAGE)
FIRST HAUL	BEGIN	05 / 09 / 22	00:00	9960-	41° 06.9	9960-	50
LAST HAUL	END	05 / 09 / 22	06:00	9960-	41° 07.6	9960-	
06				Station 1	Latitude / Bearing	Station 2	# OF BASKETS KEPT (AVERAGE)
FIRST HAUL	BEGIN	05 / 09 / 22	12:00	9960-	41° 07.6	9960-	45
LAST HAUL	END	05 / 09 / 22	18:00	9960-	41° 07.2	9960-	
07				Station 1	Latitude / Bearing	Station 2	# OF BASKETS KEPT (AVERAGE)
FIRST HAUL	BEGIN	05 / 10 / 22	00:00	9960-	41° 06.9	9960-	55
LAST HAUL	END	05 / 10 / 22	06:00	9960-	41° 07.2	9960-	
08				Station 1	Latitude / Bearing	Station 2	# OF BASKETS KEPT (AVERAGE)
FIRST HAUL	BEGIN	05 / 10 / 22	12:00	9960-	41° 07.9	9960-	55
LAST HAUL	END	05 / 10 / 22	18:00	9960-	41° 07.2	9960-	
09				Station 1	Latitude / Bearing	Station 2	# OF BASKETS KEPT (AVERAGE)
FIRST HAUL	BEGIN	05 / 11 / 22	06:00	9960-	41° 06.9	9960-	50
LAST HAUL	END	05 / 11 / 22	12:00	9960-	41° 07.9	9960-	
10				Station 1	Latitude / Bearing	Station 2	# OF BASKETS KEPT (AVERAGE)
FIRST HAUL	BEGIN	05 / 11 / 22	18:00	9960-	41° 08.3	9960-	45
LAST HAUL	END	05 / 11 / 22	00:00	9960-	41° 06.9	9960-	

OMB Control No.: 0648-0593
Expires on: 01/31/2024

Clam/Quahog Dredge Gear Characteristics Log

A Clam/Quahog Dredge Gear is defined as a distinct combination of clam/quahog dredges (port and starboard or aft) deployed during the trip. If two dredges are deployed at the same time (i.e., port and starboard), describe both dredges on a single Clam/Quahog Dredge Gear Characteristics Log. If dredges are used in different configurations (i.e., both together and then one individually), assign each configuration its own gear number and record them on separate Clam/Quahog Dredge Gear Characteristics Logs.

Most gear information will have to be obtained from the captain, as it will not be feasible to safely measure the gear if on an A-frame on the stern of the vessel

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Gear Number	Unique identifier for each configuration of dredge or pair of dredges fished together.	2-digit code	Cannot be unknown.
2	Dredge Fished Aft	Visually confirm dredge was fished off the stern. Complete gear information fields under port dredge.	Check box	Cannot be unknown. Leave blank if not fished aft.
3	Cage Height	Obtain from captain. If range, record largest height and record range in comments.	Whole inches	Dash.
4	Cage Width	Obtain from captain.	Whole inches	Dash.
5	Cage Length	Obtain from captain. Straight-line measurement on the bottom of the dredge.	Whole inches	Dash.
6	Cage Bottom Bar Diameter	Obtain from captain. If varies, dash field and record range in comments.	Inches to the nearest tenth	Dash.
7	Cage Bottom Bar Spacing	Obtain from captain. If varies, dash field and record range in comments.	Inches to the nearest tenth	Dash.
8	Sorter Used?	Yes/No. Visually confirm.	Check one	"9".
9	Number of Nozzles	Obtain from captain. Refers to where pressurized water is emitted.	Whole number	Dash.
10	Chain Bag Used?	Yes/No. Visually confirm. More common on side-rigged vessels.	Check one	"9".
11	Average Number of Links Between Two Rings	Obtain from captain. Average number of links between two rings in bottom of chain bag.	Whole number	Dash. Leave blank if chain bag not used.
12	Link Stock Size	Obtain from captain or measure with calipers. From bottom of chain bag.	Fraction of an inch	Dash. Leave blank if chain bag not used.
13	Inside Ring Size (Top of Bag)	Measure with calipers. Measure 5 random rings from the top of the chain bag. Avoid measuring any noticeably deformed rings.	Whole millimeters	Dash. Leave blank if chain bag not used.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
14	Inside Ring Size (Bottom of Bag)	Measure with calipers. Do not measure warped rings.	Whole millimeters	Dash. Leave blank if chain bag not used.
15	Outside Ring Size	Measure with calipers. Do not measure warped rings.	Whole millimeters	Dash. Leave blank if chain bag not used.
16	Towline Type	Obtain from captain. Single vs bridle (two lines). Describe "other" on line 16A.	Check one	"0".
17	Towline Position	Obtain from captain. <u>Forward</u> : Attached to the tow bar, in front of the knife. <u>Over top of the knife</u> : Set further back on the dredge, above the knife. Describe "other" on line 17A.	Check one	"0".

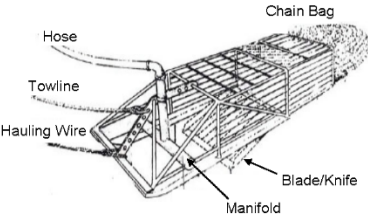
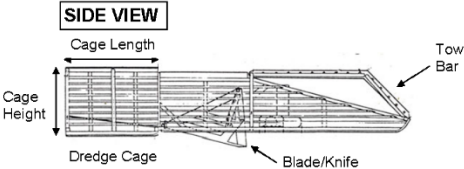
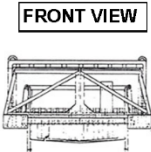
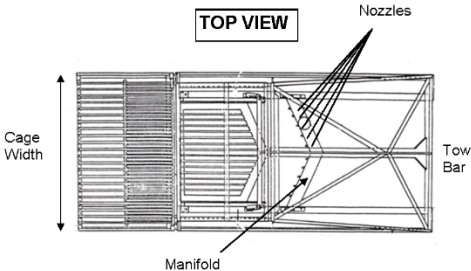
CLAM/QUAHOG DREDGE GEAR CHARACTERISTICS LOG
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OBS/TRIP ID	A	A99011-
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GEAR CODE D	GEAR NUMBER(S) 1	If the dredge is fished off the stern, check box here 2	PORT DREDGE COMMENTS Vessel is stern rigged
<div>381</div>	1	AFT (A) <input checked="" type="checkbox"/>	
PORT DREDGE (P)		STARBOARD DREDGE (S)	STARBOARD DREDGE COMMENTS
DREDGE CAGE		DREDGE CAGE	
HEIGHT 3 WIDTH 4 LENGTH 5		HEIGHT WIDTH LENGTH	
20 in 90 in 120 in		in in in	
CAGE BOTTOM BAR BAR DIAMETER SPACING		CAGE BOTTOM BAR BAR DIAMETER SPACING	
1 . 0 6 in 1 . 2 7 in		. in . in	
NUMBER OF NOZZLES 9		NUMBER OF NOZZLES	
30			
CHAIN BAG		CHAIN BAG	
USED? NO 0 <input checked="" type="checkbox"/> YES 1 10		USED? NO 0 YES 1	
AVG # OF LINKS BTW 2 RINGS 11		AVG # OF LINKS BTW 2 RINGS	
LINK STOCK SIZE / 12		LINK STOCK SIZE /	
INSIDE RING SIZE (mm) (5 random measurements)		INSIDE RING SIZE (mm) (5 random measurements)	
TOP OF BAG 13		TOP OF BAG	
BOTTOM OF BAG 14		BOTTOM OF BAG	
15			
OUTSIDE RING SIZE mm		OUTSIDE RING SIZE mm	
TOWLINE		TOWLINE	
TOWLINE TYPE: 16		TOWLINE POSITION: 17	
Unknown 0		Unknown 0	
Single 1 <input checked="" type="checkbox"/>		Forward 1 <input checked="" type="checkbox"/>	
Bridle 2		Over Top of the Knife 2	
Other 9		Other 9	
16A		17A	

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DIAGRAMS FOR REFERENCE ONLY



ADDITIONAL PORT DREDGE COMMENTS

ADDITIONAL STARBOARD DREDGE COMMENTS

FOR OFFICE USE ONLY

Clam/Quahog Dredge Haul Log

If the gear is set out, and only partially hauled back, the time spent hauling and resetting the net should be included in the haul's time.

Use a [CLAM/QUAHOG DREDGE OFF-WATCH HAUL LOG](#) to document all hauls that occur during your off-watch period. Do not record off-watch hauls on a [Clam/Quahog Dredge Haul Log](#).

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Tow Speed	Obtain from captain. Average tow speed during tow.	Knots, to the nearest tenth	Dash.
2	Wire Out	Obtain from captain. Distance from towing blocks to the gear for majority of the haul.	Whole Fathoms	Dash.
3	Clam/Quahog Clappers Observed?	Yes/No. Visually confirm. Corresponds to target species.	Check one	"g".

CLAM/QUAHOG DREDGE HAUL LOG
 NMFS FISHERIES OBSERVER PROGRAM
 OBCDH OBHAU OBSPP 07/01/21

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GEAR CODE	D	3 8 1	GEAR #	E	0 1	HAUL #	F	0 0 1	HAUL OBS?	G	NO 0 YES 1 X	ON-EFFORT?	H	NO 0 YES 1 X	CATCH?	I	NO 0 YES 1 X	INC TAKE?	J	NO 0 X YES 1	WEATHER CODE	K	01	WIND	L	SPEED 10 DIRECTION 90	WAVE HEIGHT	N	1 ft	DEPTH,	O	20 fm	GEAR COND CODE	P	810																	
HAUL/FISHING INFO	DATE	AND	TIME	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)																		WATER TEMP	T	60 . 1 F	TOW SPEED	1	3 . 7 kn	WIRE OUT	2	110 fm																						
BEGIN	06 / 15 / 22		10 : 10	Station 1	Latitude / Bearing				Station 2	Longitude / Bearing																																										
HAUL	06 / 15 / 22		10 : 10	9960 -	39 ° 10.5				9960 -	74 ° 11.3																																										
BEGIN	06 / 15 / 22		10 : 13																																																	
FISHING	06 / 15 / 22		10 : 13																																																	
END	06 / 15 / 22		10 : 35	9960 -	39 ° 11.2				9960 -	74 ° 10.3																																										
HAUL	06 / 15 / 22		10 : 35																																																	
GEAR	06 / 15 / 22		10 : 42																																																	
ONBOARD	06 / 15 / 22		10 : 42																																																	
COMMENTS																																																				
<p>Sorter motor broke. 30 minutes lost for repair</p> <p>Blade was bent during tow.</p>																																																				
<p>SAMPLE WEIGHT MULTIPLIER</p> <p>W</p>																																																				

SPECIES							SPECIES						
NAME		CODE	SUB-SAMPLE WEIGHT	POUNDS	DISP CODE	ESTIMATION METHOD CODE	NAME		CODE	SUB-SAMPLE WEIGHT	POUNDS	DISP CODE	ESTIMATION METHOD CODE
1	Ocean Quahog	B'	C'	D'	E'	F'	11						
2	Sea Cucumber, nk			2	001	R	12						
3	Sea Squirt, nk			1.1	001	R	13						
4							14						
5							15						
6							16						
7							17						
8							18						
9							19						
10							20						

Clam/Quahog Dredge Off-Watch Haul Log

This log is to be used for recording dates, times, locations, and the amount of kept clams/quahogs for **off-watch** hauls on clam/quahog dredge gear trips. Complete a single section for each off-watch period.

If you are aware of an incidental take of a marine mammal, sea turtle, or seabird during an off-watch period, complete as many fields as possible on a [Clam/Quahog Dredge Haul Log](#) in addition to completing a [MARINE MAMMAL, SEA TURTLE, AND SEABIRD INCIDENTAL TAKE LOG](#).

Fields 1, 2, 4, 6, and 8 should be completed **before** going off watch. Fields 3, 5, 7, 9, and 10 should be completed **after** your off-watch ends (i.e., before coming back on-watch).

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Watch Number	Sequential by order off-watch number.	2-digit code	Cannot be unknown.
2	First Haul Number	First haul of off-watch period.	3-digit code	Cannot be unknown.
3	Last Haul Number	Last haul of off-watch period. If only one haul in off-watch, record that haul for both first and last haul of off-watch.	3-digit code	Cannot be unknown.
4	First Haul Begin Date	See APPENDIX C – SET/HAUL TIME DEFINITIONS .	MM/DD/YY	Cannot be unknown.
5	Last Haul End Date	See APPENDIX C – SET/HAUL TIME DEFINITIONS .	MM/DD/YY	Cannot be unknown.
6	First Haul Begin Time	See APPENDIX C – SET/HAUL TIME DEFINITIONS .	HH:MM (24hr)	Dash.
7	Last Haul End Time	See APPENDIX C – SET/HAUL TIME DEFINITIONS .	HH:MM (24hr)	Dash.
8	First Haul Begin Position	See APPENDIX C – SET/HAUL TIME DEFINITIONS . Can be obtained from vessel electronics, FMRD-issued electronics, or captain's logbook.	Latitude/Longitude, to the nearest tenth of a minute OR LORAN station bearings	3-digit statistical area 000 if statistical area unknown. See APPENDIX A – NORTHEAST STATISTICAL AREAS .
9	Last Haul End Position	See APPENDIX C – SET/HAUL TIME DEFINITIONS . Can be obtained from vessel electronics, FMRD-issued electronics, or captain's logbook.	Latitude/Longitude, to the nearest tenth of a minute OR LORAN station bearings	3-digit statistical area 000 if statistical area unknown. See APPENDIX A – NORTHEAST STATISTICAL AREAS .
10	Average Number of Basket Kept	Obtain from captain. Average per haul during off-watch period.	Nearest whole basket	Dash.

CLAM/QUAHOG DREDGE OFF-WATCH HAUL LOG
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WATCH #	WATCH	DATE	TIME	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)				CLAM/QUAHOG
01	INFO	mm/dd/yy	24 hours	Station 1	Latitude / Bearing	Station 2	Longitude / Bearing	# OF BASKETS
FIRST HAUL	9	BEGIN	05 / 06 / 22	9960-	41° 07.2	9960-	69° 22.8	10
LAST HAUL	15	END	05 / 07 / 22	9960-	41° 08.3	9960-	69° 25.6	30
02	INFO	mm/dd/yy	24 hours	Station 1	Latitude / Bearing	Station 2	Longitude / Bearing	CLAM/QUAHOG
FIRST HAUL	21	BEGIN	05 / 07 / 22	9960-	41° 08.3	9960-	69° 25.6	# OF BASKETS
LAST HAUL	27	END	05 / 07 / 22	9960-	41° 07.4	9960-	69° 22.3	KEPT (AVERAGE)
								40
03	INFO	mm/dd/yy	24 hours	Station 1	Latitude / Bearing	Station 2	Longitude / Bearing	CLAM/QUAHOG
FIRST HAUL	33	BEGIN	05 / 08 / 22	9960-	41° 07.4	9960-	69° 22.3	# OF BASKETS
LAST HAUL	39	END	05 / 08 / 22	9960-	41° 07.9	9960-	69° 24.9	KEPT (AVERAGE)
								35
04	INFO	mm/dd/yy	24 hours	Station 1	Latitude / Bearing	Station 2	Longitude / Bearing	CLAM/QUAHOG
FIRST HAUL	45	BEGIN	05 / 08 / 22	9960-	41° 07.9	9960-	69° 24.9	# OF BASKETS
LAST HAUL	51	END	05 / 08 / 22	9960-	41° 06.9	9960-	69° 21.5	KEPT (AVERAGE)
								35
05	INFO	mm/dd/yy	24 hours	Station 1	Latitude / Bearing	Station 2	Longitude / Bearing	CLAM/QUAHOG
FIRST HAUL	57	BEGIN	05 / 09 / 22	9960-	41° 06.9	9960-	69° 21.5	# OF BASKETS
LAST HAUL	63	END	05 / 09 / 22	9960-	41° 07.6	9960-	69° 23.4	KEPT (AVERAGE)
								50
06	INFO	mm/dd/yy	24 hours	Station 1	Latitude / Bearing	Station 2	Longitude / Bearing	CLAM/QUAHOG
FIRST HAUL	69	BEGIN	05 / 09 / 22	9960-	41° 07.6	9960-	69° 23.4	# OF BASKETS
LAST HAUL	75	END	05 / 09 / 22	9960-	41° 07.2	9960-	69° 22.8	KEPT (AVERAGE)
								45
07	INFO	mm/dd/yy	24 hours	Station 1	Latitude / Bearing	Station 2	Longitude / Bearing	CLAM/QUAHOG
FIRST HAUL	81	BEGIN	05 / 10 / 22	9960-	41° 06.9	9960-	69° 21.5	# OF BASKETS
LAST HAUL	87	END	05 / 10 / 22	9960-	41° 07.2	9960-	69° 22.8	KEPT (AVERAGE)
								55
08	INFO	mm/dd/yy	24 hours	Station 1	Latitude / Bearing	Station 2	Longitude / Bearing	CLAM/QUAHOG
FIRST HAUL	93	BEGIN	05 / 10 / 22	9960-	41° 07.9	9960-	69° 24.9	# OF BASKETS
LAST HAUL	99	END	05 / 10 / 22	9960-	41° 07.2	9960-	69° 22.8	KEPT (AVERAGE)
								55
09	INFO	mm/dd/yy	24 hours	Station 1	Latitude / Bearing	Station 2	Longitude / Bearing	CLAM/QUAHOG
FIRST HAUL	105	BEGIN	05 / 11 / 22	9960-	41° 06.9	9960-	69° 21.5	# OF BASKETS
LAST HAUL	111	END	05 / 11 / 22	9960-	41° 07.9	9960-	69° 24.9	KEPT (AVERAGE)
								50
10	INFO	mm/dd/yy	24 hours	Station 1	Latitude / Bearing	Station 2	Longitude / Bearing	CLAM/QUAHOG
FIRST HAUL	117	BEGIN	05 / 11 / 22	9960-	41° 08.3	9960-	69° 25.6	# OF BASKETS
LAST HAUL	123	END	05 / 11 / 22	9960-	41° 06.9	9960-	69° 21.5	KEPT (AVERAGE)
								45

Marine Mammal, Sea Turtle, and Seabird Incidental Take Log

The purpose of this log is to document incidentally taken marine mammals, sea turtles, and seabirds. For sampling protocols and priorities, see [Observer On-Deck Reference Guide](#). For definitions and detailed information on preparing for, handling, and sampling incidental takes in general and species specific detailed explanations, see Incidental Takes and Protected Species Information in the [Observer Operations Manual](#).

For each incidental take, complete a new line on this log. If more than one animal is taken at a time, record each animal on a separate line. The same log may be used for all incidental takes occurring on a trip, regardless of haul number, if they are all caught by the same vessel.

For pair trawl trips, incidental takes should never be duplicated.

- If one observer: record all incidental takes regardless of which vessel the net was hauled onboard.
- If two observers: only record the incidental takes that occur on the vessel to which you are deployed.

Comments

Record any additional information regarding the incidental take(s), especially when data are unable to be collected. The COMMENTS section should include a list of identifying characteristics, details on the entanglement situation, and a description of the overall condition of the animal. If more room is needed, use the back of this log, making sure to indicate "See Back" on the front. For NEFOP and IFS trips, reference each comment with its corresponding field name and PSID. Also, include any other relevant information regarding the incidental take, such as for dredge/trawl gear if the animal was seen in the dredge/net prior to dumping on deck.

If an animal fall from the gear (alive or dead), complete this log and record additional comments regarding the "fallout," (e.g., the specifics of how the animal was entangled, whether the animal sank or floated away).

Turtle takes: comment on whether the animal slid out or escaped from the gear. Comment on if and how the turtle was hooked and/or entangled. If any gear was left on the animal when released, thoroughly describe the amount of gear, including linear feet.

Marine mammals: comment on whether the animal was released with gear. Include a description of the gear (type, material, any buoys/floats, etc.), how the animal was entangled, and how much gear remained upon release.

Seabirds: comment when animals are seen diving near setting/hauling of gear, if chasing bait, offal (entrails and internal organs of processed species), or fallouts near gear, or any details relative to how the animal(s) became entangled.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1*	Protected Species ID #	Sequential for each animal in order of time taken.	2-digit code	Cannot be unknown.
2*	Haul Number	Must match the corresponding Haul Log .	3-digit code	Cannot be unknown.
3*	Gear Number	Must match the corresponding Gear Characteristics Log .	2-digit code	Cannot be unknown.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
4	Net Number/Net Position	Gillnet & beach seine: net number that the animal was taken in within the string, starting with "01", for the first net hauled back. Scallop Dredge, Scallop Trawl and Twin Trawl Gear: dredge/net the animal was taken in, <u>P</u> ort or <u>S</u> tarboard.	2-digit number Single letter	"00" Only filled in for Gillnet, Scallop Dredge, Scallop Trawl, and Twin Trawl; otherwise leave blank.
5	Time Brought Up	Local time animal brought onboard, or alongside vessel (if not onboard).	HH:MM (24hr)	Dash.
6	Active Deterrent Device Condition	Determine audibly.	1-digit code	"0".
7*	Species Name	See APPENDIX T – SPECIES CODES AND LOGS .	N/A	Cannot be unknown.
8	Species Code	Filled in by FMRD staff for data entry. Observers: leave blank.	4-digit code	Cannot be unknown.
9*	Tag Number	Tag attached by observer and/or already present on animal. Photograph tag location. Include entire tag number and letters, including "D0", "DOA", etc. for FMRD tags.	Alphanumeric code NEFOP and IFS: up to 4 unique tag numbers per animal ASM: record additional tags in comments	Dash.
10*	Tag Code	Refers to corresponding Tag Number	1-digit code	"0".
11*	Entanglement Situation	Primary entanglement/interaction. See APPENDIX Q – ENTANGLEMENT CODES	2-digit code	"00" and describe first observation in comments.
12*	Animal Condition	Condition of the animal when released. See APPENDIX R – ANIMAL CONDITION CODES	2-digit code	"00".
13	Onboard?	Yes/No. See definition in <u>Operations Manual</u> .	1-digit code	"9".
14*	Photo(s) Taken?	Yes/No. Comments required if animal not photographed.	1-digit code	Cannot be unknown.
15	Sampled?	0 (No): no additional sampling 1 (Yes): a Marine Mammal or Sea Turtle Biological Sample Log exists. 2 (Yes, feathers only): Birds	1-digit code	Cannot be unknown.
16	Estimated Length	Estimated by observer. Leave blank for birds. Sea turtles: Notch to Tip (curvilinear). Marine mammals: Total Length (straight).	Whole centimeters	Dash. Dash if actual measurements taken on <u>Sample Log</u> .

MARINE MAMMAL, SEA TURTLE, AND SEA BIRD INCIDENTAL TAKE LOG
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PSID #	HAUL NUM	GEAR NUM	NET NUM/ DREDGE/NET POSITION (p/s/u/a)	TIME (24 hours)	ADD COND CODE	SPECIES		TAG		ENTANG SITU CODE	ANIMAL COND CODE	ANIMAL ONBRD? 0=No 1=Yes	PHOTO TAKEN? 0=No 1=Yes	SAMPLED? 0=No 1=Yes 2 = Yes, feathers only	EST LEN (cm) (if no actual) (no birds)
						NAME	CODE	NUMBER(S) (record most recent first)	CODE(S)						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

FOR GILLNET GEARS:

0 1	3	3	8	10:04	2	Harbor Porpoise		D07982	1	04	11	0	1	1	105
-------	---	---	---	-------	---	-----------------	--	--------	---	----	----	---	---	---	-----

FOR DREDGE, SCALLOP TRAWL, & TWIN TRAWL GEARS:

0 2	4	1	p	12:13	1	Loggerhead Turtle		QQS555	1						
								PPD117	1	18	09	1	1	1	---

FOR OTHER GEARS:

0 3	15	2	---	12:20	1	Greater Shearwater			2	26	13	1	1	0	---
___ 4				:											
___ 5				:											
___ 6				:											
___ 7				:											

COMMENTS: List identifying characteristics, describe in detail the entanglement situation, include a description of the overall body condition of the animal, behavior on deck and upon release and any other related information. Use back of log if more room is needed.

PSID #01- Fell from net when animal came to roller head first and meshes tore dropping animal into water, but was recovered using gaff into head of animal. Small sample of dorsal fin taken for DNA, tagged around peduncle & photographed while in water, but was not brought onboard as too heavy to lift over side rail. No beak; spade-like flat-topped small teeth; dark gray/black coloration to dorsal surface of body, dorsal fin, flippers and fluke gradually changing to light gray on lateral body and white belly. Could not see entire R side of body but L side had no visible damage or blood except thin, linear cut in skin down to blubber around head behind blowhole where head was through mesh. R flipper also through a mesh to axilla which tore when raised to hauler. Indentation to skin around flipper at axilla but did not penetrate skin. Body sunk immediately when released.

See back for more comments.

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ACTIVE DETERRENT DEVICE (ADD) CONDITION CODES: 0 = Unknown 1 = No Pingers Used On Gear 2 = Audible, Not Tested 3 = Inaudible, Tested and Working 4 = Inaudible, Tested and Not Working 5 = Inaudible, Not Tested 6 = Absent (Lost) 7 = Audible, Tested and Working 8 = Audible, Tested and Not Working TAG CODES: 0 = Unknown 1 = Tag Applied by Observer 2 = No Tag(s) 3 = Tag Already Present, Left On 4 = Tag Already Present, Removed NOTE: Record Turtle Pit Tags on the Sample Log	ENTANGLEMENT / INTERACTION SITUATION CODES: 00 = Unknown 01 = Fell From Gear at a Point Unknown 02 = Fell From Gear Before Exiting Water 03 = Fell From Gear Once Hauled Out of Water 04 = Fell From Gear Due to Force of Roller 05 = Removal Requires Cutting of Gear/Animal 06 = Removal Does NOT Require Cutting of Gear/Animal 08 = Caught in Wings of Trawl Net 10 = Sea Bird Caught, Gangion Attached to Mainline 11 = Sea Bird Caught, Gangion Unattached to Mainline 12 = Hooked, Ingested 13 = Hooked, Beak 14 = Hooked, Head 15 = Hooked, Flipper 16 = Hooked, Carapace 17 = Hooked, Other/Unknown 18 = Caught Inside Dredge Chain Bag 19 = On Top of Dredge or Dredge Frame NOTE: If more than one code applies to a situation, choose the code that describes the primary entanglement/interaction (e.g. a turtle is observed inside the twine top of a dredge and falls from the gear as it is hauled up - choose code 21 as it best describes the primary interaction). 20 = Caught in Dredge Frame or Between Bails 21 = Caught Inside Dredge in Twine Top 22 = Caught on Sweep/Tickler/Rock Chains 23 = Caught in Bridles/Cables/Warp 24 = Inside Mouth of Trawl Net 25 = Inside Belly of Trawl Net 26 = Inside Codend of Trawl Net 27 = Caught in Sweep or Footrope of Trawl Net 28 = Contact with Vessel or Vessel Equipment other than Fishing Gear 29 = Entangled in Gear other than Vessel's Fishing Gear (e.g. Ghost Gear Caught by Vessel) 30 = Caught in Catch Pump 31 = Entrapped/caught in Bunt of Purse Seine 32 = Entrapped/caught in Net/Wing of Purse Seine 33 = Caught in the Buoyline 99 = Other	ANIMAL CONDITION CODES (when released): 00 = Unknown 01 = Alive, see comments 04 = Alive, Hook/Gear In/Around Mouth 05 = Alive, Hook/Gear In/Around Flipper 06 = Alive, Hook/Gear In/Around Another Single Body Part 07 = Alive, Hook/Gear In/Around Several Body Parts 08 = Alive, Seen by Captain/Crew ONLY 09 = Alive, resuscitated (turtle) 10 = Dead, Condition Unknown 11 = Dead, Fresh 12 = Dead, Moderately Decomposed 13 = Dead, Severely Decomposed 14 = Dead, Seen by Capt/Crew ONLY NOTE: If more than one code applies, choose the code that describes the most specific condition (e.g. a turtle is alive and released with gear around the left front flipper - choose code 05 as it is most specific at release).
ADDITIONAL COMMENTS <p>PSID #02- Turtle foreflipper seen protruding through dredge ring prior to dumping. Found in pile of catch right side up during sorting @ depth of approx. 6in below scallops. No movement seen and not reacting to eye reflex or flipper tug stimuli test. Moved from pile by crew holding edges of plastron to area of deck in shade. Resuscitation begun at 12:30 with body flat on board and hind quarters elevated about 6in high. Turtle was rocked gently from side to side occasionally while on board. No visible drainage from nose or mouth noted. No movement for 4 hours, then began moving flippers back & forth while opening & closing mouth; kept onboard for 1 more hour until haul completed. Was then able to crawl around deck so was released. Total resuscitation time = 5 hrs. Carried to stern ramp by lifting sides of carapace & released off stern ramp tail first gently into water. Gear was out of water and engine in neutral. Swam few strokes & dove immediately. At surface <10 sec & not sighted again. Tag present on right flipper when found, left on with another tag added to L flipper. 2 pairs of prefrontal scutes, 5 costal scutes w/ first costal touching nuchal scute, 3 inframarginals w/ no pores, overall brown/orange coloration.</p> <p>PSID #03- Shearwater not seen in net but found in pile of fish after dumping. Birds feather were water logged w/ head and body feathers 45% intact. Tissue on legs torn exposing some bone. Opening in body cavity exposing internal tissue with most organs missing and skeletal remains intact. Remaining skin mushy and tore easily. Odor like rotting flesh and coloration on feet faded to grayish pink and hanging from bones. Feathers taken and retained from breast area (easily pulled from skin with no resistance). Id'd by tubes on top of black beak that is strongly hooked, dark black cap on white head and neck, belly feathers white with dirty brown areas in feathers on center ventral mid to rear body, 4 toes present with 3 webbed, black dorsal wings and body.</p>		

Marine Mammal Biological Sample Log

The purpose of this log is to record sex, body measurements, and biological samples taken from all incidentally taken marine mammals. Instructions on obtaining measurements are in the [Observer On-Deck Reference Guide](#) and more detailed explanations are in the [Observer Operations Manual](#). If the animal was not biologically sampled (i.e., no measurements or samples taken), do not complete this log but instead record all comments, including why the animal was not sampled, on the [MARINE MAMMAL, SEA TURTLE, AND SEABIRD INCIDENTAL TAKE LOG](#). You can still use the drawings on this log to show additional detail, if helpful.

Comments

For **each animal**, document how much of the animal was examined (e.g., “only dorsal and lateral sides seen”). Thoroughly sketch and describe identifying characteristics, new and/or healed wounds, the amount and location of scavenger damage and/or decomposition, the firmness and coloration of tissues, condition of the skin (e.g., cracked, sloughing, dull, glossy), the presence or absence of blood (record if bleeding), any missing parts, and smell. Include comments about the animal's behavior on deck and upon release (lethargic, active, calm, vocalizing, struggling, swam away, sank, floated at surface, righted itself, dove, etc.). Also record the amount and location of gear remaining on the animal. Reference each description with the animal's unique PSID # (#1) and be sure to circle which side of the animal is illustrated.

Record any additional information regarding the marine mammal incidental take(s), especially when data are unable to be collected. Reference each comment with its corresponding field name.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Protected Species ID#	Must match the corresponding record on the MARINE MAMMAL, SEA TURTLE, AND SEABIRD INCIDENTAL TAKE LOG .	2-digit code	Cannot be unknown.
2	Species Name	See APPENDIX T – SPECIES CODES AND LOGS .	N/A	Cannot be unknown.
3	Species Code	Filled in by FMRD staff for data entry. Observers: leave blank.	4-digit code	Cannot be unknown.
4	Sex	See On-Deck Reference Guide .	1-digit code	“0”.
5	Body Temperature	Lateral dorsal musculature temperature. Take as soon as possible after animal is brought onboard, before cutting into the animal. See On-Deck Reference Guide for diagram of location	Degrees Fahrenheit to the nearest tenth	Dash.
6	Blubber Thickness	Measure where the blubber meets the muscle, up to and including the skin. See On-Deck Reference Guide for diagram of location.	Centimeters, to the nearest tenth	Dash.
7	Total Length	See On-Deck Reference Guide .	Whole centimeters	Dash.
8	Axillary Girth	See On-Deck Reference Guide .	Whole centimeters	Dash.
9	Hind Flipper or Pectoral Flipper Length	See On-Deck Reference Guide .	Whole centimeters	Dash.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
10	Pectoral Flipper Width	See <u>On-Deck Reference Guide</u> .	Whole centimeters	Dash. Dash for pinnipeds.
11	Dorsal Fin Height	See <u>On-Deck Reference Guide</u> .	Whole centimeters	Dash. Dash for pinnipeds.
12	Fluke Width	See <u>On-Deck Reference Guide</u> .	Whole centimeters	Dash. Dash for pinnipeds.
13	Whole Animal Retained	Number collected.	Whole Number	Cannot be unknown. "0" if not collected.
14	Fin Clip/Flipper/Skin Sample Retained	Number collected.	Whole Number	Cannot be unknown. "0" if not collected.
15	Jaw Sample Retained	Number collected.	Whole Number	Cannot be unknown. "0" if not collected.
16	Stomach Sample Retained	Number collected.	Whole Number	Cannot be unknown. "0" if not collected.
17	Blubber Sample Retained	Number collected.	Whole Number	Cannot be unknown. "0" if not collected.
18	Muscle Sample Retained	Number collected.	Whole Number	Cannot be unknown. "0" if not collected.
19	Reproductive Tract Sample Retained	Number collected.	Whole Number	Cannot be unknown. "0" if not collected.
20	Head/Skull Sample Retained	Number collected.	Whole Number	Cannot be unknown. "0" if not collected.
21	Other Sample Retained	Number collected. Describe type in comments.	Whole Number	Cannot be unknown. "0" if not collected.
22	Snout to Center of Eye	Measure for all Bottlenose Dolphins.	Whole centimeters	Dash. Leave blank for other species.
23	Snout to Ear	Measure for all Bottlenose Dolphins.	Whole centimeters	Dash. Leave blank for other species.
24	Snout to Center of Blowhole	Measure for all Bottlenose Dolphins.	Whole centimeters	Dash. Leave blank for other species.
25	Snout to Flipper Anterior Insertion	Measure for all Bottlenose Dolphins.	Whole centimeters	Dash. Leave blank for other species.

MARINE MAMMAL BIOLOGICAL SAMPLE LOG
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PSID#	SPECIES		SEX 0=U 1=M 2=F	MARINE MAMMAL MEASUREMENTS					CETACEANS ONLY			NUMBER OF SAMPLES TAKEN									
	NAME	CODE		Body Temp °F	Blubber Thickness cm	Total Length cm	Axillary Girth cm	Hind/Pec Flip Len cm	Pec Flip Width cm	Dorsal Fin Height cm	Fluke Width cm	Whole	Fincip/ Flipper/ Skin	Jaw	Stom	Blub	Musc	Repro Tract	Head/ Skull	Other list in comments	
101	2 Harbor Porpoise	3	4 2	5 87.6	6 3.5	7 123	8 84	8 19	10 8	11 10	12 30	13 1	14 1	15 0	16 0	17 0	18 0	19 0	20 0	21 0	
04	Harbor Seal		1	46.7	2.1	111	77	27	---	---	---	0	0	1	1	1	1	0	0	0	
05	Bottlenose Dolphin		2	75.8	2.6	202	116	32	16	19	50	0	1	1	1	1	1	1	0	3	

General Comments:

PSID05- Other samples = fetus, heart, and liver

BOTTLENOSE DOLPHIN

PSID# 05

22 Snout-eye (cm) 30

23 Snout-ear (cm) 34

24 Snout-blowhole (cm) 32

25 Snout-flipper (cm) 48

BOTTLENOSE DOLPHIN

PSID#

Snout-eye (cm)

Snout-ear (cm)

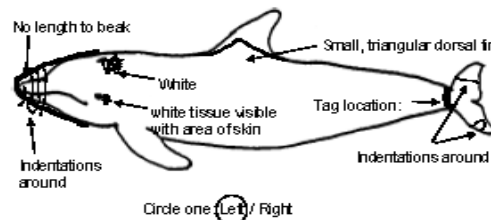
Snout-blowhole (cm)

Snout-flipper (cm)


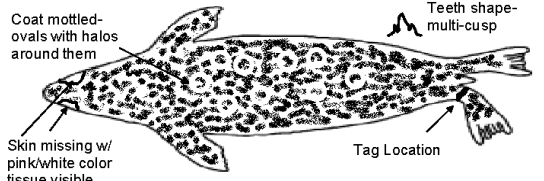
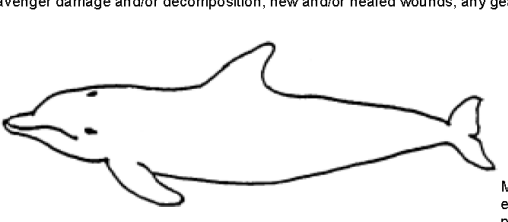
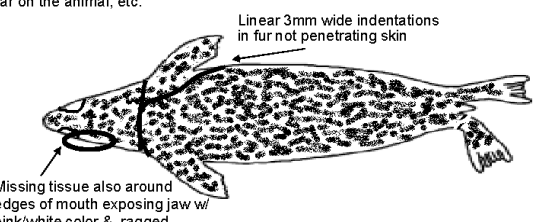
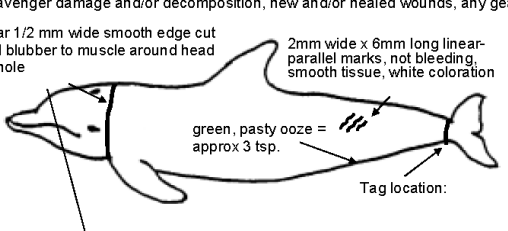
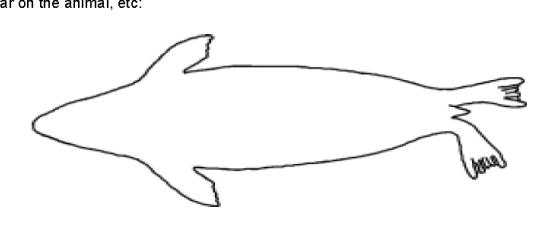
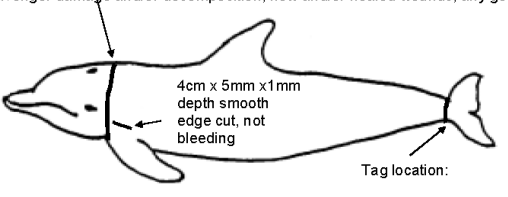

Sketch and describe ID characteristics, overall body condition, note any scavenger damage and/or decomposition, new and/or healed wounds, any gear on the animal, etc.

PSID# 01

Indents around tip of snout & flukes not thru skin- linear, < .2mm in width. White foam coming from blowhole. Skin firm like unripe banana, blubber creamy white, muscle deep maroon color & like meat @ grocery; skin behind L eye missing w/blubber visible= 1in wide x 1.4in deep -blood trickle approx. = 1tsp. volume



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<p>Sketch and describe ID characteristics, overall body condition, note any scavenger damage and/or decomposition, new and/or healed wounds, any gear on the animal, etc:</p> <p>PSID # <u>0 4</u></p> <p>L eye cloudy/milky white; Damaged tissue around eyes (4cm in diam) eyeballs still present; not actively bleeding anywhere on body.</p> <p>Linear marks around head/ neck area and underneath chest around L pectoral flipper</p>	 <p>Circle one: Left / Right</p>	 <p>Coat mottled-ovals with halos around them</p> <p>Teeth shape-multi-cusp</p> <p>Tag Location</p> <p>Skin missing w/ pink/white color tissue visible, ragged edges</p> <p>Circle one: <u>Dorsal</u> / Ventral</p>
<p>Sketch and describe ID characteristics, overall body condition, note any scavenger damage and/or decomposition, new and/or healed wounds, any gear on the animal, etc:</p> <p>PSID # <u>0 4</u></p> <p>Skin tissue around R jaw missing and exposing pink/white undertissue with ragged edges= 8cm x 4cm x 1 cm depth; bone not visible</p>	 <p>Circle one: Left / Right</p>	 <p>Linear 3mm wide indentations in fur not penetrating skin</p> <p>Missing tissue also around edges of mouth exposing jaw w/ pink/white color & ragged edges</p> <p>Circle one: Dorsal / <u>Ventral</u></p>
<p>Sketch and describe ID characteristics, overall body condition, note any scavenger damage and/or decomposition, new and/or healed wounds, any gear on the animal, etc:</p> <p>PSID # <u>0 5</u></p> <p>Cut around entire head behind blowhole; 3 linear marks on L peduncle; no other visible damage or wounds on L side of body; green pasty substance oozing from anal slit</p>	 <p>Uniform linear 1/2 mm wide smooth edge cut thru skin and blubber to muscle around head behind blowhole</p> <p>2mm wide x 6mm long linear-parallel marks, not bleeding, smooth tissue, white coloration</p> <p>green, pasty ooze = approx 3 tsp.</p> <p>Tag location:</p> <p>Circle one: <u>Left</u> / Right</p>	 <p>Circle one: Dorsal / Ventral</p>
<p>Sketch and describe ID characteristics, overall body condition, note any scavenger damage and/or decomposition, new and/or healed wounds, any gear on the animal, etc:</p> <p>PSID # <u>0 5</u></p> <p>Skin taut, firm and smooth like fresh eggplant; no discharge from blowhole; eyes intact but cloudy/milky white; gums light pink coloration; when cut for blubber sample blood was bright red & muscle warm; no missing or worn teeth-all conical w/ sharp points; cut over L pec flipper</p>	 <p>4cm x 5mm x 1mm depth smooth edge cut, not bleeding</p> <p>Tag location:</p> <p>Circle one: Left / <u>Right</u></p>	 <p>Circle one: Dorsal / Ventral</p>

Sea Turtle Biological Sample Log

The purpose of this log is to record body measurements, scute counts, identification criteria, condition, and biological samples taken from all incidentally taken sea turtles on an individual basis. If the animal was not biologically sampled (i.e., no measurements or samples taken), do not complete this log but instead record all comments, including why the animal was not sampled, on the [MARINE MAMMAL, SEA TURTLE, AND SEABIRD INCIDENTAL TAKE LOG](#). You can still use the drawings on this log to show additional detail, if helpful.

Do not record information on terrapins on this log. These animals should be recorded on the [INDIVIDUAL ANIMAL LOG](#).

Comments

For *each animal*, document how much of the animal was examined (e.g., “only dorsal and lateral sides seen”). Thoroughly sketch and describe identifying characteristics (including scute counts), new and/or healed wounds, the amount and location of scavenger damage and/or decomposition, the coloration of tissues, condition of the skin (i.e., cracked, cut), the presence or absence of blood (record if bleeding), any missing parts, and smell. Also, sketch the tag and biopsy location(s). Include comments about the animal's behavior on deck and upon release (lethargic, active, calm, struggling, swam away, sank, floated at surface, righted itself, dove, etc.). Provide details of animal's retrieval and details of the release (lethargic, active, calm, struggling, swam away, sank, floated at surface, righted itself, dove, etc.). Also record the amount and location of gear remaining on the animal, and the time required for resuscitation. Record any additional information regarding the sea turtle incidental take(s), especially when data are unable to be collected. Reference each comment with its corresponding field name.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Protected Species ID #	Must match the corresponding record on the MARINE MAMMAL, SEA TURTLE, AND SEABIRD INCIDENTAL TAKE LOG .	2-digit code	Cannot be unknown.
2	Species Name	See APPENDIX T – SPECIES CODES AND LOGS .	N/A	Cannot be unknown.
3	Species Code	Filled in by FMRD staff for data entry. Observers: leave blank.	4-digit code	Cannot be unknown.
4	Scanned for PIT Tag	Yes/No.	1-digit code	“9”.
5	PIT Tag Number	Obtain from PIT tag scanner.	Alphanumeric code	Dash.
6	Notch to Tip Length	See On-Deck Reference Guide .	Centimeters, to the nearest tenth	Dash.
7	Notch to Notch Length	See On-Deck Reference Guide .	Centimeters, to the nearest tenth	Dash.
8	Width	See On-Deck Reference Guide .	Centimeters, to the nearest tenth	Dash.
9	Vertebral Scute Count	See On-Deck Reference Guide .	Whole number	Dash.
10	Lateral Scute Count	See On-Deck Reference Guide .	Whole number	Dash.
11	Inframarginal Scute Count	See On-Deck Reference Guide .	Whole number	Dash.
12	1 Pair Prefrontals?	Yes/No.	1-digit code	“9”.
13	Overlap Scutes	Yes/No.	1-digit code	“9”.
14	Dorsal Color Code	Visually confirm.	2-digit code	“00”.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
15	Number of Samples Whole Animal	Number collected.	Whole number	Cannot be unknown "0" if not collected.
16	Number of Samples Biopsy/Skin Samples	Number collected.	Whole number	Cannot be unknown "0" if not collected.
17	Number of Other Samples	Number collected.	Whole number	Cannot be unknown "0" if not collected.
18	Behavior on Deck	Observe behavior.	Check all that apply	Cannot be unknown.
19	Reflex Test and Resuscitation	Perform tests, or explain reason not performed in comments. Always comment on results of tests.	Check all that apply	Cannot be unknown.
20	Shell (Carapace and Plastron) Condition	Examine both carapace and plastron. If you do not examine <u>both carapace and plastron</u> , mark "Not Examined", in addition to any other applicable boxes.	Check all that apply	Cannot be unknown.
21	Head Condition	Examine head. Mark "One or both eyes closed/ injured" if the eye(s) was(were) closed for longer than a typical blink.	Check all that apply	Cannot be unknown.
22	Skin Condition	Examine skin (excluding head and flippers).	Check all that apply	Cannot be unknown.
23	Flippers Condition	Examine all four flippers.	Check all that apply	Cannot be unknown.
24	Behavior at Release	Observe behavior just prior to release and/or once the turtle is back in the water.	Check all that apply	Cannot be unknown.
25	Additional Information	Perform actions, or explain reason not performed in comments.	Check all that apply	Leave blank if none applicable.

SEA TURTLE BIOLOGICAL SAMPLE LOG
NMFS FISHERIES OBSERVER PROGRAM
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PSID #	SPECIES	CODE	Scan?	TAGS	MEASUREMENTS (Curv)			IDENTIFICATION CRITERIA						NUMBER OF SAMPLES		
	NAME		0=N 1=Y	PIT Tag Number	Notch-to- Tip Length cm	Notch-to- Notch Length cm	Width cm	Vertebral Scute Count	Lateral (Costal) Scute Count	Infra- marginal Scute Count	1 Pair Pre- frontals?	Overlap Scutes? 0=N,1=Y	Dorsal Color Code	Whole	Biopsy/ Skin	Other list in comments
1 01	2 Green Turtle	3	4 1	5 -----	6 38.5	7 38.1	8 33.2	9 5	10 4	11 4	12 1	13 0	14 04	15 0	16 2	17 0

Directions: Mark the boxes below for any conditions that apply for PSID above, mark all options that apply. You must mark at least 1 box for each category. Provide more comments and details where instructed.

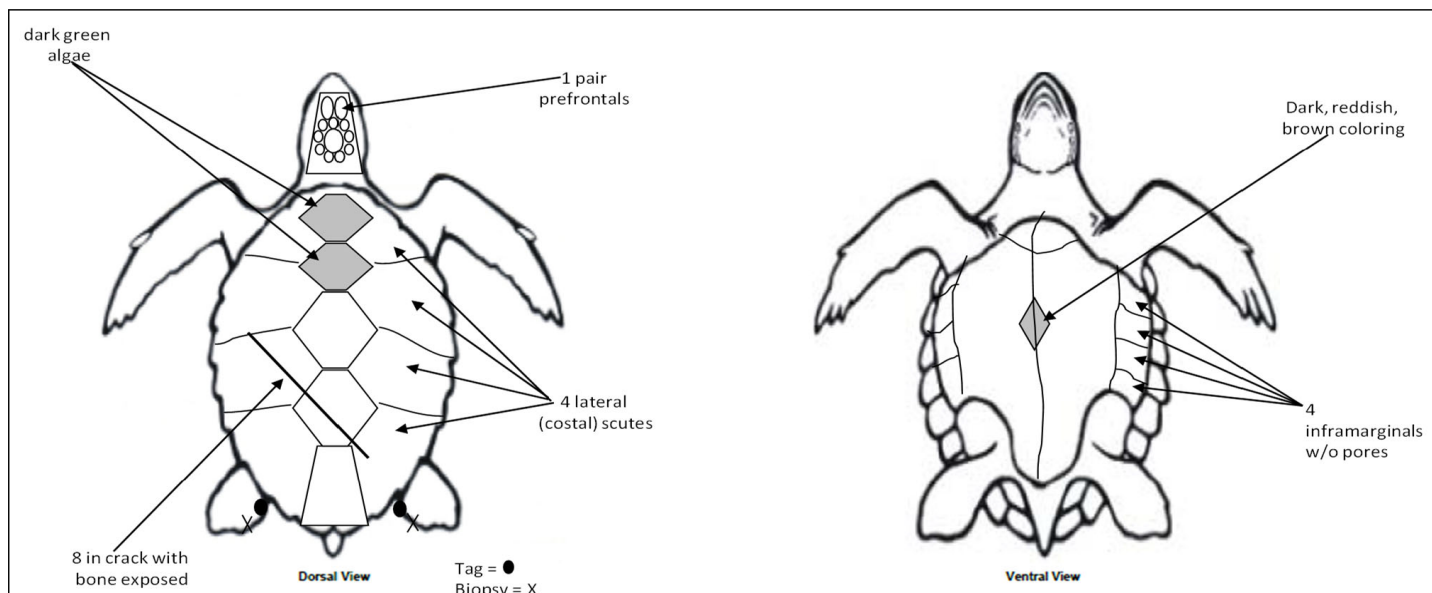
<p>DORSAL COLOR CODE (Above)</p> <p>01 = Black 02 = Gray-Green 03 = Orange/Red-Brown 04 = Brown 99 = Other 00 = Unknown</p>	<p>20 Shell (Carapace and Plastron)</p> <p><input type="checkbox"/> No cracks/chips/injuries observed If yes to following, provide comments & photo/video</p> <p><input checked="" type="checkbox"/> Shell crack with bone or tissue visible <input checked="" type="checkbox"/> Crack includes vertebral scutes <input checked="" type="checkbox"/> Crack with sharp/clean edges <input type="checkbox"/> Crack includes marginal scutes <input type="checkbox"/> Only marginals cracked, <50% width <input type="checkbox"/> Only marginals cracked, =>50% width <input checked="" type="checkbox"/> Superficial scuffs/chips/abrasions observed <input type="checkbox"/> Barnacles present <input checked="" type="checkbox"/> Algae present <input type="checkbox"/> Not examined</p>	<p>22 Skin</p> <p><input checked="" type="checkbox"/> No injuries/wounds/bleeding observed If yes to following, provide comments & photo/video</p> <p><input type="checkbox"/> Any indents, abrasions, swelling, lacerations or bleeding seen <input type="checkbox"/> External bleeding from skin <input type="checkbox"/> Cut/injury through skin (no bleeding) <input type="checkbox"/> Bleeding seen while tagging/biopsy <input type="checkbox"/> Bleeding from cloaca (anus) <input type="checkbox"/> Barnacles present <input type="checkbox"/> Algae present <input type="checkbox"/> Worms/parasites present <input type="checkbox"/> Not examined</p>	<p>24 Behavior at Release</p> <p><input checked="" type="checkbox"/> Eyes open at release <input checked="" type="checkbox"/> Lifting head to breath <input checked="" type="checkbox"/> All flippers moving/flapping <input type="checkbox"/> Immediately dove <input checked="" type="checkbox"/> Seen in water after release If yes to following, provide comments & photo/video</p> <p><input type="checkbox"/> Still no response to reflex tests <input type="checkbox"/> Moving sluggish/slow once in water <input type="checkbox"/> Head or flippers hanging limply <input type="checkbox"/> Gear on animal <input checked="" type="checkbox"/> Circling/listing once in water <input type="checkbox"/> Upside down/can't right itself once in water <input type="checkbox"/> Surfaced after diving <input checked="" type="checkbox"/> Stays at surface, does not dive <input type="checkbox"/> Released while observer not present <input type="checkbox"/> Not seen once in water</p>
<p>18 Behavior on Deck</p> <p><input type="checkbox"/> Eyes open while on deck <input type="checkbox"/> Lifting head to breath <input type="checkbox"/> All flippers moving/flapping If yes to following, provide comments & photo/video</p> <p><input type="checkbox"/> Moving sluggish/slow <input checked="" type="checkbox"/> No movement seen <input checked="" type="checkbox"/> Head or flippers hanging limply</p>	<p>21 Head</p> <p><input type="checkbox"/> No injuries/wounds/bleeding observed If yes to following, provide comments & photo/video</p> <p><input checked="" type="checkbox"/> One or both eyes closed/injured <input type="checkbox"/> Any bones or muscle visible <input type="checkbox"/> Object seen in/coming from mouth <input type="checkbox"/> Discharge/bleeding/growth seen from eyes/nares/mouth <input type="checkbox"/> Any indents, abrasions, swelling, lacerations or bleeding seen <input type="checkbox"/> Barnacles present <input type="checkbox"/> Not examined</p>	<p>23 Flippers</p> <p><input checked="" type="checkbox"/> No injuries/wounds/bleeding observed If yes to following, provide comments & photo/video</p> <p><input type="checkbox"/> Amputation of <50% of flipper <input type="checkbox"/> Amputation of =>50% of flipper <input type="checkbox"/> Whole or broken bone visible in wound <input type="checkbox"/> Soft tissue exposed/involved <input type="checkbox"/> Any indents, abrasions, swelling, lacerations or bleeding seen <input type="checkbox"/> Not examined</p>	<p>25 Additional Information</p> <p>Sampling completed and waiting to release</p> <p><input checked="" type="checkbox"/> Protected from elements <input checked="" type="checkbox"/> Anything put over eyes, nares not covered</p> <p>Additional release details</p> <p><input checked="" type="checkbox"/> Boat in neutral and gear out of water <input checked="" type="checkbox"/> Released off stern of boat <input checked="" type="checkbox"/> No other boats in immediate area</p>
<p>19 Reflex Tests and Resuscitation</p> <p>If yes to following, provide comments on the reaction</p> <p><input type="checkbox"/> No reflex test performed, explain <input checked="" type="checkbox"/> Touch corner/upper eyelid (both eyes) <input checked="" type="checkbox"/> Tail or flipper pinch (all 4 flippers) <input checked="" type="checkbox"/> Rocking side to side <input checked="" type="checkbox"/> Lightly splashing water on face <input checked="" type="checkbox"/> Touch soft tissue around nose <input checked="" type="checkbox"/> Put in resuscitation position Duration(hrs): <u>6.5</u></p>			

Comments: Using the boxes above as a guide, provide comments and sketches to describe ID characteristics, overall condition of carapace, plastron and soft tissue, note any scavenger damage and/or decomposition, new and/or healed wounds, tag and biopsy location, any gear on animal, results of reflex tests/resuscitation, details of retrieval, details of release and any other relevant information. Sketches and space for more comments available on back of log.

Turtle was identified by one pair of pre-frontals, 4 lateral scutes, 4 inframarginal scutes without pores, brown carapace color with starburst like pattern. Turtle came up in codend and was dumped with catch, landed right side up and was covered by a layer of fish. Turtle was inactive with no movement seen. Observer brought to side of deck to sample, carrying by a hand on either side of the shell. Observer performed reflex tests marked above, all elicited no response or movement. While examining animal observer saw thick, dark green algae present on the first two vertebral scutes. Also noted a ~8in crack in carapace going from 3rd left lateral scute across 4th vertebral scute to the 4th right lateral scute. Crack had a clean edge but slight flaking of outer layer of carapace seen, bone exposed in center of crack, no muscle or other tissue seen in wound. Crack was ~2-3mm across. In center of plastron there was a diamond shaped area that was dark reddish brown, no texture or wound seen just discolored. Once turtle was examined, sampled and measured observer used a checkpen board leaning against a pile of rope to support turtle while in resuscitation position. Observer did same reflex tests every hour, did not see any change for first

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Comments and Sketches: Using the boxes on the front of the log as a guide provide comments and sketches to describe ID characteristics, overall condition of carapace, plastron and soft tissue, note any scavenger damage and/or decomposition, new and/or healed wounds, tag and biopsy location, any gear on animal, results of reflex tests/resuscitation, details of retrieval, details of release and any other relevant information.



Dorsal View

Ventral View

Additional space for comments (if needed):

4 hours. When checking at the four hour mark there was a slight twitch when rubbing above left eye, but no reaction for other tests. At five hour mark slight withdraw of left flippers when pinched and both eyes were now open. Still very lethargic and not much movement so left in resuscitation position. When checking at the 6.5 hour mark it was actively moving. When observer came out on deck it had moved off of board under its own power and was actively moving around deck, lifting head to breathe, all flippers seen moving. Pinched tail and flippers to make sure it was alert and all pinches elicited a withdraw response of a couple inches. Gear was still in water but near end of a tow so talked with captain and decided since it was day 3 of 10 day trip it was best to get turtle back in the water once gear was back on board. For the next 45 minutes turtle was corralled into corner of deck and a damp cloth was placed over eyes and a wet towel was placed over carapace. Once gear was back on deck and boat in neutral turtle was carried to stern of vessel by observer and released down stern ramp. It initially went under water but surfaced about 2 seconds later and was swimming in circles at the surface until it was out of sight, boat was steaming away once turtle was released. Observer saw it for about 2 minutes while at surface and it was circling the entire time. Total time on deck was about 7.5 hours.

Protected Species Sighting Log

The purpose of this log is to record all protected species sightings. This information is critical in determining the temporal and spatial distribution of protected species, and the relative abundance and behavior of animals in the vicinity of fishing operations. Seabird sightings are not recorded here.

All protected species observed during a deployment, which are determined not to be incidental takes by the observer, are recorded on the [Protected Species Sighting Log](#). An animal must not be recorded on both the Protected Species Sighting Log **and** the [MARINE MAMMAL, SEA TURTLE, AND SEABIRD INCIDENTAL TAKE LOG](#). See the [Incidental Takes and Protected Species Information](#) section of the [Observer Operations Manual](#) for more detailed instructions on deciding when an animal is a sighting versus an incidental take. An animal determined to be an incidental take is recorded on the [MARINE MAMMAL, SEA TURTLE, AND SEABIRD INCIDENTAL TAKE LOG](#).

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Today's Date	Date event(s) occurred. Fill out new log for each day sightings occur.	MM/DD/YY	Cannot be unknown.
2	Event Number	Sequential for each day of sighting events. Start at 1 for each new day.	2-digit code	Cannot be unknown.
3	Event Time	Local time at start of event.	HH:MM (24hr)	Dash and record estimated time in comments.
4	Event Type Code	Sightings made during a protected species watch are always "On-effort, during dedicated watch" (08). Codes defined on Sighting Log.	2-digit code	"00".
5	Position Code	If the sighting is made by the captain or crew only, record "other" (99) and describe in comments. Codes defined on Sighting Log.	2-digit code	"00".
6	Haul Number	Haul when event occurred.	Whole number	Dash. Dash if the event does not occur on a haul.
7	Latitude/Longitude or Loran	Collect at time of initial sighting. Record statistical area if unable to obtain coordinates. Can be obtained from vessel electronics or FMRD-issued electronics.	DD MM.M	Dash.
8	Weather Code	See APPENDIX K – WEATHER CODES .	2-digit code	"00".
9	Wave Height	Estimated by observer and/or captain. Beginning of haul; not a range. Record "0" if less than 6 inches.	Whole feet	Dash.
10	Comments?	Yes/No. Comments are required for every sighting event.	1-digit code	Cannot be unknown.
11	Species Name	See APPENDIX T – SPECIES CODES AND LOGS .	N/A	Cannot be unknown.
12	Species Code	Filled in by FMRD staff for data entry. Observers: leave blank.	4-digit code	Cannot be unknown.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
13	Number of Animals	Count. Cannot be range. Provide best estimate and comment on range.	Whole number	Dash.
14	Sight Cue Code	Describes first sighting. Codes defined on Sighting Log.	1-digit code	"0".
15	Animal Condition Code	See APPENDIX R – ANIMAL CONDITION CODES . If more than one code applies, choose the one that describes the most specific condition of the animal.	2-digit code	"00".
16	Animal Behavior Code	See APPENDIX S – ANIMAL BEHAVIOR CODES . If more than one code applies, choose the lowest sequential code that applies and comment on all behaviors.	2-digit code	"00".

PROTECTED SPECIES SIGHTING LOG
NMFS FISHERIES OBSERVER PROGRAM
OBSIG 07/01/21

OBS/TRIP ID	A	A99010L
DATE LANDED mm/yy	B	05 / 22
PAGE #	C	1 OF 2
TODAY'S DATE mm/dd/yy	1	05 / 10 / 22

EVENT #	EVENT TIME 24 hours	EVENT TYPE CODE	POSN CODE	HAUL NUM	LATITUDE/LONGITUDE (DD MM.M) - LORAN (XXXX)				WEA- THER CODE	WAVE HGT ft	COMM- ENTS? 0=N, 1=Y	SPECIES		#ANIM	SIGHT CUE CODE	ANIM COND CODE	ANIM BEHVR CODE
					Station 1	Latitude/ Bearing Bearing	Station 2	Longitude/ Bearing				NAME	CODE				
2 0 1	3 10:10	4 08	5 06	6 3	9960-	7 42° 24.3	9960-	70° 41.2	8 03	9 4	10 1	11 Whitesided Dolphin	12	13 22	14 1	15 01	16 05
0 2	10:11	08	06	3	9960-	42° 24.7	9960-	70° 41.2	03	4	1	Humpback Whale		1	1	01	08
0 3	11:14	13	02	---	9960-	42° 25.1	9960-	70° 40.3	03	4	1	Finback Whale		3	2	01	08
4	:				9960-		9960-										
5	:				9960-		9960-										
6	:				9960-		9960-										
7	:				9960-		9960-										
8	:				9960-		9960-										
9	:				9960-		9960-										
0	:				9960-		9960-										
EVENT TYPE CODES:					POSITION CODES:				SIGHT CUE CODES:			ANIMAL CONDITION CODES:		ANIMAL BEHAVIOR CODES:			
08 = On-effort, during dedicated watch					00 = Unknown				0 = Unknown			00 = Unknown		00 = Unknown			
10 = Off-effort, vessel activity unknown					01 = Bow, facing wind				1 = Sighted with naked eye			01 = Alive, see comments		01 = Near gear, physical contact			
11 = Off-effort, Vessel stop/anchor/drift					08 = Bow, facing sideways				2 = Sighted with binoculars			04 = Alive, hook/gear in/around mouth		02 = Near gear, within 50 meters			
12 = Off-effort, sitting on gear					02 = Wheelhouse, facing forward				3 = First sighted by capt/crew			05 = Alive, hook/gear in/around flipper		03 = Near gear, 51-150 meters			
13 = Off-effort, transiting or searching					03 = Wheelhouse, facing backward				then by observer			06 = Alive, hook/gear in/around other body part		04 = Feeding on catch			
14 = Off-effort, towing gear					09 = Wheelhouse, facing sideways				4 = Sighted by capt/crew ONLY			07 = Alive, hook/gear in/around several body parts		05 = Porpoising			
15 = Off-effort, hauling in gear					04 = Work deck, facing backward				9 = Other			08 = Alive, seen by capt/crew ONLY		06 = Bow riding			
16 = Off-effort, setting out gear					05 = Work deck, facing sideways							10 = Dead, condition unknown		07 = Breaching			
19 = Off-effort, pumping catch					06 = Starboard side, facing net							11 = Dead, fresh		08 = Swimming at surface			
					07 = Port side, facing net							12 = Dead, moderately decomposed		09 = Milling			
					09 = Other							13 = Dead, severely decomposed		10 = Motionless at surface			
GENERAL												14 = Dead, seen by capt/crew ONLY		11 = Vessel avoidance			
00 = Unknown												NOTE: If more than one code applies, choose the one		12 = Vessel attraction			
99 = Other												that describes the most specific cond. of the animal		99 = Other			

OMB Control No.: 0648-0583
 Expires on: 01/31/2024

OBS/TRIP ID	A	A99010L
DATE LANDED mm/yy	B	05 / 22
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TODAY'S DATE mm/dd/yy	1	05 / 10 / 22

EVENT #	COMMENTS	EVENT #	COMMENTS
2 01	10 Whitesided dolphins IDed by tan patch over white on hind flank, short beak with black top and white bottom, black dorsal body coloration. Two animals half the size of others in group assumed to be calves. Porpoising along behind another fishing vessel towing gear amidship of this vessel off our port side. Other vessel was headed northeast. Animals were approx. 100 meters to the stern of the vessel and 1/4 mile from our vessel.		
02	Long, white pectoral flippers seen through the water. Fluke underside had white pattern against black background with a scalloped trailing edge Photographed the underside of fluke (see photo log). While gear was being hauled in whale approached the vessel swimming at the surface from 1/4 mile off starboard stern to within 250 meters amidship and the lifted its fluke and dove. Not seen again.		
03	Three whales sighted by tall blows 1/2 mile off port amidship with swimming heading of 330 degrees swimming toward the vessel. All three animals had falcate dorsal fins set far back on the body. The blow was visible first and then the dorsal fin. All three dove in a wheel like motion exposing the dorsal fin. No flukes seen. Animals were spaced approximate 100 meters apart from one another.		

Pinger Tester Worksheet

The purpose of this worksheet is to record the location, brand and condition of Active Deterrent Devices (ADD) or pingers on gillnet gear. On limited sampling gillnet trips, all pingers should be tested, when pingers are present. On complete sampling trips, no pingers will be tested until an incidental take of a marine mammal occurs. If a marine mammal take does occur, the pingers on both sides of the marine mammal and all pingers for the remainder of the trip must be “tested” and recorded.

If pingers were tested and a [Pinger Tester Worksheet](#) submitted, record Program Code “101” on the [VESSEL AND TRIP INFORMATION LOG](#).

Comments

Provide details on any other or unknown codes, any reason(s) pingers were not tested, and any other information regarding the pingers (e.g., a broken pinger, a unique pinger location set-up). If any issues with the pinger tester arise, provide details concerning how the tester was operating, any errors encountered, and specific details about the problem experienced.

Pingers should be located on each end of the gear and on the bridles between each net panel. If you see a pinger in a different position than those mentioned, provide details about where it was in the gear. If extra pinger(s) are on the gear, record them in the order that they came onboard. Comment where the extra pinger(s) are located. If a pinger is not seen where it is expected, confirm with captain and/or crew to determine if pinger was lost or no pinger was set there.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Haul Number	Haul on which pingers were tested.	3-digit code	Dash.
2	Pinger Number	Sequential for each pinger in order of time hauled. If the number of pingers used exceeds 30, continue recording pinger positions using the following HAUL NUMBER (#1) column and renumber the PINGER NUMBER to match pinger positions.	Pre-filled field	Cannot be unknown.
3	ADD Condition Code	Determine audibly or with tester.	1-digit code	“0”. Record “0” if not tested and comment.
4	ADD Brand Code	Visually confirm.	2-digit code	“00”. Record “00” if not tested and comment.
5	ADD Unknown Code	Fill in when Unknown code is used for ADD Condition Code to help describe the event.	1digit code	Cannot be unknown.
6	Light On	Fill in when brands of pingers with lights are used on the gear; do not fill in if pinger brand does not have light.	Yes = 1, No = 0	Dash, comment on why light was not visible.

PINGER TESTER WORKSHEET
NMFS FISHERIES OBSERVER PROGRAM
07/01/2021

OBS/TRIP ID	A	A99011L
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HAUL # 1 001					HAUL# 002					HAUL #				
PINGER NUMBER	COND CODE	BRAND CODE	UNK CODE	LIGHT ON 0=N, 1=Y	PINGER NUMBER	COND CODE	BRAND CODE	UNK CODE	LIGHT ON 0=N, 1=Y	PINGER NUMBER	COND CODE	BRAND CODE	UNK CODE	LIGHT ON 0=N, 1=Y
2 1	3 2	4 02	5	6	1	2	04		1	1				
2	2	02			2	5	04		0	2				
3	2	01			3	2	04		1	3				
4	5	02			4	2	04		1	4				
5	2	02			5	2	04		1	5				
6	6	02			6	0	00	2		6				
7	2	02			7	0	00	2		7				
8					8					8				
9					9					9				
10					10					10				
11					11					11				
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27					27					27				
28					28					28				
29					29					29				
30					30					30				

Codes and comment area provided on back

<div>OBS/TRIP ID<div>A</div>A99011L</div> <div>DATE LANDED mm/yy<div>B</div>10 / 22</div> <div>PAGE #<div>C</div>1 of 2</div>		
<div>ACTIVE DETERRENT DEVICE (ADD)</div> <div>CONDITION CODES:</div> <div>0 = Unknown (must provide UNK CODE)</div> <div>1 = No pinger (confirm with captain)</div> <div>2 = Audible, Not Tested</div> <div>5 = Inaudible, Not Tested</div> <div>6 = Absent / Lost (confirm with captain)</div>	<div>ACTIVE DETERRENT DEVICE (ADD)</div> <div>BRAND CODE:</div> <div>00 = Unknown (or no pinger)</div> <div>01 = Dukane</div> <div>02 = Airmar</div> <div>03 = Fumunda</div> <div>04 = Future Ocean LED **</div> <div>05 = Fishtek **</div> <div>98 = Multiple brands (comment)</div> <div>99 = Other (comment)</div> <div>*** = LIGHT ON FIELD MUST BE FILLED OUT</div> <div>NO = 0, YES =1</div>	<div>ACTIVE DETERRENT DEVICE (ADD)</div> <div>UNKNOWN (UNK) CODE:</div> <div>1 = Unknown, boat noise</div> <div>2 = Unknown, gear not hauled</div> <div>3 = Unknown, indistinguishable pingers</div> <div>4 = Unknown, missed pinger due to INC</div> <div>5 = Unknown, missed (comment)</div> <div>6 = Unknown, other (comment)</div> <div>FIELD ONLY FILLED OUT IF CONDTION CODE IS UNKNOWN</div>
<div>COMMENTS:</div> <div>Haul 1: pinger #6 captain confirmed pinger was in location when gear was set</div> <div>Haul 2: Captain said he had Future Ocean pingers on his gear, stopped hauling after net 5, unknown brand for rest of gear (6 nets altogether)</div>		

Individual Animal Log

Complete this log on a per haul basis to record species labeled as “IAL” in [APPENDIX T – SPECIES CODES AND LOGS](#), as well as any tagged individuals of species labeled as “SPP”. This includes all pelagic species, sturgeons, terrapins, and tagged fish and shellfish caught in a particular haul. All individual animals **MUST** be recorded separately. See the [Observer Operations Manual](#) for strategies for how to handle hauls with large amounts of IAL species.

See [APPENDIX T – SPECIES CODES AND LOGS](#) for a list of all species and the log on which they are recorded. All species recorded on this log are to be **EXCLUDED** from the corresponding Haul Log, with the exception of cases where fins or chunks were kept. When sharks are finned, record carcasses with the appropriate disposition code, an estimated length, and dressed weight on the Individual Animal Log, and record the kept fin weight on the Haul Log. When fish chunks are kept, the weight of the chunks should be recorded on the Haul Log.

In the gillnet fisheries, the following IAL species should be recorded in the [GILLNET HAUL LOG](#) species summary section:

- Bonito,
- Skipjack tuna,
- False albacore, and
- King mackerel.

Comments

Reference each comment with its corresponding animal sequence number and field name. If more room is needed, use the back of this log, making sure to indicate “SEE BACK” on the front of the log in the comments.

Record identification characteristics for each animal (particularly individual sharks, rays, and sturgeons), regardless of whether photographs were taken. Record any additional information regarding the animal(s) (e.g., samples collected, processing types, whether sharks were processed at sea or at the dock, explanation for data that cannot be collected). If animals cannot be photographed, indicate why and give details, perhaps providing drawings of the characteristics for which photos would be requested (e.g., identifying species characteristics, tag locations). Remember, cameras can be lost and photos can be blurry or corrupted, so describe thoroughly and take multiple photos or video.

Also, be sure to include all tag information, such as tagging program (may be acronym), phone number, tag description (type, color) and location.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Gear Number	Must match the corresponding Gear Characteristics Log .	2-digit code	Cannot be unknown.
2*	Sequence Number	Sequential for each animal caught on this haul.	Whole number	Cannot be unknown.
3*	Species Name	See APPENDIX T – SPECIES CODES AND LOGS .	N/A	Cannot be unknown.
4	Species Code	Filled in by FMRD staff for data entry. Observers: leave blank.	4-digit code	Cannot be unknown.
5	Initial Status	Determined by observer. As it comes up, whether it is brought onboard or not.	1-digit code	“0”.
6*	End Status	Determined by observer. If animal is kept, end status must be “dead”.	1-digit code	“0”.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
7*	Fish Disposition	Obtain reason from captain. See APPENDIX M – FISH DISPOSITION CODES .	3-digit code	"900" and comment.
8	Processing Type	Final processing done to each animal while at sea, regardless of whether the animal was weighed round or dressed. Do not include processing done at dock.	2-digit code	"00".
9*	Weight	Observer actual weight preferred. Otherwise observer or captain's estimate, indicated by Estimation Method.	Pounds Actual or <1lb: to the nearest tenth Estimated >1lb: whole	Dash. Do not record for terrapins.
10*	Dressed or Round	Determined by observer. Status animal was in when weighed (actual/estimated), regardless of final processing. Verify type of estimate if obtained from captain or crew. Dressed includes carcasses or gutted animals.	D/R	Cannot be unknown.
11*	Estimation Method	Determined by the observer. Method used to estimate this species/disposition. See APPENDIX N – ESTIMATION METHOD CODES .	2-digit code	Cannot be unknown.
12*	Tag Number	Tag attached by observer and/or already present on animal. Photograph tag location. Include DOA for NEFOP tags.	Alphanumeric code NEFOP and IFS: up to 4 unique tag numbers per animal ASM: record secondary tag number under 12a	Dash.
13*	Tag Code	Refers to corresponding Tag Number. Record "2" if no tag on animal.	1-digit code ASM: record secondary tag code under 13a	"0".
14	Data Storage Tag?	Yes/No. See example images in Operations Manual .	1-digit code	"9".
15*	Standard Length #1	See On-Deck Reference Guide . If unable to measure, record estimate in #17 (NEFOP and IFS) or comments (ASM), and explain reason in comments.	Whole centimeters	Dash.
16	Standard Length #2	See On-Deck Reference Guide .	Whole centimeters	Dash.
17	Estimated Length	Estimate of Standard Length #1. Record estimates of other lengths in comments.	Whole centimeters	Dash. Leave blank if actual length measured.
18	Sex	See On-Deck Reference Guide .	1-digit code	"0".
19	Bio. Samples Taken?	Yes/No.	1-digit code	"9".

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
20	Photo(s) Taken?	Yes/No. See <u>On-Deck Reference Guide</u> for required photos for each species/group.	1-digit code	"9".

INDIVIDUAL ANIMAL LOG
NMFS FISHERIES OBSERVER PROGRAM
OBIAL 07/01/21

OBS/TRIP ID	A	A99015C
DATE LANDED mm/yy	B	06 / 22
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HAUL #	F	0 0 1

GEAR #	SEQ #	SPECIES		INTL STAT- US CODE	END STAT- US CODE	FISH DISP CODE	PROC CODE	WEIGHT			TAG			LENGTHS cm			SEX 0=U 1=M 2=F	BIO- SAMP 0=N 1=Y	PHOTO TAKEN 0=N 1=Y
		NAME	CODE					POUNDS	MKT D/R	EST. METH- OD	NUMBER(S)	CODE	DATA STORAGE TAG? 0=N, 1=Y	#1	#2	Est (#1)			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	0 1	Swordfish		3	3	100	09	165	D	01	A2999	5	0	193	106	---	1	0	1
1	0 2	Blue Shark		2	2	100	06	170	D	01	A2318 M45392	5 4	0	201	240	---	2	1	1
1	0 3	Atlantic Sturgeon		1	1	001	01	180	R	04	BOS873	3	0	---	---	244	0	0	1
1	0 4	Torpedo Ray		1	2	001	01	28	R	01		2	---	82	46	---	1	0	1
1	0 5	Porbeagle Shark		2	2	100	08	40	R	06		2	---	114	---	---	2	0	0
	6																		
	7																		
	8																		
	9																		
	0																		

COMMENTS: List identifying characteristics such as fin placement relative to other body parts, coloration, head and tail shape, presence/absence of lateral and/or anal scutes (sturgeon), presence of spines, etc.

Also include tag recapture information such as tagging program, phone number, etc.

01- Slightly damaged by sharks. ID'd by broad flat bill; dorsal fin extends only short length along body; single caudal keel; brownish/black dorsal color.

02- Removed yellow plastic tag from base of dorsal fin. Took vertebrae sample. ID'd by long snout; long narrow pec fins; dorsal fin set way back, closer to pelvic fins than pec fins. Deep blue dorsal color.

03- Tagged along dorsal midline; blue tag from Fish and Wildlife, PO Box 23, Sudbury, MA 01651; released in good condition. Unsure of ID, photo taken.

05- Only one measurement, not enough time to fully sample. ID'd by white patch on trailing edge of 1st dorsal; caudal fins equal size; two caudal keels; thick body dorsal color dark gray.

MEASUREMENTS:

Finfish, Squid - cm

Shellfish - mm

STANDARD LENGTHS:

	#1	#2
Swordfish (c)	LJFL	CK
Billfish (c)	LJFL	PFL
Tuna	FL	PFL
Shark	FL	TL
Sturgeon	FL	None
Ray	TL	DW
Terrapin	TL	NL
Other	FL	None

STATUS CODES:	PROCESSING CODES:	WEIGHT MARKET CODES:	TAG CODES:	ESTIMATION METHOD CODES:
0 = Unknown	00 = Unknown	06 = Dressed (Headed and Gutted)	0 = Unknown	01 = Actual, spring scale
1 = Alive	01 = No Processing	07 = Dressed (Headed, Gutted, Finned)	1 = Tag Applied by Observer	04 = Estimated by captain
2 = Dead	02 = Chunked	08 = Dressed (Headed, Gutted, Tailed)	2 = No Tag(s)	05 = Tally
3 = Dead, Damaged	03 = Filleted	09 = Dressed (Headed, Gutted, Finned, Tailed)	3 = Tag Already Present, Left On	06 = Visually Estimated by observer
4 = Dead, Head only	04 = Dressed (Gutted only)	99 = Other	4 = Tag Already Present, Removed	11 = Actual, electronic scale
	05 = Dressed (Finned only)		5 = Carcass Tagged (fish only)	99 = Other, describe in COMMENTS

Length Frequency Log

Complete this log on a per haul basis to record biological sampling of species labelled as “SPP” listed in [APPENDIX T – SPECIES CODES AND LOGS](#), unless they have a tag. Species labelled as “IAL” as well as all tagged “SPP” species listed in [APPENDIX T – SPECIES CODES AND LOGS](#) are recorded on the [INDIVIDUAL ANIMAL LOG](#). Sea scallop shell heights and clam/quahog shell widths are recorded in the right-hand section of this log. Crustacean sampling (e.g., American lobster and crab species) sampling is recorded on the [CRUSTACEAN SAMPLE LOG](#).

Length frequencies and shell height frequencies should be collected in the priority order listed in the [Observer On-Deck Reference Guide](#). For each species record on this log, lengths, heights, and any corresponding age structures must be collected from the same trip, haul, and fish disposition. Sometimes, samples must also be separated by sex (NEFOP and IFS). While one log may be used for multiple species, if fish dispositions or sexes sampled from one haul differ, then separate columns on the log must be used for each of these catch segments. Samples from mixed segments of the catch are not usable. Each catch segment recorded on this log MUST have a corresponding record on the [Haul Log](#).

For more detailed information on when and how to biologically sample catch, see the [Length Frequencies and Age Structures](#) subsection in the [Biological Sampling](#) section of the [Observer Operations Manual](#). Concise information on type of length measurement and sexing species can also be found in the [Observer On-Deck Reference Guide](#).

Comments

Record information regarding fish, scallops, clams, or quahogs sampled on this haul. If more room is needed, use the back of this log, making sure to write “See Back” on the front of the log. Reference each comment with its corresponding field name. If a complete sample cannot be obtained, record the reason(s) in this section.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1*	Species Name	See APPENDIX T – SPECIES CODES AND LOGS .	N/A	Cannot be unknown.
2	Species Code	Filled in by FMRD staff for data entry. Observers: leave blank.	4-digit code	Cannot be unknown.
3*	Fish Disposition Code	Obtain reason from captain. See APPENDIX M – FISH DISPOSITION CODES .	3-digit code	“900” and comment.
4	Sex Code	Male/Female/Unknown.	1-digit code	“0”.
5*	Sample Weight	Must be actual weight. Finfish and squid: round weight. Shellfish: dressed (meat) weight.	Pounds, to the nearest tenth	Dash.
6	Age Structure Type Code	Must match age structure(s) submitted.	2-digit code	Cannot be unknown.
7	Number of Age Structures	One pair of otoliths or one envelope of scales is one age structure sample.	Whole number	Cannot be unknown. Dash if none collected.
8*	Lengths	See Biological Sampling Instructions section in On-Deck Reference Guide for measurement instructions by species. Record lengths consecutively from shortest to longest.	Finfish and squid: whole centimeters Shellfish: whole millimeters	Cannot be unknown.
9*	Number at Length	Record the <i>total</i> number of animals measured at each centimeter or millimeter. Do not stroke tally in this field.	Whole number	Cannot be unknown.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
10	Volumetric Measure of Scallop Meats	See Scallop Dredge and Scallop Trawl Fisheries Sampling Priorities section in <u>On-Deck Reference Guide</u> .	Milliliters, to the nearest 50	Dash.
11	Number at Height	Record the <i>total</i> number of sea scallops, clams, or quahogs measured at each height interval. Do not stroke tally in this field.	Whole number	Cannot be unknown.
12	Shellfish Round Weight	Actual weight of scallops, clams, or quahogs in the shell.	Pounds	Dash. Leave blank for other species.

LENGTH FREQUENCY LOG
NMFS FISHERIES OBSERVER PROGRAM
OBLNH OBLND 07/01/21

OBS/TRIP ID	A	A99010-
DATE LANDED mm/yy	B	06 / 22
PAGE #	C	3 OF 3
HAUL #	F	0 0 5

SPECIES NAME	1	Atlantic Cod		Haddock		Spiny Dogfish		Spiny Dogfish		Spiny Dogfish		Scallop, Sea
SPECIES CODE	2											
FISH DISPOSITION CODE	3	100		100		001				001		100
SEX CODE	4	0		0		2				1		
SAMPLE WEIGHT (R/A)	5	61		29		503				18.5		SAMPLE WEIGHT (D/A) 7.2
AGE STRUCTURE TYPE CODE	6	02		02		00				00		VOLUMETRIC MEASURE OF MEATS
# AGE STRUCTURES	7	6		5								10 2650 nearest 50 ml
MEASUREMENTS:	8	6 0 9	8 0	6 0 1	0	6 0	8 0 2	10 0 1	0	7 0	0	10 - 14 11 110 - 114 6
Finfish, Squid - cm		1	1	1	1	1	1 1	1 1	1	1 2	1	15 - 19 115 - 119 14
Shellfish - mm		2	2	2	2	2	2 4	2	2	2 3	2	20 - 24 120 - 124 15
SEX CODES:		3	3 1	3 1	3	3	3 9	3	3	3 1	3	25 - 29 125 - 129 21
0=Unknown		4	4	4 2	4	4	4 9	4	4	4	4	30 - 34 130 - 134 26
1=Male		5	5	5 1	5	5	5 4	5	5	5	5	35 - 39 135 - 139 6
2=Female		6 3	6	6	6	6	6 7	6	6	6	6	40 - 44 140 - 144 5
AGE STRUCTURE		7	7	7	7	7	7 8	7	7	7	7	45 - 49 145 - 149 1
TYPE CODES:		8 2	8	8	8	8 1	8 6	8	8	8	8	50 - 54 150 - 154 1
00=None		9	9	9	9	9 1	9 6	9	9	9	9	55 - 59 155 - 159
01=Scales		7 0 1	0	0	0	7 0 2	9 0 5	0	0	0	0	60 - 64 160 - 164
02=Otoliths		1 1	1	1	1	1 1	1 4	1	1	1	1	65 - 69 165 - 169
03=Shells		2 1	2	2	2	2	2	2	2	2	2	70 - 74 170 - 174
04=Whole		3	3	3	3	3	3	3	3	3	3	75 - 79 175 - 179
05=Vertebra		4	4	4	4	4	4 1	4	4	4	4	80 - 84 180 - 184
06=Dorsal Spines		5	5	5	5	5	5 1	5	5	5	5	85 - 89 185 - 189
07=Scales & Otoliths		6	6	6	6	6	6	6	6	6	6	90 - 94 190 - 194
08=Head		7	7	7	7	7	7 3	7	7	7	7	95 - 99 195 - 199
09=Illicium		8	8	8	8	8 3	8	8	8	8	8	100 - 104 200 - 204
99=Other (comment)		9	9	9	9	9 2	9	9	9	9	9	105 - 109 2 205 - 209

COMMENTS

Round weight = 68 lbs **12**

Did not have time to get otoliths from all cod.

Catch Composition Log

The Catch Composition Log is designed to categorize the catch on vessels that are catching extremely large quantities of fish, in the tens or hundreds of thousands of pounds on a single haul. Due to the size of catches, it is necessary to obtain subsamples from all portions of a haul in order to properly quantify the amount of fish caught. However, the method in which subsamples are collected and extrapolated is different than other estimation methods. See the Catch Composition subsection in Catch Estimation section of the Observer Operations Manual for detailed instructions of the method. Concise reminders can be found on the High Volume Fisheries section of the Observer On-Deck Reference Guide.

Record details related to the pumping process, observing of catch, and any discards on the [DISCARD LOG](#).

On this log, only record the species in the basket subsamples (i.e., catch going directly into the fish hold). Do not use this log to document any other catch observed in the net or picked out at a grate; those weights should go on the Haul Log with the appropriate estimation method code. Any large animals that did not pass through the pump should be recorded on the [MARINE MAMMAL, SEA TURTLE, AND SEABIRD INCIDENTAL TAKE LOG](#) or [INDIVIDUAL ANIMAL LOG](#).

Comments

Record information regarding this sample or your sampling methods. Include comments of times of pauses in pumping, explanation for why there was a pause for each event, and also comment of times when no fish, only water is being pumped. If catch is not pumped, comment on which sample baskets came from each split of bringing catch onboard. Reference each comment with its corresponding field name or basket number. If a complete sample cannot be obtained, record the reason(s) in this section.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Estimated Pumping Time	Obtain from captain how long pumping catch to your vessel is expected to take assuming no unpredictable pauses.	Whole Minutes	Dash. Dash if catch is not pumped onboard.
2	Basket Number	Sequential for each basket sample in order of time taken. If more than 5 species in one sample basket, continue recording in the next section with the same basket number.	Whole number	Cannot be unknown.
3	Time	Time basket sample is taken.	HH:MM (24hr)	Dash. Dash if catch is not pumped onboard.
4	Species Name	See APPENDIX T – SPECIES CODES AND LOGS . Recorded per subsample basket.	N/A	Cannot be unknown.
5	Species Code	Filled in by FMRD staff for data entry. Observers: leave blank.	4-digit code	Cannot be unknown.
6	Pounds	Round actual weight per subsample basket.	Pounds, to the nearest tenth	Cannot be unknown.
7	Basket Subtotal Weight	Total weight of all catch per subsample basket.	Pounds, to the nearest tenth	Cannot be unknown.
8	Total Weight of Pumped Catch	Obtain estimate from captain.	Whole pounds	Cannot be unknown.
9	Species Name	Listing of all species encountered in any basket sample.	N/A	Cannot be unknown.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
10	Species Weight	Calculated by summing weight of this species across all sample baskets.	Pounds, to the nearest tenth	Cannot be unknown.
11	Total Basket Weight	Calculated by summing weight of all species in all sample baskets.	Pounds, to the nearest tenth	Cannot be unknown.
12	Catch Composition as a Proportion of Total Basket Weight	Calculated by dividing each species weight (10) by the total basket weight (11). The summed proportions should equal 1.	Proportion, rounded to 4 decimal places	Cannot be unknown.
13	Extrapolated Weight	Calculated by multiplying each proportion by the total weight of pumped catch. Must have a corresponding entry on the <u>Haul Log</u> with estimation method code "10" .	Whole pounds	Cannot be unknown.

CATCH COMPOSITION LOG
NMFS FISHERIES OBSERVER PROGRAM
OBCMP 07/01/21

OBS/TRIP ID	A	A99011-
DATE LANDED mm/yy	B	11 / 22
PAGE #	C	2 OF 4
HAUL #	F	003

ESTIMATED PUMPING TIME 45 minutes **1**

BASKET # 1 **2** TIME 22 : 30 **3**

SPECIES	CODE	POUNDS (R/A)
4 Atlantic Herring	5	6 63 . 7
Atlantic Mackerel		0 . 2
		.
		.
		.
SUBTOTAL		7 63 . 9

BASKET # 2 TIME 22 : 34

SPECIES	CODE	POUNDS (R/A)
Atlantic Herring		65 . 9
		.
		.
		.
SUBTOTAL		65 . 9

BASKET # 3 TIME 22 : 38

SPECIES	CODE	POUNDS (R/A)
Atlantic Herring		69 . 3
Atlantic Mackerel		8 . 1
Blueback Herring		2 . 4
		.
		.
SUBTOTAL		79 . 8

BASKET # 4 TIME 22 : 42

SPECIES	CODE	POUNDS (R/A)
Atlantic Herring		74 . 3
Blueback Herring		1 . 5
		.
		.
		.
SUBTOTAL		75 . 9

BASKET # 5 TIME 22 : 46

SPECIES	CODE	POUNDS (R/A)
Atlantic Herring		62 . 8
Atlantic Mackerel		9 . 4
		.
		.
		.
SUBTOTAL		72 . 2

BASKET # 6 TIME 22 : 50

SPECIES	CODE	POUNDS (R/A)
Atlantic Herring		68 . 6
		.
		.
		.
		.
SUBTOTAL		68 . 6

COMMENTS

OBS/TRIP ID	A	A99011-
DATE LANDED mm/yy	B	11 / 22
PAGE #	C	3 OF 4
HAUL #	F	0 0 3

BASKET # 7 TIME 22 : 54

SPECIES	CODE	POUNDS (R/A)
Atlantic Herring		61 . 4
Blueback Herring		4 . 9
Silver Hake		0 . 1
		.
		.
SUBTOTAL		66 . 4

BASKET # 8 TIME 22 : 58

SPECIES	CODE	POUNDS (R/A)
Atlantic Herring		61 . 3
Atlantic Mackerel		6 . 5
		.
		.
		.
SUBTOTAL		67 . 4

BASKET # 9 TIME 23 : 02

SPECIES	CODE	POUNDS (R/A)
Atlantic Herring		69 . 3
Silver Hake		3 . 5
		.
		.
		.
SUBTOTAL		72 . 8

BASKET # 10 TIME 23 : 06

SPECIES	CODE	POUNDS (R/A)
Atlantic Herring		67 . 6
		.
		.
		.
		.
SUBTOTAL		67 . 6

(d) TOTAL WEIGHT OF PUMPED CATCH (Captain's Estimate)	8	200,000 lbs
---	---	-------------

SPECIES	POUNDS (R/A)	PROPORTION OF TOTAL BASKET WEIGHT (a/b)	EXTRAPOLATED WEIGHT (lbs) (c x d)
9 Atlantic Herring	10 (a) 664 . 2	12 (c) 0 . 9 4 7 8	13 189,555
Atlantic Mackerel	(a) 24 . 2	(c) 0 . 0 3 4 5	6,906
Blueback Herring	(a) 8 . 8	(c) 0 . 0 1 2 6	2,511
Silver Hake	(a) 3 . 6	(c) 0 . 0 0 5 1	1027
	(a) .	(c) 0 .	
	(a) .	(c) 0 .	
	(a) .	(c) 0 .	
	(a) .	(c) 0 .	
TOTAL	11 (b) 700 . 8	1	

Catch Estimation Worksheet

This worksheet contains detailed information about obtaining and recording catch weight information for sea life and/or debris taken by a fishing vessel. Use this worksheet to organize and illustrate catch estimation methodology and work. Complete this worksheet for **every** haul. This worksheet is used for all programs.

If the Tally or Basket/Tote Count methods are used, complete fields 3-11. If the Volume-to-Volume method is used, complete fields 12-16. If another subsampling method is used, complete fields 16-19. If the Cumulative Sum method is used, complete fields 20-26. If a method is not used, the corresponding fields should be left blank.

Two orientations of the Catch Estimation Worksheet exist. One is for scallop dredge and scallop trawl trips, for which deckloading is more likely. The other is for all other gear types. The ASM program has separate Catch Estimation Worksheets by method.

If there are insufficient lines on one form for all species subsampled in this haul, continue listing species on an additional Catch Estimation Worksheet, making sure to complete all of the Header Information (**A**, **B**, and **F**).

All calculations must be rounded to amount indicated in format column below prior to calculating the next step (e.g., for tally count, the average weight per fish must be rounded to tenths of pounds prior to extrapolating the weight of the total number of individuals).

Comments

Record any detailed additional information associated with this log (e.g., description of irregular shapes or other shapes, other catch estimation methods, safety concerns, or time constraints). Sketch catch pile or checker pen shape. If checker pen was drawn on a prior haul, only provide a new sketch when checker pen dimensions change or if catch does not fill checker area.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Sorting Method	Indicate how the crew is sorting. Describe "other" on line 1A.	Check all that apply	Cannot be unknown.
2	Marel Scale Calibration Weight	Collected from Marel Scale. Leave blank if not using a Marel Scale.	Pounds, to the nearest tenth	Blank.
3	Species	See APPENDIX T – SPECIES CODES AND LOGS .	N/A	Cannot be unknown.
4	Fish Disposition	Obtain reason from captain. See APPENDIX M – FISH DISPOSITION CODES .	3-digit code	"900" and comment.
5	Unit Type	Container used or individual if tally. Describe "other" in comments.	1-letter code	Cannot be unknown.
6	List Individual Sample Weights	Weighed by observer. Dash and comment if not weighed individually.	Pounds, to the nearest tenth	Cannot be unknown.
7	Total Sample Weight	Sum of the individual sample weights.	Pounds, to the nearest tenth	Cannot be unknown.
8	Number of Sample Units	Count of the individual sample weights.	Whole number	Cannot be unknown.
9	Average Weight Per Unit	Calculate. Total Sample Weight / Number of Sample Units.	Pounds, to the nearest tenth	Cannot be unknown.
10	Total Number of Units	Count.	Whole number	Cannot be unknown.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
11	Total Estimated Weight	Calculate. Average Weight Per Unit x Total Number of Units.	Pounds, to the nearest tenth	Cannot be unknown.
12	Catch Shape, Measurements & Volume	Measure checker pen dimensions. May need to measure as multiple shapes. Draw and label all dimensions in comments.	Feet, to the nearest tenth	Cannot be unknown.
12A	Remainder Pile Volume	Calculate. Remainder from before this haul was dumped.	Cubic feet, to the nearest hundredth	Cannot be unknown.
12B	Total Pile Volume	Calculate. After current haul is dumped, including any remainder pile.	Cubic feet, to the nearest hundredth	Cannot be unknown.
13	Depths	Measure. Obtain 10 depths evenly across the catch pile area. Include a single depth of 0.0ft if the catch pile is not in a checker pen or slopes to zero .	Feet, to the nearest tenth	Cannot be unknown.
14	Total Haul Volume	Calculate. Sum from all shapes used to measure catch area. Use formulas on worksheet. For deckloading: total minus remainder.	Cubic feet, to the nearest hundredth	Cannot be unknown.
15	Total Subsample Volume	Calculate. All subsample containers must be filled flush. Use formulas on worksheet.	Cubic feet, to the nearest hundredth	Cannot be unknown.
16	Sample Weight Multiplier	Calculate. Total divided by subsample. Used with both Volume-to-Volume calculations and Other Subsample Types. Copy to front of <u>Haul Log</u> .	Unitless, to the nearest hundredth	Cannot be unknown.
17	Unit Type	Must be the same for both total and subsample.	Check one	Cannot be unknown.
18	Total Number of Units	Weight: sum. Other units: count.	Weight: Pounds, to the nearest tenth Other: whole number	Cannot be unknown.
19	Number of Sample Units	Weight: sum. Other units: count. Must use full units for sample. Add weight of any partial units to the extrapolated total.	Weight: Pounds, to the nearest tenth Other: whole number	Cannot be unknown.
20	Entire Deckloading Haul Range	Range of hauls where deckloading occurred.	Haul numbers	Cannot be unknown.
21	Number of Hauls	Count.	Whole number	Cannot be unknown.
22	Species	See APPENDIX T – SPECIES CODES AND LOGS .	N/A	Cannot be unknown.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
23	Disposition Code	Obtain reason from captain. See APPENDIX M – FISH DISPOSITION CODES .	3-digit code	“900” and comment.
24	Total Sample Weight	Weigh.	Pounds, to the nearest tenth	Cannot be unknown.
25	Estimation Method	Method used to estimate the total for this species/disposition. See APPENDIX N – ESTIMATION METHOD CODES .	2-digit code	Cannot be unknown.
26	Weight Per Haul	Calculate. Total weight divided by number of hauls.	Pounds, to the nearest tenth	Cannot be unknown.
27	Partial Unit Weight	Only collected on the ASM Tally Count Worksheet. Weight of any containers that are not full.	Pounds, to the nearest tenth	Cannot be unknown.
28	Conveyor Used	Only collected on the ASM Volume-to-Volume Worksheet and ASM Deckloading Worksheet. Leave unchecked if conveyor present but not used for catch sorting.	Checkbox	Cannot be unknown.

CATCH ESTIMATION WORKSHEET
NMFS FISHERIES OBSERVER PROGRAM
07/01/21

OBS/TRIP ID	A	A99017-
DATE LANDED	mm/yy	10 / 22
HAUL #	F	006

SORTING METHOD Check all that apply 1 <input type="checkbox"/> Picked 1 2 <input type="checkbox"/> Shoveled 3 <input type="checkbox"/> Deckloaded 4 <input checked="" type="checkbox"/> Conveyor System 5 <input type="checkbox"/> Pumping System 9 <input type="checkbox"/> Other (Comment) 1A	ESTIMATION METHODS 01 = Actual (Spring Scale) 11 = Actual (Electronic Scale) 05 = Tally 03 = Basket or Tote Count 02 = Volume-to-Volume 13 = Count-to-Count 14 = Weight-to-Weight 07 = Cumulative Sum 12 = Trap Subsample 10 = Catch Composition Log 04 = Captain 06 = Visually Estimated 98 = Combination (Comment) 99 = Other (Comment)
--	--

MAREL SCALE
CALIBRATION WT
 _____ **2**

VOLUME-TO-VOLUME
 CATCH PILE SHAPE AS SEEN FROM ABOVE: **12**

Trapezoid

$$\left(\frac{4.4 \text{ ft} + 7.2 \text{ ft}}{2} \right) \times 3.3 \text{ ft} \times 0.87 \text{ ft} \times 0.5 = 16.65 \text{ ft}^3$$
 Width 1 Width 2 Length Avg. Depth Volume

Rectangle

$$6.5 \text{ ft} \times 7.2 \text{ ft} \times 0.87 \text{ ft} = 16.65 \text{ ft}^3$$
 Width Length Avg. Depth Volume

Triangle

$$\frac{1}{2} \times \text{Width} \times \text{Length} \times \text{Avg. Depth} = \text{Volume}$$
 Width Length Avg. Depth Volume

Full Oval or Half-Oval

$$\text{Width} \times \text{Length} \times \text{Avg. Depth} \times 0.785 = \text{Volume}$$
 Width Length Avg. Depth Volume

Other Shapes or Combination: Draw and label all dimensions in comments.
 DEPTHS: Representative depths (ft) systematically taken throughout the catch pile.
 Include a single depth of 0.0 ft if the catch pile is not in a checker pen or slopes to zero. **13**

0.8	0.6	0.9	1.1	1.1	0.8	1.0	0.7	0.9	0.8
A) Total Haul Vol. 14 57.37 ft ³		B) Total Subsample Vol. 15 8 Basket(s) X 1.47 ft ³ = 11.76 ft ³ Tote(s) X 2.65 ft ³ = . ft ³ Other(s) X . ft ³ = . ft ³		C) Sample Weight Multiplier 16 4.88 >> Copy to Front >>					
OTHER SUBSAMPLE TYPES <input type="checkbox"/> Basket <input type="checkbox"/> Tote <input type="checkbox"/> Weight <input type="checkbox"/> Trap <input type="checkbox"/> Count <input type="checkbox"/> Other		A) Total 18		B) Sample 19					

DECKLOADING and CUMULATIVE SUM

Entire Deckloading Haul Range **20**

Deckloading Measurements

Total Pile Vol.	Remainder Pile Vol.	A) Total Haul Vol.
_____ ft ³	_____ ft ³	_____ ft ³

Number of Hauls **21**

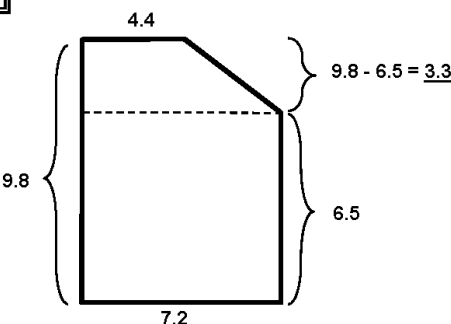
*Est. Meth.: Estimation Method used to obtain species Total Samp. Wgt. for cumulative sum calculation. If not '01' or '11' show all additional calculations & use '99' on front.

Species	Disp. Code	Total Sampled Weight	*Est. Method	Weight per Haul
1	22	23	24	25
2				26
3				
4				
5				

BASKET OR TOTE COUNT OR TALLY									
**Unit Types: B = Basket, T = Tote, I = Individual (tally), O = Other									
Species	Disp. Code	**Unit Type	List Individual Sample Weights	Total Sample Weight	# of Sample Units	Avg. Weight per Unit	Total # of Units	Total Est. Weight	
1 Cod, Atl.	3	4	5 weighed all together 6	7 14.8	8 6	9 2.4	10 17	11 41	
2 Squid, Shortfin	100	O	21, 23.8, 28, 23.2, 23.4, 23, 17.5, 22, 23.3, 28			_____			
				228.8	10	22.9	162	3710	
4 Skate, Little	001	B	see haul 5	_____	_____	62.1	5	311	
5						_____			
6						_____			
7						_____			
8						_____			
9						_____			
10						_____			

COMMENTS:

Kept Squid stored in boxes approx. 1' x 0.5' x 0.5'



CATCH ESTIMATION WORKSHEET (SCALLOP)
NMFS FISHERIES OBSERVER PROGRAM
07/01/21

OBS/TRIP ID	A	A99023-
DATE LANDED mm/yy	B	11 / 22
HAUL #	F	147

SORTING METHOD Check all that apply 1 <input type="checkbox"/> Picked 1 2 <input type="checkbox"/> Shoveled 3 <input checked="" type="checkbox"/> Deckloaded 4 <input type="checkbox"/> Conveyor System 5 <input type="checkbox"/> Pumping System 9 <input type="checkbox"/> Other (Comment) 1A		ESTIMATION METHODS 01 = Actual (Spring Scale) 11 = Actual (Electronic Scale) 05 = Tally 03 = Basket or Tote Count 02 = Volume-to-Volume 13 = Count-to-Count 14 = Weight-to-Weight 07 = Cumulative Sum 12 = Trap Subsample 10 = Catch Composition Log 04 = Captain 06 = Visually Estimated 98 = Combination (Comment) 99 = Other (Comment)		DECKLOADING Entire Deckloading Haul Range 20 147 — 151 Number of Hauls 21		CUMULATIVE SUM <small>*Estimation Method used to obtain species Total Samp. Wgt. for cumulative sum calculation. If not '01' or '11' show all additional calculations and use '98' on front.</small> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Species</th><th>Disp. Code</th><th>Total Sampled Weight</th><th>*Est. Method</th><th>Weight per Haul</th></tr> </thead> <tbody> <tr> <td>22</td><td>23</td><td>24</td><td>25</td><td>26</td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>					Species	Disp. Code	Total Sampled Weight	*Est. Method	Weight per Haul	22	23	24	25	26																																													
Species	Disp. Code	Total Sampled Weight	*Est. Method	Weight per Haul																																																													
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1	3	4	5	6	7	8	9	10																																																									
2																																																																	
3																																																																	
VOLUME-TO-VOLUME CATCH PILE SHAPE AS SEEN FROM ABOVE:							MAREL SCALE CALIBRATION WT _____ * 2																																																										
<div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;"> <small>Full Oval</small> </div> <div style="text-align: center;"> <small>Half-Oval</small> </div> <div style="text-align: center;"> <small>Rectangle</small> </div> </div>							<small>DEPTHS: Representative depths (ft) systematically taken throughout the catch pile. Include a single depth of 0.0 ft if the catch pile is not in a checker pen or slopes to zero.</small>																																																										
A1) REMAINDER VOLUME from previous haul(s) Starboard Circle One: Full Oval Half-Oval Rectangle 12A							COMMENTS :																																																										
3.2 ft X 7.1 ft X 1.1 6 ft (X 0.785) = 20.69 ft³ <small>Width Length Avg. Depth (ovals) Volume</small>					<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>1.2</td><td>1.0</td><td>1.3</td><td>1.5</td><td>2.0</td></tr> <tr><td>1.3</td><td>1.2</td><td>1.1</td><td>1.0</td><td>0.0</td></tr> </table>				1.2	1.0	1.3	1.5	2.0	1.3	1.2	1.1	1.0	0.0																																															
1.2	1.0	1.3	1.5	2.0																																																													
1.3	1.2	1.1	1.0	0.0																																																													
Port Circle One: Full Oval Half-Oval Rectangle 3.0 ft X 6.0 ft X 0.8 4 ft (X 0.785) = 11.87 ft³ <small>Width Length Avg. Depth (ovals) Volume</small>					<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>0.8</td><td>0.1</td><td>1.2</td><td>1.0</td><td>1.0</td></tr> <tr><td>0.9</td><td>0.8</td><td>1.1</td><td>0.6</td><td>0.0</td></tr> </table>				0.8	0.1	1.2	1.0	1.0	0.9	0.8	1.1	0.6	0.0																																															
0.8	0.1	1.2	1.0	1.0																																																													
0.9	0.8	1.1	0.6	0.0																																																													
A1) TOTAL REMAINDER VOLUME (Starboard + Port) = 32.56 ft³																																																																	
A2) TOTAL VOLUME after current haul dumped Starboard Circle One: Full Oval Half-Oval Rectangle 12B																																																																	
3.6 ft X 7.6 ft X 1.2 0 ft (X 0.785) = 25.77 ft³ <small>Width Length Avg. Depth (ovals) Volume</small>					<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>1.3</td><td>1.0</td><td>0.6</td><td>0.3</td><td>1.7</td></tr> <tr><td>1.9</td><td>2.0</td><td>1.4</td><td>1.8</td><td>0.0</td></tr> </table>				1.3	1.0	0.6	0.3	1.7	1.9	2.0	1.4	1.8	0.0																																															
1.3	1.0	0.6	0.3	1.7																																																													
1.9	2.0	1.4	1.8	0.0																																																													
Port Circle One: Full Oval Half-Oval Rectangle 3.0 ft X 7.0 ft X 1.3 0 ft (X 0.785) = 27.30 ft³ <small>Width Length Avg. Depth (ovals) Volume</small>					<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>0.7</td><td>0.5</td><td>1.8</td><td>1.3</td><td>1.9</td></tr> <tr><td>1.2</td><td>1.0</td><td>0.8</td><td>1.6</td><td>1.8</td></tr> </table>		0.7	0.5	1.8	1.3	1.9	1.2	1.0	0.8	1.6	1.8																																																	
0.7	0.5	1.8	1.3	1.9																																																													
1.2	1.0	0.8	1.6	1.8																																																													
A2) TOTAL CATCH PILE VOLUME (Starboard + Port) = 53.07 ft³																																																																	
A) Total Haul Vol. 14 4 Basket(s) X 1.47 ft³ = 5.88 ft³ Tote(s) X 2.65 ft³ = . ft³ Other(s) X . ft³ = . ft³ 20.31 ft³		B) Total Subsample Vol. 15		C) Sample Weight Multiplier (A + B) 16 3.49 >> Copy to Front >>																																																													
OTHER SUBSAMPLE TYPES <input type="checkbox"/> Basket <input type="checkbox"/> Tote <input type="checkbox"/> Weight <input type="checkbox"/> Trap <input type="checkbox"/> Count <input type="checkbox"/> Other		Unit Type 17 A) Total 18 B) Sample 19																																																															
Pile on deck when I came on watch																																																																	

OBS/TRIP ID	A	A99022-
DATE LANDED mm/yy	B	12 /22
PAGE NUMBER	C	1 of 1

[illegible]

**Leave blank if n/a.

NOTES:

142

Catch Estimation Worksheet

07/01/2021





HAUL #	15	F	NUMBER OF HAULS	2	21
ENTIRE DECKLOADING HAUL RANGE	14	-	15	20	

~This Worksheet is intended for Volume-to-Volume Deckloading math only~

[illegible]

Remainder
Volume = 105.71 ft³

B

Trapezoid		$\left(\frac{\text{Width 1} + \text{Width 2}}{2} \right) \times \text{Length} \times 0.5 = \text{Volume}$										
Rectangle		$\text{Width} \times \text{Length} \times 1.20 = \text{Volume}$										
Triangle		$\left(\frac{\text{Width}}{2} \right) \times \text{Length} \times 0.5 = \text{Volume}$										
Full Oval or Half-Oval		$\left(\frac{\text{Width}}{2} \right) \times \text{Length} \times 0.785 = \text{Volume}$										
Depths: 13												
<table border="1"> <tbody> <tr> <td>1.0 ft</td> <td>0.8 ft</td> <td>1.6 ft</td> <td>1.3 ft</td> <td>1.5 ft</td> <td>1.0 ft</td> <td>1.4 ft</td> <td>1.1 ft</td> <td>1.3 ft</td> <td>1.0 ft</td> </tr> </tbody> </table>			1.0 ft	0.8 ft	1.6 ft	1.3 ft	1.5 ft	1.0 ft	1.4 ft	1.1 ft	1.3 ft	1.0 ft
1.0 ft	0.8 ft	1.6 ft	1.3 ft	1.5 ft	1.0 ft	1.4 ft	1.1 ft	1.3 ft	1.0 ft			
B) Total Pile Volume = 142.42 ft³												

B) Total Pile Volume 12B		A) Remainder Pile Volume 12A		C) Total Haul Volume 14		Other Shapes, Combinations, or Comments: Draw, label and record in Comment Section
142.42 ft ³		105.71 ft ³		= 36.71 ft ³		
D) Total Subsample Volume 15				E) Sample Weight Multiplier (C ÷ D) 16		Check here if conveyor used <input type="checkbox"/>
4	Basket(s)	X	1.47ft ³	=	5.88 ft ³	
___	Tote(s)	X	2.65ft ³	=	___ ft ³	
___	Other(s)	X	___ ft ³	=	___ ft ³	
				6.24		

Other Shapes, Combinations, or Comments: Draw, label and record in Comments Section

28

☐ Check here if conveyor used

OBS/TRIP ID	A	A99022-
DATE LANDED mm/yy	B	12 /22
PAGE NUMBER	C	1 of 1

[illegible]

**Estimation Method used to obtain species Total Sampled Weight for cumulative sum calculation. If not '01' or '11' use '98' on upload with comment.

NOTES:

Kept monkfish stored in baskets mixed across hauls. I weighed them at end of haul 6.

Discard Log

The purpose of this log is to systematically capture discarding events and the associated data. This log is required for all hauls in which pumping occurs, regardless of target species or gear type observed, unless there is no catch (kept or discarded). Generally, these are high-volume fisheries in which discard information is critical to collect. Additionally, this log should be used in non-pumping fisheries if a significant discarding event occurs, but is not required on every haul. A significant Discarding event is a relatively large amount of catch released before coming on board the vessel (released directly into the water) or before observer is able to sample the catch (dumped on deck then immediately shoveled over). This log should be completed in addition to the [Haul Log](#) for each particular gear type. Offer the captain a copy of the [FISHERMEN'S COMMENT LOG](#) to document any issues that occurred during this haul.

All discards recorded on the [Haul Log](#) must be accounted for and described on the [Discard Log](#), including those brought onboard and sorted prior to discarding. If no catch exists, check CATCH = "No" on the [Haul Log](#), and do not fill out a [Discard Log](#).

Comments

Document and describe the weight, species composition, and discard reason(s) for the released catch as accurately as possible. Record the corresponding weight on the species section of the [Haul Log](#), labeling any catch released before coming onboard as "Fish, NK" because identification is not verifiable. Any catch brought onboard should be identified as fully as possible.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Discards Exist?	Yes/No. Were there any discards in haul, regardless if discarded before or after brought onboard.	1-digit code	"9".
2	All Catch Sampled?	Yes/No. If any catch slipped ⁷ from this vessel, must be "No". Comment if any portion of the catch is not sampled.	1-digit code	Cannot be unknown. If no catch, mark "Not applicable".
3*	See Contents of Codend?	Visually confirm. If any amount discarded without coming onboard, mark "Yes, all/some contents seen in water".	1-digit code	Cannot be unknown.
4*	Reason Catch Discarded?	Check all that apply.	Check all that apply	"0".
5*	Who Estimated Discarded Catch?	Visually confirm. "Observer" refers to you and "captain" refers to the captain of the vessel you are on.	Check one	Cannot be unknown.
6	Catch Pumped to Another Vessel	Yes/No.	Check one	"9".
7	Observer Onboard Other Vessel	Yes/No.	Check one	"9".
8	Other Observer's TripID	Obtain from other observer.	3-character ObsID plus 3-digit trip number	Dash. Leave blank if no observer on other vessel.

⁷ Does not include operational discards. See the [Observer Operations Manual](#) for complete definition of slippage.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
9	Other Observer's Haul #	Obtain from other observer. May differ from your haul number.	3-digit number	Dash. Leave blank if no observer on other vessel.
10*	Discard Event	Check all that apply.	Check all that apply	Cannot be unknown.
11*	Reasons Not Brought Onboard	Describe any reasons why the catch could not be pumped/hailed onboard.	Comment field	Leave blank.
12*	Catch Composition of Discarded Catch	Describe the catch composition of the discarded catch and how those determinations were made.	Comment field	Leave blank.
13*	Challenges with Haul	Describe any challenges that occurred while observing this haul. Might include, but is not limited to, weather related reasons, viewing of codend or bunt, and/or gear related issues.	Comment field	Leave blank.

No or Unknown Discards

If there are no discards for this tow, or if the catch is pumped/hailed to another vessel and you are unable to determine if discards exist, much of the information will be unknown or not applicable. For the following fields, record the values indicated below. For all other fields, record as usual.

Field #	Name	Record if No Discards	Record if Discards Unknown
1	Discards Exist?	"No".	"Unknown".
4	Reason Catch Discarded?	"Not applicable".	"Unknown"
5	Who Estimated Discarded Catch?	"Not applicable".	"Not applicable".
10	Discard Event	"Not applicable".	"Unknown".

DISCARD LOG
NMFS FISHERIES OBSERVER PROGRAM
OBPDQ 07/01/21

OBS/ TRIP ID	A	A99029-
DATE LAND (mm/yy)	B	10 / 22
PAGE #	C	4 OF 4

GEAR CODE 1 7 0	GEAR # 0 1	HAUL # 0 0 1	Why was the catch discarded on this haul? (CHECK ALL THAT APPLY) 4	Who estimated the weight of the discarded catch? 5 X Observer (1) ____ Captain (2) ____ Combination (8) ____ Not applicable	Was there an observer onboard the other vessel? If yes, provide the Tripid and Haul Number. 7 ____ No (0) X Yes (1) ____ Unknown (9)	Check off the discard event. (CHECK ALL THAT APPLY) 10 <input type="checkbox"/> Unknown (0) (comment) <input checked="" type="checkbox"/> Operational discards (1) <input type="checkbox"/> Tow was partially released (2) <input type="checkbox"/> Tow was fully released (3) <input checked="" type="checkbox"/> Discarded after being brought onboard (4) <input type="checkbox"/> Other (9) (comment) <input type="checkbox"/> Not applicable	REASONS NOT BROUGHT ONBOARD: Describe any reasons why the catch could not be pumped/hailed onboard. 11 ~125 pounds of fish could not be pumped from net. They were seen in the water when pump was disconnected.
Were there discards for this tow? 1 ____ No (0) X Yes (1) ____ Unknown (9)	When the pumping/hauling process was complete were you able to see the contents of the codend/bunt? 3 ____ No (0) ____ Yes, all contents seen on deck (1) X Yes, all/some contents seen in water (2)	<input type="checkbox"/> Unknown (0) (comment) <input checked="" type="checkbox"/> Market (1) <input type="checkbox"/> Regulations (2) <input type="checkbox"/> Quality (4) <input checked="" type="checkbox"/> Not brought onboard (5) <input type="checkbox"/> Other (9) (comment) <input type="checkbox"/> Not applicable	Was any of the catch pumped to another vessel? 6 ____ No (0) X Yes (1) ____ Unknown (9)	TRIPID: B99018- 8 HAUL #: 001 9			
Was all catch brought to the observed vessel pumped/hailed onboard and completely sampled? 2 ____ No (0) X Yes (1) ____ Not applicable							
CATCH COMPOSITION OF DISCARDED CATCH: Describe the catch composition of the discarded catch and how those determinations were made. 12 Market/discard after pumping = spiny dogfish picked at grate (17 lbs) and discarded Operational discards seen floating in water - all looked to be silvery, herring-bodied fish No released catch from this boat. I sampled all catch that came onboard.				CHALLENGES OBSERVING THIS HAUL: Describe any challenges that occurred with observing this haul: 13 ~100,000 pounds pumped to F/V Susan B.			

Crustacean Sample Log

This log is designed to collect biological data on the size and condition of individual lobsters and crabs. These data are used to determine crustacean mortality rates, and to assess the effects of fishing on these rates.

Complete this log on a per haul basis during deployments targeting lobsters and crabs. It should also be completed to sample lobsters and crabs caught on other deployments, as the biological sampling priorities specify, and as time permits.

Only one species may be recorded on a log, as the information collected for lobsters and crabs differs.

Follow the lobster sampling strategies described in the Sampling Strategies subsection under the Pot and Trap Fisheries section of the Observer Operations Manual or summarized in the Observer On-Deck Reference Guide. For detailed information on sampling, see the Crustacean Sampling subsection under Biological Sampling section of the Observer Operations Manual.

If you are unable to collect all of the information for every animal sampled, the priority of data collection should be the order (left to right) of the fields listed on the log. All animals sampled must have a CARAPACE LENGTH or CARAPACE WIDTH and CATCH DISPOSITION recorded. When more than 50 animals are sampled, continue sampling on the back of the log, and number each page accordingly.

Comments

Record information regarding this sample or your sampling methods (e.g., the reason all animals caught were not sampled) below. If more room is needed, use the back of this log, making sure to write "See Back" on the front of the log. Reference each comment with its corresponding field name or animal number.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Number of Animals Caught	Count or estimate from trap subsampling. Total for the haul, regardless of number sampled.	Whole number	Cannot be unknown.
2	Count – Actual or Estimated	Actual (counted) or Estimated.	A or E	Cannot be unknown.
3	Shell Disease Percentage	Calculate. Number of affected animals divided by total number of animals.	Whole percent	Dash.
4	Carapace Length/Width	Measure with calipers.	Whole millimeters	Cannot be unknown.
5	Catch Disposition	Kept or Discarded.	K or D	Cannot be unknown.
6	Sex	Visually determine.	1-digit code	"0".
7	Egg Stage	Visually determine. See <u>On-Deck Reference Guide</u> .	1-digit code	"0".
8	Lobster V-Notch	Visually determine.	1-digit code	"0". Leave blank for species other than lobster.
9	Lobster Molt	Visually confirm.	1-digit code	"0". Leave blank for species other than lobster.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
10	Lobster # of Claws	Count. Claws must have a shell, regardless of size or shell condition. Do not count regenerating claws which are small, fleshy appendages ("buds") with no shell.	Whole number	Dash. Leave blank for species other than lobster.

CRUSTACEAN SAMPLE LOG
NMFS FISHERIES OBSERVER PROGRAM
OBCRU 07/01/21

OBS/TRIP ID	A	A99036-
DATE LANDED mm/yy	B	05 / 16
PAGE #	C	3 OF 3
HAUL #	F	0 4 4

SPECIES								ANIMALS CAUGHT								SHELL DISEASE PERCENTAGE
NAME				CODE				NUMBER				A / E				
A' American Lobster				B'				1 33				2 A				3 12
LOBSTER ONLY								LOBSTER ONLY								
CARAPACE (mm)	C D I S P (K / D)	S E X	E G G	V - N O T C H	M O L T	#	C L A W	CARAPACE (mm)	C D I S P (K / D)	S E X	E G G	V - N O T C H	M O L T	#	C L A W	
LOBSTER - LENGTH CRAB - WIDTH								LOBSTER - LENGTH CRAB - WIDTH								
01 117	4 D	5 2	6 4	7 1	8 3	9 2	10 2	26 120	D	2	5	1	3	2		
02 90	K	2	1	1	3	2	2	27 103	K	2	1	2	3	2		
03 93	K	1	1	1	3	2	2	28 91	K	2	1	1	3	2		
04 133	K	1	1	1	3	2	2	29 106	K	2	1	2	3	2		
05 124	D	2	4	2	3	2	2	30 102	K	1	1	1	3	0		
06 130	K	1	1	1	3	2	2	31 118	D	2	4	1	3	2		
07 131	D	2	4	2	3	2	2	32 117	D	2	4	2	3	2		
08 122	K	1	1	1	3	2	2	33 132	D	2	3	2	3	2		
09 118	K	2	1	1	3	2	2	34								
10 100	K	1	1	1	3	2	2	35								
11 132	K	2	1	2	3	2	2	36								
12 148	K	2	1	1	3	2	2	37								
13 134	K	1	1	1	3	2	2	38								
14 101	D	2	3	1	3	2	2	39								
15 102	K	2	1	1	3	2	2	40								
16 116	K	2	1	2	3	2	2	41								
17 108	K	2	1	2	3	2	2	42								
18 105	K	1	1	1	3	2	2	43								
19 103	K	2	1	1	3	2	2	44								
20 123	K	2	1	1	3	2	2	45								
21 138	K	1	1	1	3	2	2	46								
22 99	K	1	1	1	3	2	2	47								
23 116	K	1	1	1	3	1	1	48								
24 107	K	1	1	1	3	2	2	49								
25 108	D	2	4	1	3	2	2	50								
COMMENTS																
4 lobsters had a brown, spotting shell disease. Females w/eggs were discarded.																

OBS/TRIP ID A																			
DATE LANDED mm/yy B										/									
PAGE # C										<input type="text"/> OF <input type="text"/>									
HAUL # F										<input type="text"/>									

LOBSTER ONLY								LOBSTER ONLY							
CARAPACE (mm)		C D I S P	S E X	E G G	V - N O T C H	M O L T	#	CARAPACE (mm)		C D I S P	S E X	E G G	V - N O T C H	M O L T	#
LOBSTER - LENGTH CRAB - WIDTH		(K / D)					C L A W	LOBSTER - LENGTH CRAB - WIDTH		(K / D)					C L A W
51	4	5	6	7	8	9	10	76							
52								77							
53								78							
54								79							
55								80							
56								81							
57								82							
58								83							
59								84							
60								85							
61								86							
62								87							
63								88							
64								89							
65								90							
66								91							
67								92							
68								93							
69								94							
70								95							
71								96							
72								97							
73								98							
74								99							
75								100							

SEX CODES:
0= Unknown
1=Male
2=Female

EGG CODES:
0=Unknown
1=No eggs
2=Eggs, stage unknown
3=Eggs, newly extruded
4=Eggs, eyed
5=Eggs, hatching
6=Spent

V-NOTCH CODES:
0=Unknown
1=No
2=Yes, old
3=Yes, new

MOLT CODES:
0=Unknown
1=Soft
2=Paper
3=Hard
4=Splitter

COMMENTS

Marel Scale Worksheet

The purpose of this worksheet is to document the performance of the electronic Marel scales. If you are assigned a Marel scale you must complete a Marel Scale Worksheet for every deployment, regardless of whether or not the scale is used. This worksheet is used for all programs.

Record the results of your daily calibration tests and comment on any error messages or unusual results. If you are unable to use the scale for certain hauls, indicate on the Haul Log why the Marel scale was not used.

Comments

Provide details on any error messages, fit values or calibration weights outside of normal ranges, and any other factors influencing the scale reading.

If you cannot take your issued Marel scale on a trip, you must complete this worksheet and describe the reason the Marel scale was not used.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Scale Serial Number	Number displayed on the face unit. NOT the number on the metal handle.	7 characters	Cannot be unknown.
2	Vessel Name	Obtain from captain.	N/A	Cannot be unknown.
3	Daily Calibration Test Date	Date the test was completed. If multiple tests conducted on a single day, record the time in comments.	MM/DD/YY	Cannot be unknown.
4	Fit Value	Indicator of how well the scale is performing in the marine conditions. Calm weather: must be ≤ 25 . Rough weather: must be ≤ 70 .	Whole number	Cannot be unknown.
5	Calibration Weight	Must be between 11.0 and 11.1 to use the scale.	Pounds, to the nearest tenth.	Cannot be unknown.
6	Daily Calibration Test Comments	Describe any error messages or other problems with the daily test.	Comment field	Cannot be unknown.
7	Event Date	Date of any event resulting in the scale not being used or requiring retest. If multiple events in a single day, record the time in explanation.	MM/DD/YY	Cannot be unknown.
8	Event Code	Reasons why the scale could not be used or had to be retested.	1-digit code	Cannot be unknown.
9	Event Explanation	Provide additional details.	Comment field	Cannot be unknown.

MAREL SCALE WORKSHEET

NMFS FISHERIES OBSERVER PROGRAM

07/01/21

OBS/TRIP ID	A	A99101-
DATE LANDED mm/yy	B	10 / 22
PAGE #	C	1 of 2

SCALE SERIAL NUMBER A114321	VESSEL NAME Comorant
---------------------------------------	--------------------------------

DAILY TESTS

DATE <small>(mm/dd/yy)</small>	FIT VALUE	CALIBRATION WEIGHT <small>(must be 11.0 - 11.1 to use)</small>	COMMENTS
10 /13 /22	2	<u> 1 </u> <u> 1 </u> . <u> 0 </u>	
10 /14 /22	5	<u> 1 </u> <u> 1 </u> . <u> 0 </u>	
10 /15 /22	17	<u> 1 </u> <u> 1 </u> . <u> 0 </u>	
10 /16 /22	14	<u> 1 </u> <u> 1 </u> . <u> 0 </u>	
10 /17 /22	30	<u> 1 </u> <u> 1 </u> . <u> 1 </u>	E-05, rough weather, tried 3 times, all high fit values
10 /18 /22	13	<u> 1 </u> <u> 1 </u> . <u> 0 </u>	
10 /19 /22	11	<u> 1 </u> <u> 1 </u> . <u> 1 </u>	
10 /20 /22	6	<u> 1 </u> <u> 1 </u> . <u> 0 </u>	E-08, E-05, recalibrated and codes went away
10 /21 /22	0	<u> 1 </u> <u> 1 </u> . <u> 1 </u>	
10 /22 /22	9	<u> 1 </u> <u> 1 </u> . <u> 0 </u>	Scale would not turn on. Changed batteries and worked

EVENTS

DATE <small>(mm/dd/yy)</small>	EVENT CODE	EXPLANATION
10 /17 /22	2	Tried next haul, calibrated fine
10 /21 /22	2	E-08, was not able to correct on deck, tried 3 times. Tried next haul and worked fine.
10 /22 /22	5	Large catch on deck, no space for scale
/ /		
/ /		
/ /		
/ /		
/ /		
/ /		
/ /		

EVENT CODES

- 1 = Unable to bring on trip
 2 = Error Message
 3 = Unable to calibrate
 4 = Damaged/lost
 5 = Unable to establish sampling station
 6 = Other

OBS/TRIP ID	A	A99101-
DATE LANDED mm/yy	B	10 / 22
PAGE #	C	2 of 2

DAILY TESTS

DATE 3 (mm/dd/yy)	FIT VALUE 4	CALIBRATION WEIGHT 5 (must be 11.0 - 11.1 to use)	COMMENTS 6
10 / 23 / 22	6	1 1 . 0	
10 / 24 / 22	2	1 1 . 0	
10 / 25 / 22	3	1 1 . 0	
10 / 26 / 22	20	1 1 . 0	seas < 1 ft, scale worked fine, will call to check-in
/ /		.	
/ /		.	
/ /		.	
/ /		.	
/ /		.	
/ /		.	

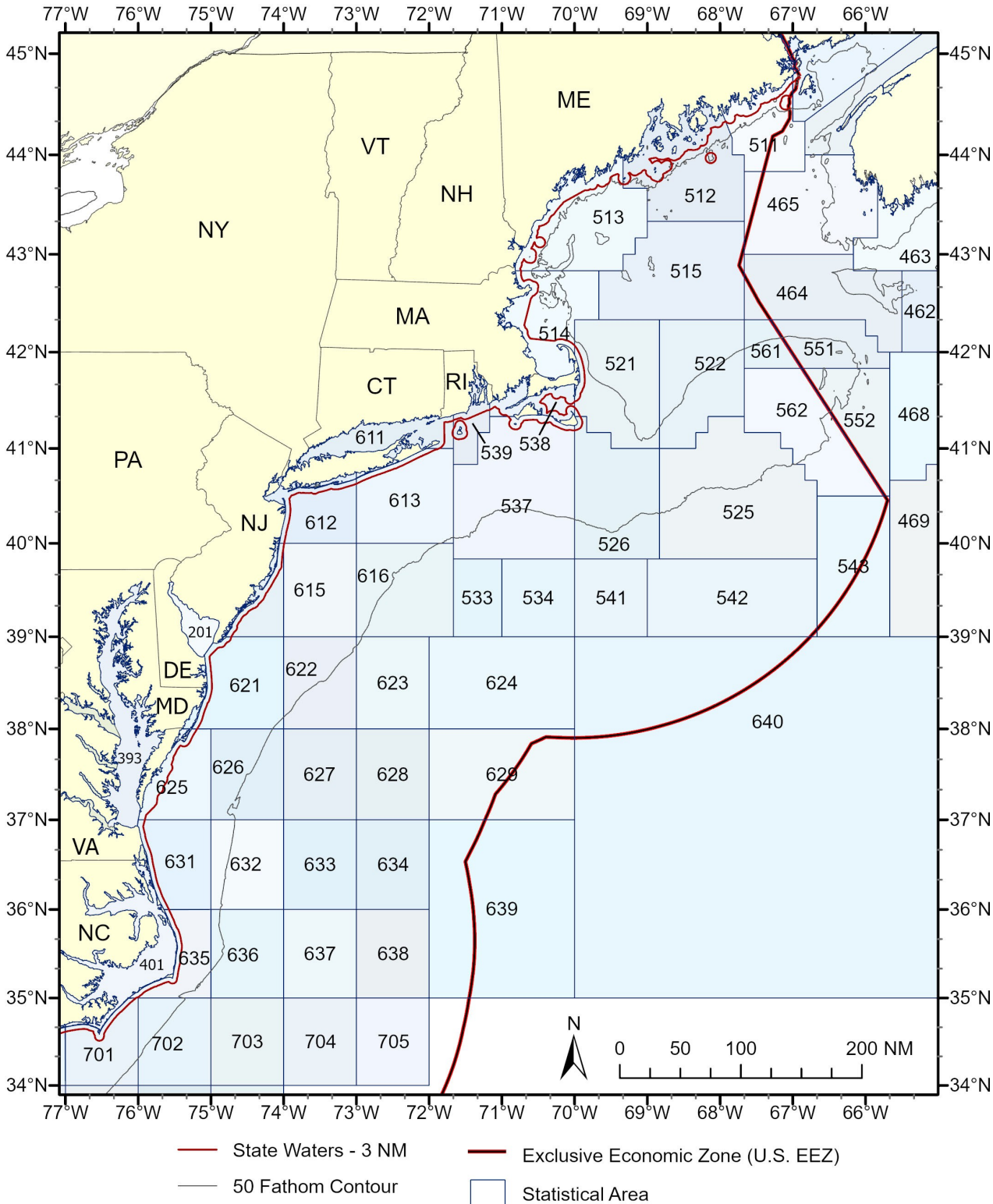
ERROR CODES

- E-01 = AD converter failure - Restart the scale.
- E-03 = ADC over range - Reduce the weight on the platform.
- E-04 = ADC under range - Increase the weight on the platform.
- E-05 = Unstable weight (initial zero) - Stabilize scale.
- E-06 = Weight outside range (initial zero) - Make sure platform is empty.
- E-08 = Operation in progress (initial zero) - Wait until completed.
- E-11 = Invalid initial zero - Remove or reduce the weight on the platform.
- E-13 = Program failure - Contact FMRD staff.
- E-14 = ADC not responding - Contact FMRD staff.
- E-15 = W&M setup checksum failure - Contact FMRD staff.
- E-23 = 24 V power voltage too high - Contact FMRD staff.
- E-25 = Low voltage to load cells - Contact FMRD staff.
- E-50 = Parameter protection test failed - Restart the scale.
- E-81 = Fit value too high - Repeat calibration.
- E-82 = Calibration weight not detected - Repeat calibration.
- E-84 = Marine static calibration not allowed - Scale requires motion.
- E-91 = Invalid marine calibration. Fit value too high - Repeat calibration.
- E-92 = Invalid marine calibration. Calibration weight not detected - Repeat calibration.
- E-93 = Invalid initial zero - Make sure the platform is empty.

Appendix A – Northeast Statistical Areas

Chart 1. Overview of Northeast Statistical Areas.

Do not use for navigation



Fisheries Sampling Branch 2020-08

Chart 2a. Gulf of Maine, management and statistical areas.

Do not use for navigation

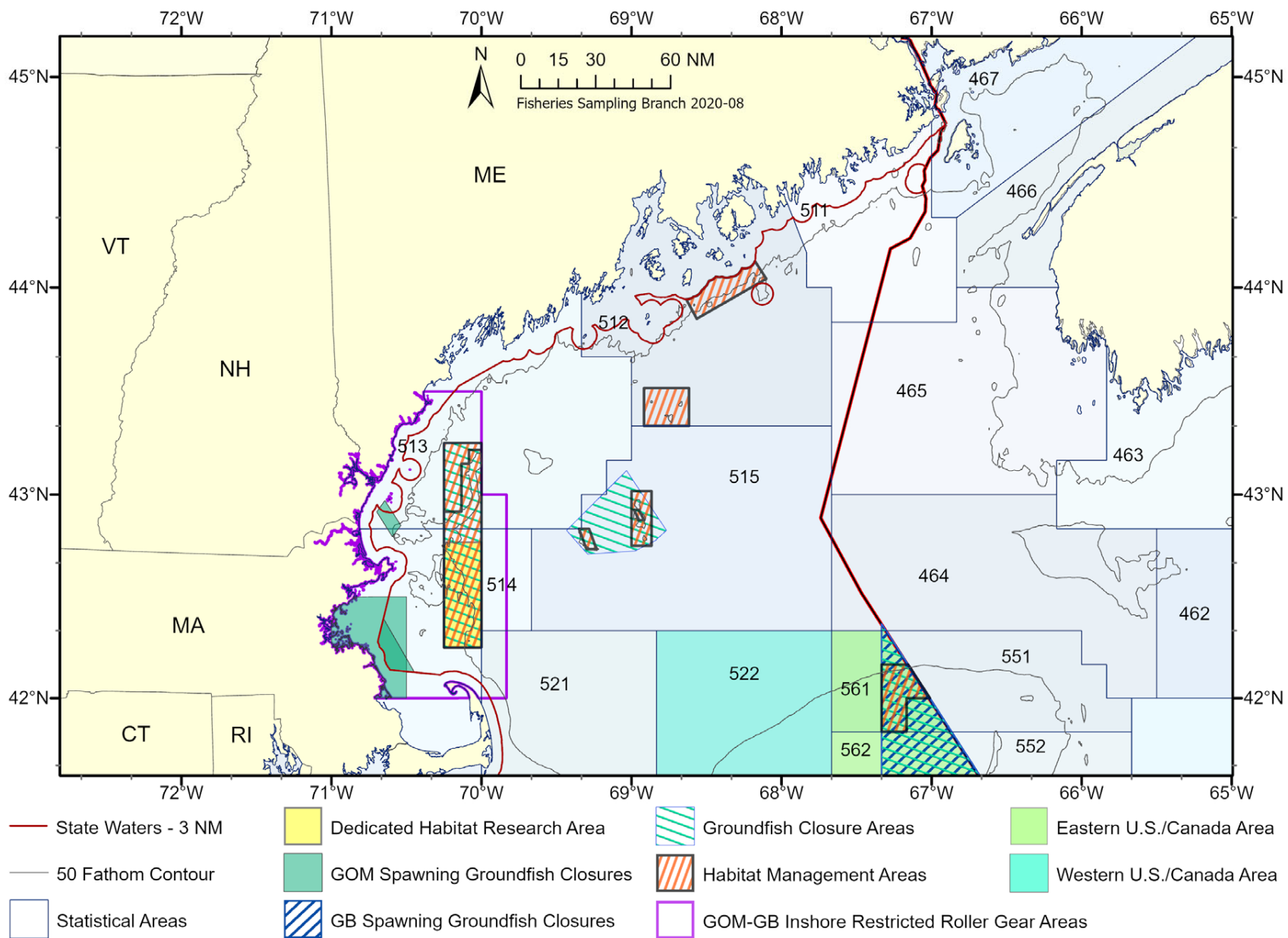


Chart 2b. Gulf of Maine, as above, with Loran Lines Overlay.

Do not use for navigation

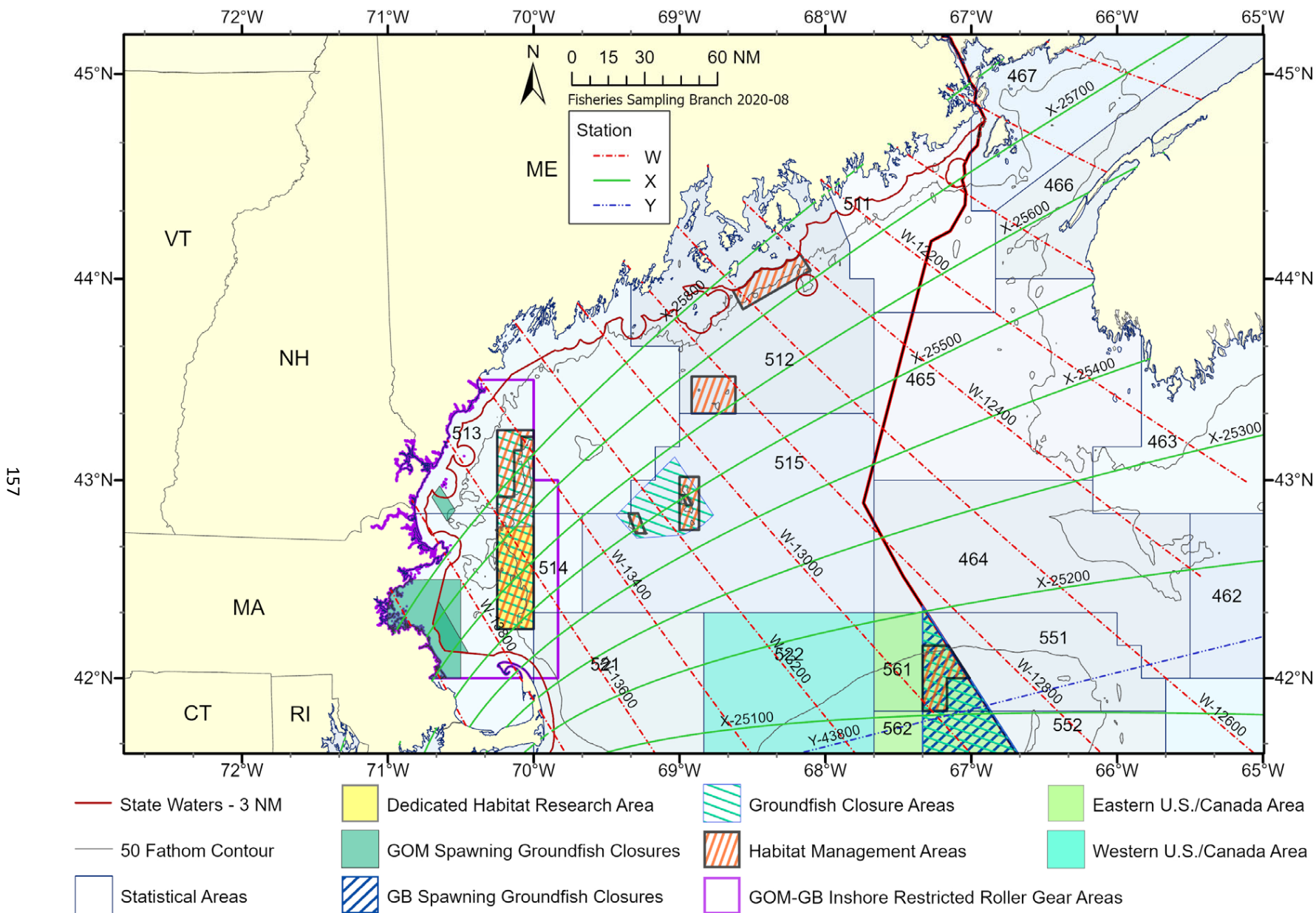
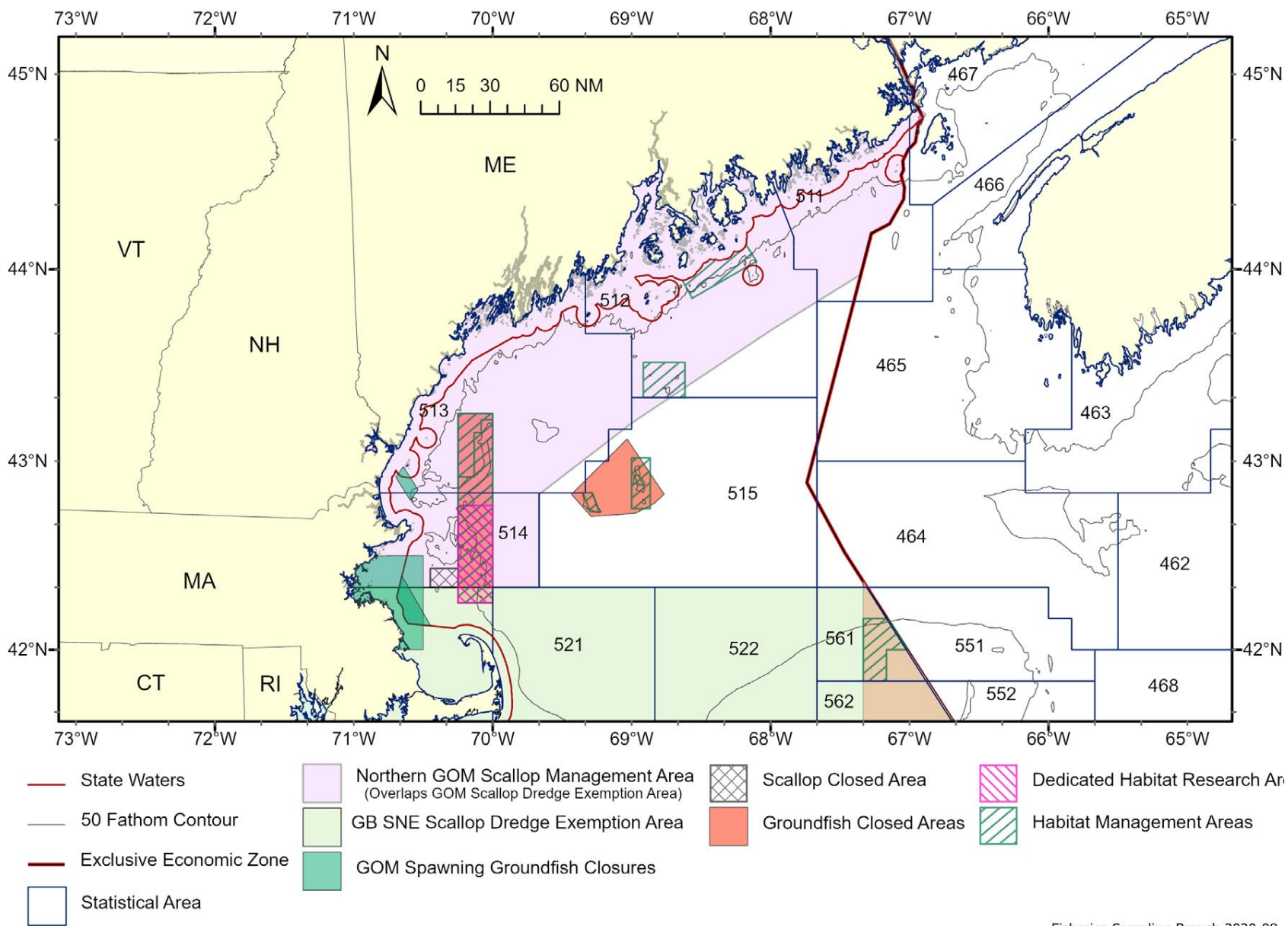


Chart 2c. Gulf of Maine, Scallop Fishery Associated Management Areas.

Do not use for navigation



Fisheries Sampling Branch 2020-08

Chart 3a. Georges Bank, Groundfish Management and Statistical areas.

Do not use for navigation

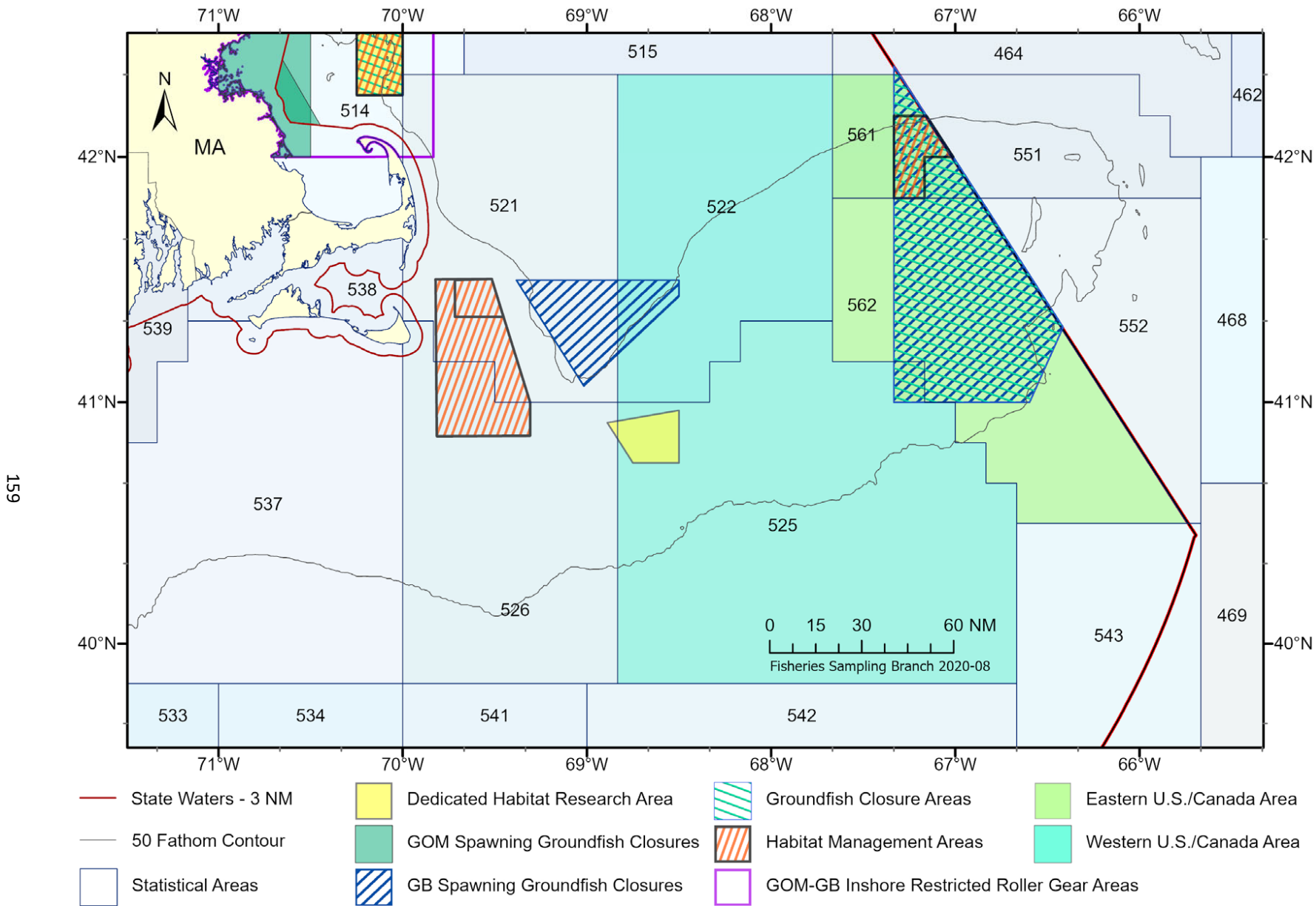


Chart 3b. Georges Bank, as above, with Loran Lines Overlay.

Do not use for navigation

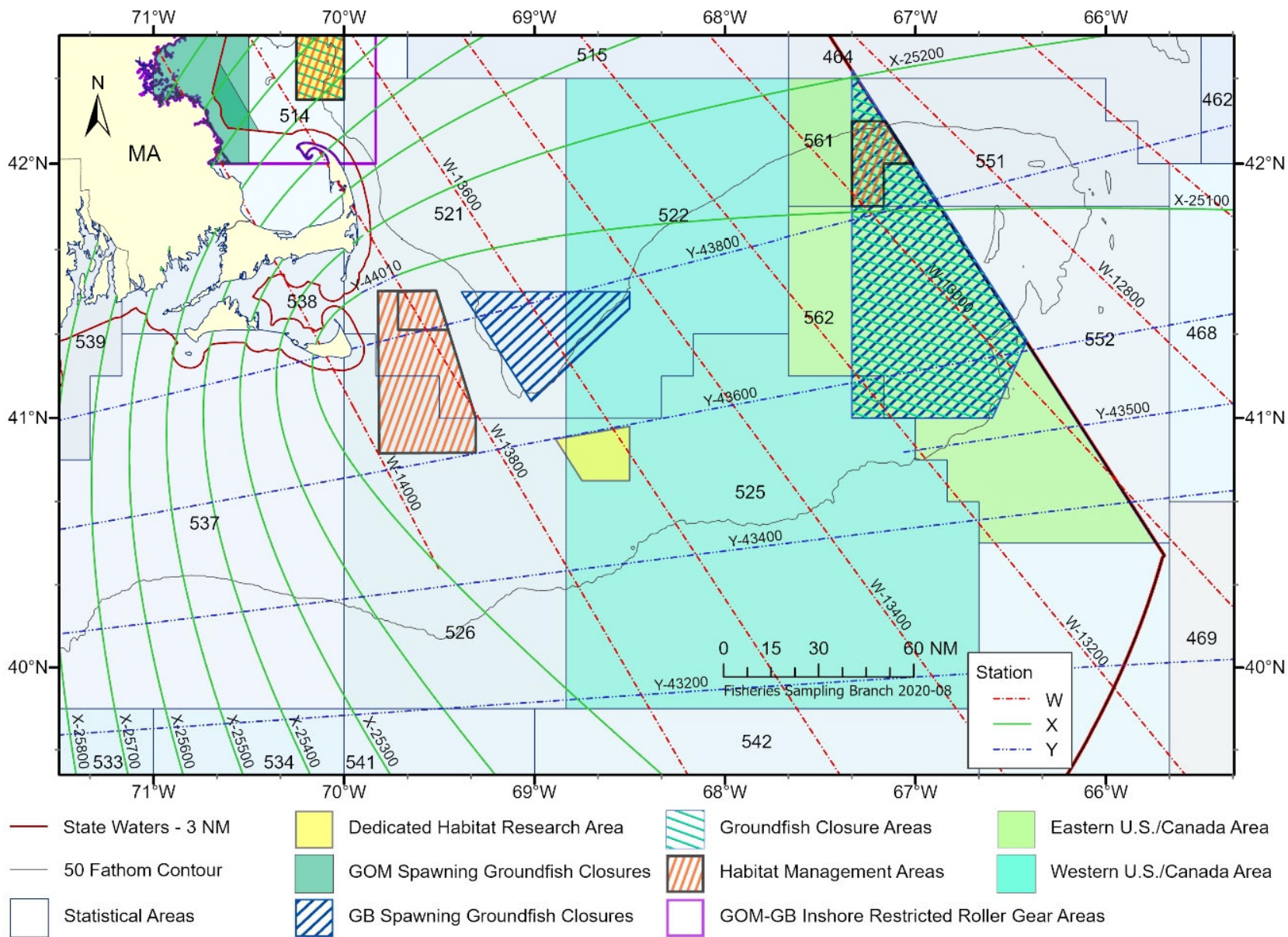


Chart 3c. Georges Bank, Scallop Fishery Associated Management Areas.

Do not use for navigation

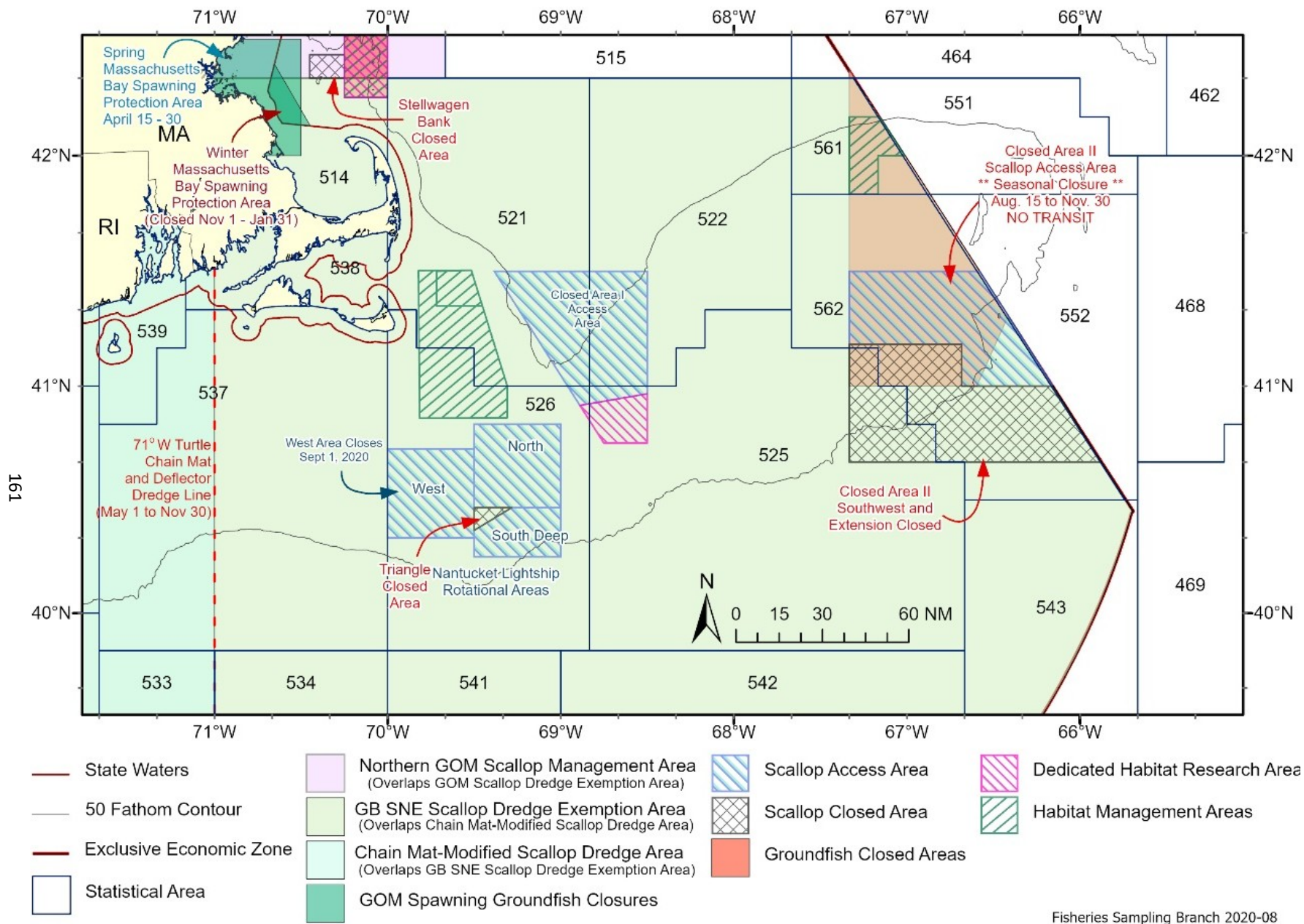


Chart 4a. Detail of US/Canada management areas.

Do not use for navigation

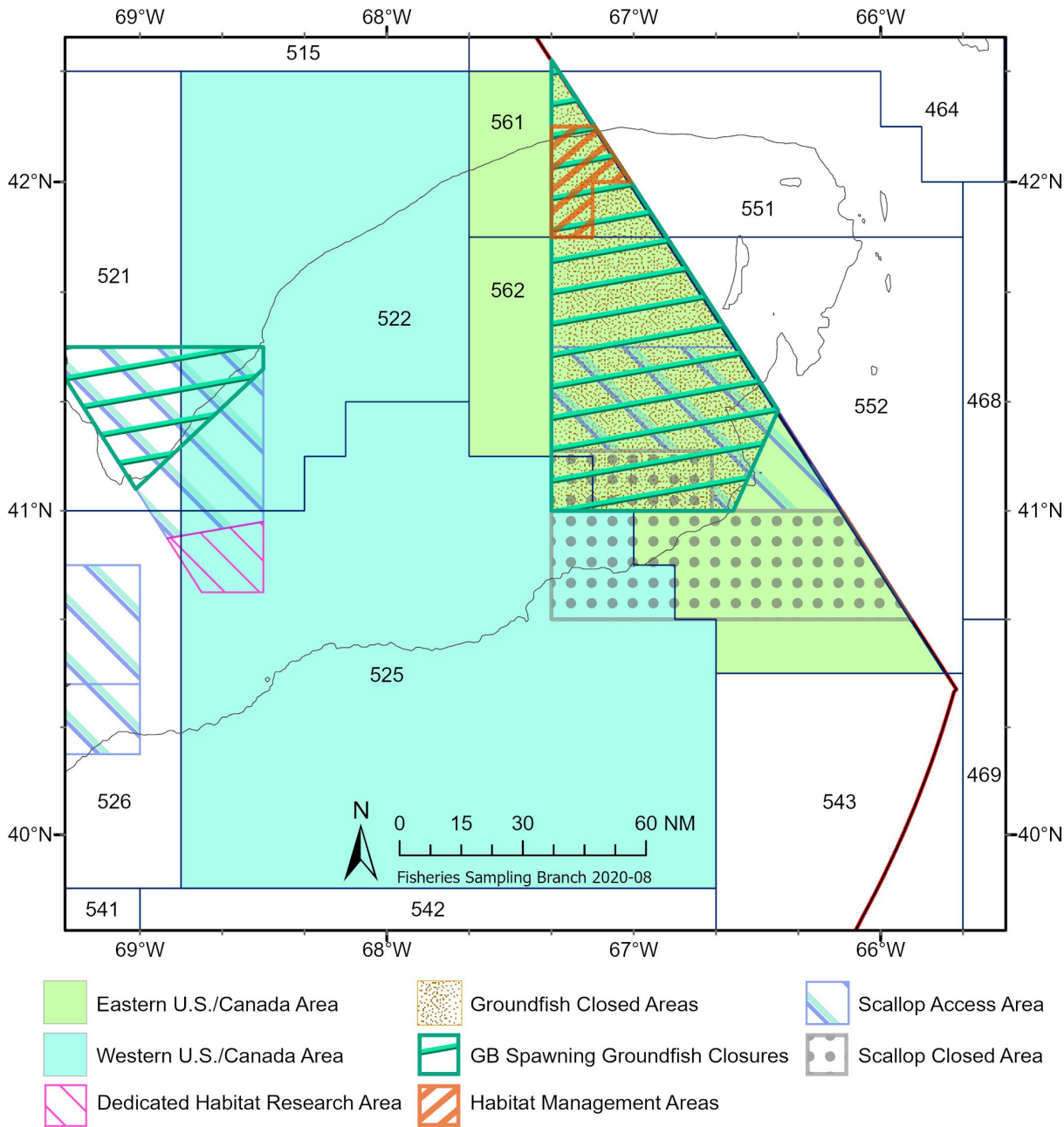


Chart 5a. Southern New England/Mid-Atlantic with Management Areas. *Do not use for navigation*

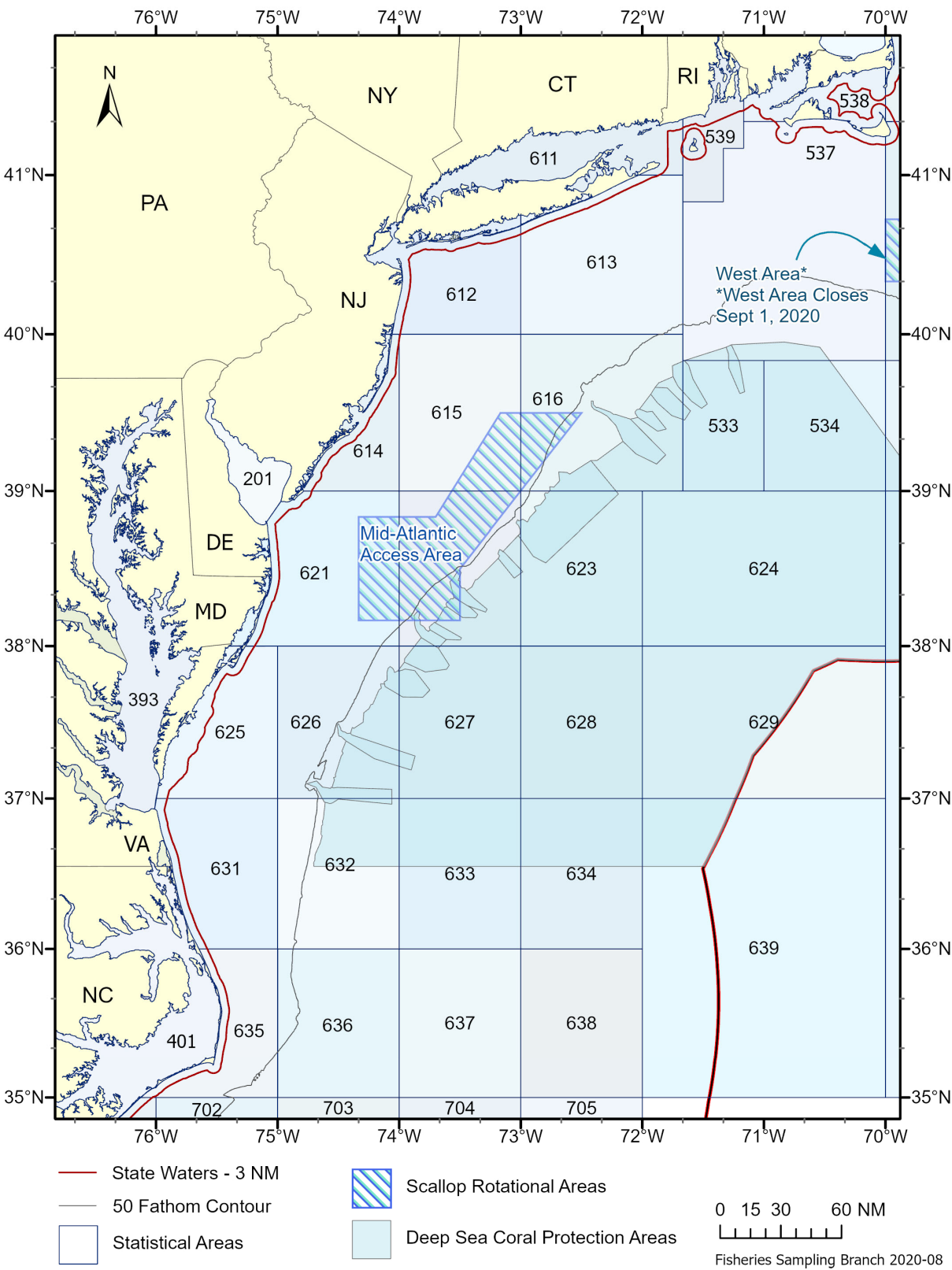


Chart 5b. Southern New England/Mid-Atlantic with Loran Overlay

Do not use for navigation

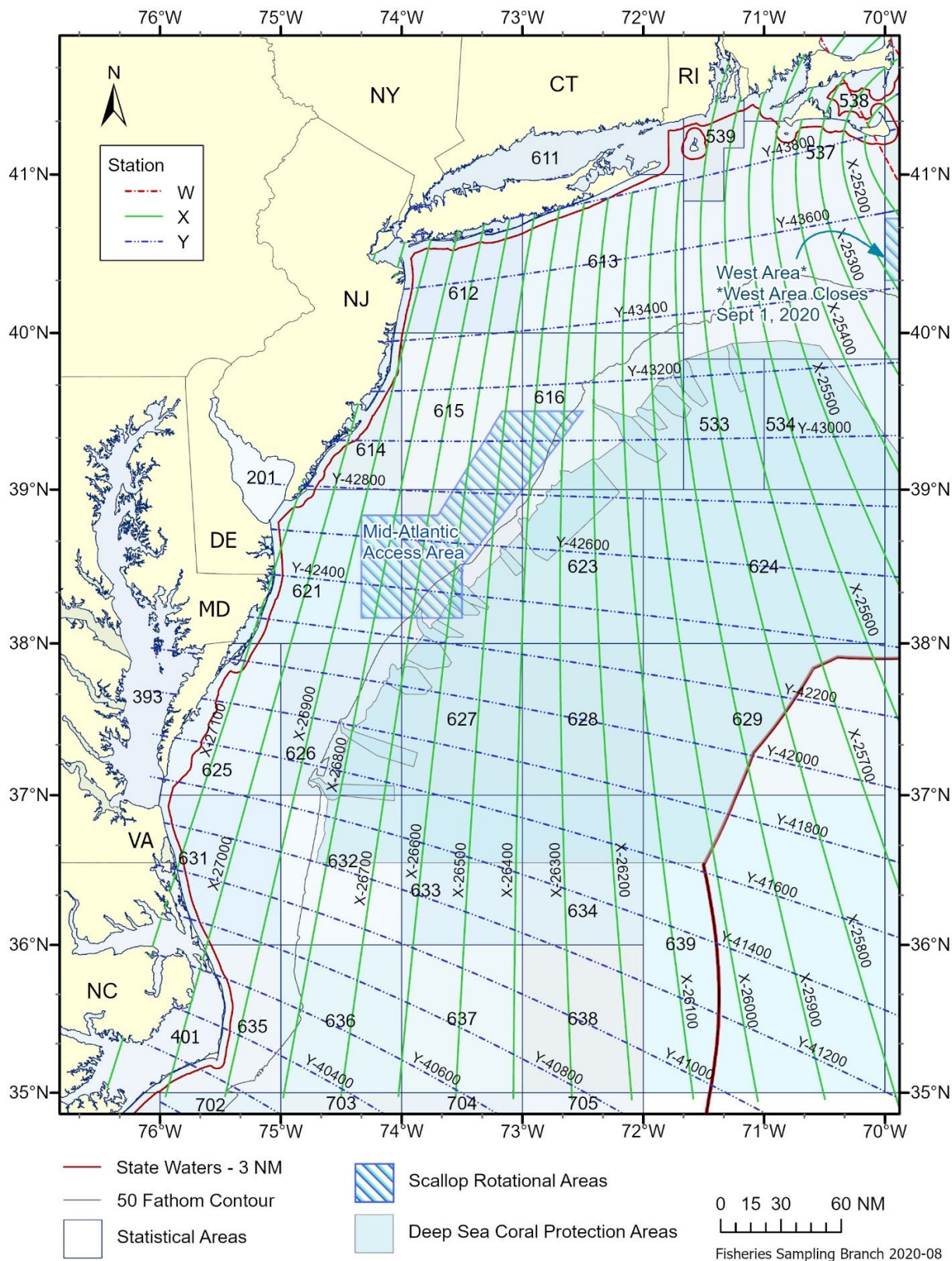
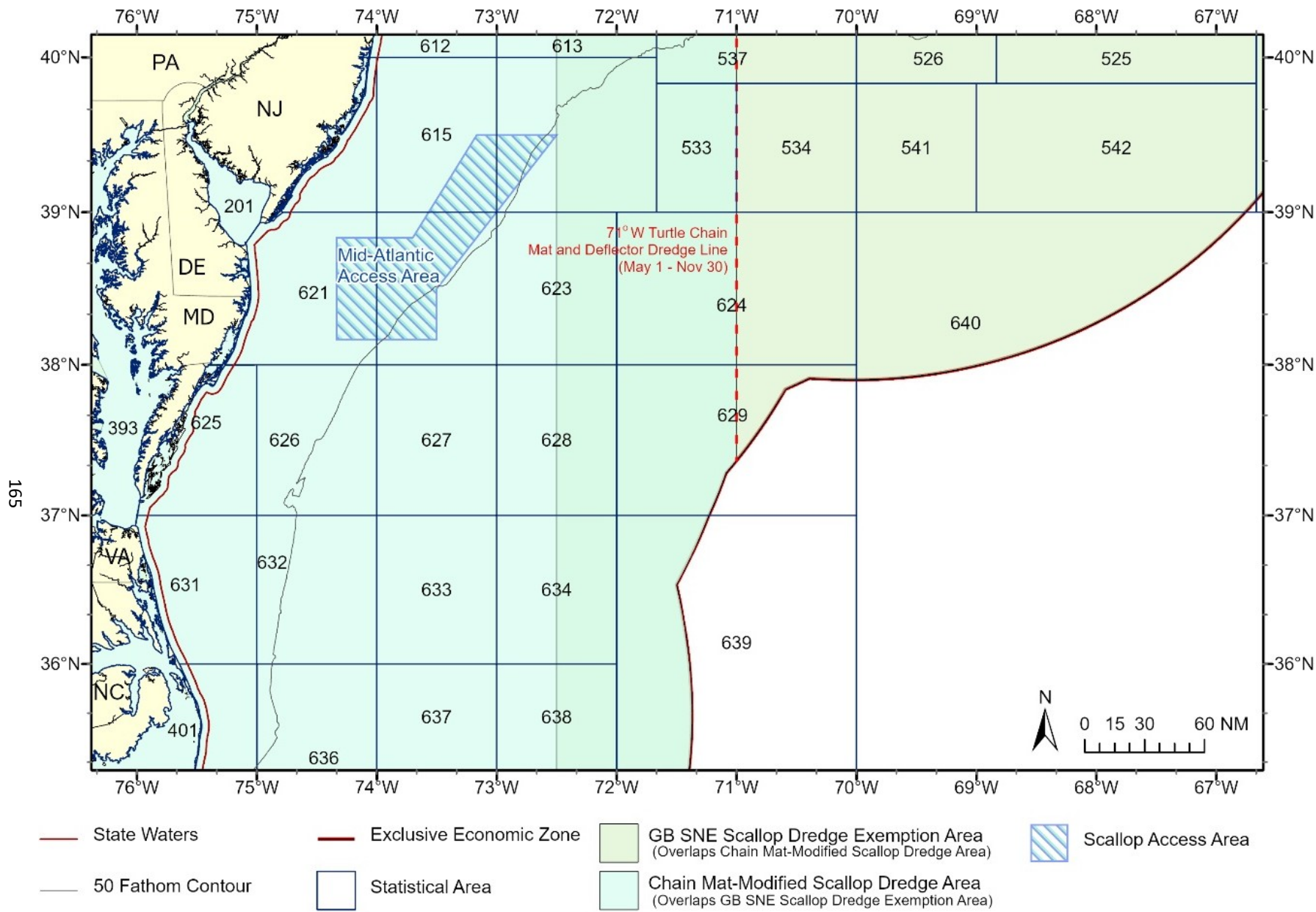


Chart 5c. Southern New England/Mid-Atlantic, Detail.

Do not use for navigation



Fisheries Sampling Branch 2020-08

Appendix B – Page Numbering Instructions

All Logs except the Vessel and Trip Information Log are numbered. Below is a listing of each data log used in domestic observing, and the manner in which the logs should be page numbered, with examples provided. The order of listing of the logs indicates log placement when submitting trips.

Vessel and Trip Information Log

These logs are not currently page numbered.

Gear Characteristics Log

These logs are numbered on a per **trip** basis in the Gillnet, Pot/Trap, Otter Trawl, Twin Trawl, Scallop Trawl, Pair Trawl/Mid-Water Trawl fisheries. The logs have two sides, each requiring a number (if used). Do not number the second side if no comments are recorded on that side.

Example: A NEFOP gillnet trip has 3 gears used. This would require three (3) Gear Logs to be filled out. The observer made additional comments on gear 1, requiring the use of the back side. The page numbering for gear 1 would be “1 of 4” and “2 of 4”. Gear 2 (front only) would be page “3 of 4” and gear 3 (front only) would be “4 of 4”.

Haul Log

These logs are numbered on a per **haul** basis in all fisheries. They are the “cover” sheet for the following other logs (listed in the order of ordering/numbering):

- Individual Animal Log
- Length Frequency Log
- Crustacean Sample Log
- Catch Composition Log
- Discard Log

Example: A pair trawl haul required one (1) Pair and Single Mid-water Trawl Haul Log to record all of the catch. A couple of sharks were caught in this haul as well, requiring one (1) Individual Animal Log. Finfish and crustaceans were sampled, requiring two (2) Length Frequency Logs and one (1) Crustacean Sample Log. 10 Baskets were sampled on this haul requiring one (1) Catch Composition Log. Additionally, information regarding the discarding events was filled in on one (1) Discard Log. The page numbers for the Pair and Single Mid-water Trawl Haul Log would be “1 of 8”.

Individual Animal Log

These logs are numbered on a per **haul** basis in all fisheries. They always immediately follow a corresponding Haul Log, so they may never have a page number lower than “2 of ...”.

Example: In the Haul Log example above, the one Individual Animal Log page number would be “2 of 8”.

Example: A gillnet haul required one (1) Haul Log to record all of the haul specific information and ten (10) Individual Animal Logs to sample all of the pelagic species caught in this haul. The page numbers for the Individual Animal Logs would be “2 of 11”, “3 of 11”, “4 of 11”, etc.

Length Frequency Log

These logs are numbered on a per **haul** basis. They should always follow a corresponding Haul Log and any Individual Animal Logs (if any), so they may never have a page number lower than “2 of ...”

Example: In the Haul Log example above, the Length Frequency Log page numbers would be “3 of 8”, and “4 of 8”.

Example: An otter trawl trip haul sampled eight different species of finfish, requiring three (3) Length Frequency Logs to record all of the length data. No pelagic species or crustaceans were caught in this haul. The page numbers for these logs would be “2 of 4”, “3 of 4” and “4 of 4”.

Crustacean Sample Log

These logs are numbered on a per **haul** basis. They always follow a corresponding Haul Log and any Individual Animal Logs and/or Length Frequency Logs (if any), so they may never have a page number lower than “2 of ...”.

Example: In the Haul Log example above, the Crustacean Sample Log page numbers would be “5 of 8”.

Example: A lobster trip haul sampled 175 lobsters, requiring four (4) of these logs. No pelagic species or finfish were caught in this haul. The page numbers for these logs would be “2 of 5”, “3 of 5”, “4 of 5” and “5 of 5”.

Catch Composition Log

These logs are numbered on a per **haul** basis. The log has two sides, each requiring a number. They always follow a corresponding Haul Log and any Individual Animal Logs (if any), Length Frequency Logs (if any), and Crustacean Sample Logs (if any) so they may never have a page number lower than “2 of ...”.

Example: In the Haul Log example above, the Catch Composition Log page numbers would be “6 of 8” and “7 of 8”.

Example: A purse seine trip haul sampled 10 baskets of fish requiring one (1) of these logs. No pelagic species were caught and no fish or crustaceans were sampled. The page numbers for these logs would be “2 of 3” and “3 of 3”.

Discard Log

These logs are numbered on a per **haul** basis. They should follow a corresponding Haul Log and any Individual Animal Logs (if any), Length Frequency Log (if any), Crustacean Sample Logs (if any), and Catch Composition Logs (if any) so they may never have a page number lower than “2 of ...”.

Example: In the Haul Log example above, the Discard Log page number would be “8 of 8”.

Scallop Dredge, Scallop Trawl, Clam/Quahog Dredge Off-watch Haul Log

These logs are numbered on a per **trip** basis. These logs are included at the end of the trip.

Example: A scallop trip required three (3) of these logs to record all of the off-watch periods. The page numbers would be “1 of 3”, “2 of 3”, and “3 of 3”.

Protected Species Sighting Log

These logs are numbered on a per **trip** basis. Comment pages, located on the back side of the log, always directly follow and are numbered after the corresponding log page.

Example: A trip required four (4) of these logs (comment pages included). The page numbers would be “1 of 4” (log), “2 of 4” (comment page), “3 of 4” (possibly another comment page or a new log), etc.

Incidental Take Log

These logs are numbered on a per **trip** basis. The log has two sides, each requiring a number.

Example: A trip of 20 incidental takes require two (2) logs to record them all. The page numbers for these logs would be “1 of 4 (front)”, “2 of 4 (back)”, “3 of 4 (front)”, and “4 of 4 (back)”.

Marine Mammal Biological Sample Log

These logs are numbered on a per **trip** basis. The log has two sides, each requiring a number.

Example: In the trip above of twenty incidental takes, two (2) logs are needed to record all of the information. The first animal was a bottlenose dolphin for which additional measurements were recorded on the back side of the first

Marine Mammal Biological Sample Log. The page numbers would be “1 of 3” (front), “2 of 3” (back side of first page) and “3 of 3” (front side of second log).

Sea Turtle Biological Sample Log

These logs are numbered on a per **trip** basis. The log has two sides, each requiring a number.

Example: A trip caught 11 sea turtles, requiring two (2) logs to record all of the information. Sketches were drawn for five of the turtles recorded on the first page, necessitating the use of the back side of the first log. The page numbers would be recorded as “1 of 3” (front of first page), “2 of 3” (back side of first page) and “3 of 3” (front of second page).

Pinger Tester Worksheet

These logs are numbered on a per **trip** basis. The log has two sides, each requiring a number.

Example: A trip had 4 hauls, requiring the front of (2) worksheets. The last haul had comments recorded on the back. The page numbers for these logs would be “1 of 3 (front of first page)”, “2 of 3 (front of second page)”, and “3 of 3 (back of second page)”. The back pages of the first sheet would be left blank.

Fishermen's Comment Log

These logs are numbered on a per **trip** basis. The log has two sides, each requiring a number.

Example: A captain requests to use these logs for two different event dates. On the first log the captain uses both the front and the back. On the second log the captain only fills in the front of the log. The page numbers for these logs would be “1 of 3”, “2 of 3” and “3 of 3”. The back side of the second log would be left blank.

Appendix C – Set/Haul Time Definitions

Only exact times are recorded in time fields on logs. Record times from captain or estimated times in comment section of haul log.

Gillnet

Set Begin: First component of gillnet gear deployed in water.

Set End: Gillnet secured to anchoring device or completely deployed.

Haul Begin: Retrieval of gear commences or hauling equipment put into gear.

Haul End: Gillnet gear completely retrieved and aboard vessel or vessel ceases retrieval of gear to either leave remaining nets soaking or reset nets just hauled aboard.

Beach Seine

Haul Begin: Time that gear hauling (retrieving) begins, whether it is the warp line or the actual net

Haul End: Time that the last piece of the gear is pulled up onto the beach.

Pelagic or Demersal Longline

Set Begin: First component of gear deployed in water.

Set End: Gear secured to high flyer or anchoring device or completely deployed.

Haul Begin: Retrieval of gear commences or hauling equipment put into gear.

Haul End: Gear completely retrieved and aboard vessel or vessel ceases retrieval of gear to either leave remaining hooks soaking or reset hooks just hauled aboard.

Rod and Reel or Other Line Gears

Set Begin: First component of gear deployed in water.

Set End: Do not record set end information for handline gears.

Haul Begin: Do not record haul begin information for handline gears.

Haul End: Gear is removed from the water and fishing activity ceases. The end of the haul occurs when there is a significant break in time and/or the captains intent is to change location.

Lobster, Crab, and Fish Pot

Set Begin: First component of gear deployed in water.

Set End: Gear secured to high flyer or anchoring device or completely deployed.

Aggregations: Last pot in the aggregation has been completely deployed.

Haul Begin: Retrieval of gear commences or hauling equipment put into gear.

Haul End: Gear completely retrieved and aboard vessel or vessel ceases retrieval of gear to either leave remaining pots soaking or reset pots just hauled aboard.

Aggregations: Last pot in the aggregation has been completely retrieved.

See the Pot and Trap Fisheries section of the [Observer Operations Manual](#) for more details on aggregating pots.

Bottom Trawl, Twin Trawl, Scallop Trawl

Haul Begin: First component of net deployed in water.

Fishing Begin: Gear is fully deployed and actively fishing (this may be when the brakes are engaged).

Haul End: Hauling equipment put into gear with the intention of hauling back.

Gear Onboard: Gear from this haul is completely out of the water.

Single Mid-water Trawl Fishery

Haul Begin: First component of net deployed in water.

Fishing Begin: Gear is fully deployed and actively fishing (this may be when the brakes are engaged).

Haul End: Hauling equipment is put into gear with the intention of hauling back.

Gear Onboard: Gear from this haul is completely out of the water.

Pair Trawl Fishery

Haul Begin:

Vessel that deployed net: First component of net deployed in water.

Vessel that did not deploy net: When the warp (towing cable) is passed to your vessel

Fishing Begin: Gear is fully deployed and actively fishing (this may be when the brakes are engaged).

Haul End: Net retrieved to the surface, i.e., warps retrieved and aboard both vessels.

Gear Onboard:

Vessel that deployed net: Gear from this haul is completely out of the water.

Vessel that did not deploy net: Fill in date but leave time blank or dash.

Purse Seine

Set Begin: First component (skiff, highflyer, or sea anchor) hits the water with intention to set the net.

Set End: All purse rings (metal rings) are cinched and alongside or aboard the vessel.

Scallop Dredge

Haul Begin: First component of dredge(s) deployed in water.

Dredges hanging over the rail with the mouth out of the water are not considered a haul.

Fishing Begin: Gear is fully deployed and actively fishing (this may be when the brakes are engaged).

Haul End: Hauling equipment put into gear with the intention of hauling back.

Gear Onboard: Gear from this haul is completely out of the water.

Clam/Quahog Dredge

Haul Begin: First component of dredge deployed in water, excluding water hose.

Fishing Begin: Gear is fully deployed and actively fishing (this may be when the brakes are engaged).

Haul End: Hauling equipment put into gear with the intention of hauling back.

Gear Onboard: Gear from this haul is completely out of the water.

Appendix D – Conversion Tables

Ounces to Pounds (tenths place)	Nautical Units	24 Hour Clock
1 ounce = 0.1 pounds 2 ounces = 0.1 pounds 3 ounces = 0.2 pounds 4 ounces = 0.3 pounds 5 ounces = 0.3 pounds 6 ounces = 0.4 pounds 7 ounces = 0.4 pounds 8 ounces = 0.5 pounds 9 ounces = 0.6 pounds 10 ounces = 0.6 pounds 11 ounces = 0.7 pounds 12 ounces = 0.8 pounds 13 ounces = 0.8 pounds 14 ounces = 0.9 pounds 15 ounces = 0.9 pounds 16 ounces = 1.0 pounds	1 fathom = 6 feet 1 fathom = 1.83 meters 1 nautical mile = 6076 feet 1 nautical mile = 1852 meters 1 nautical mile = 1.15 statute miles 1 knot = 1 nautical mile/hour	12:00 Midnight = 0000 1:00 a.m. = 0100 2:00 a.m. = 0200 3:00 a.m. = 0300 4:00 a.m. = 0400 5:00 a.m. = 0500 6:00 a.m. = 0600 7:00 a.m. = 0700 8:00 a.m. = 0800 9:00 a.m. = 0900 10:00 a.m. = 1000 11:00 a.m. = 1100 12:00 noon = 1200 1:00 p.m. = 1300 2:00 p.m. = 1400 3:00 p.m. = 1500 4:00 p.m. = 1600 5:00 p.m. = 1700 6:00 p.m. = 1800 7:00 p.m. = 1900 8:00 p.m. = 2000 9:00 p.m. = 2100 10:00 p.m. = 2200 11:00 p.m. = 2300
Seconds to Tenths of Minutes or Minutes to Tenths of Hours	Mass	
0-2 seconds = 0.0 minutes 3-8 seconds = 0.1 minutes 9-14 seconds = 0.2 minutes 15-20 seconds = 0.3 minutes 21-26 seconds = 0.4 minutes 27-32 seconds = 0.5 minutes 33-38 seconds = 0.6 minutes 39-44 seconds = 0.7 minutes 45-50 seconds = 0.8 minutes 51-56 seconds = 0.9 minutes 57-59 seconds = 1.0 minutes	1 pound = 453.59 grams 1 pound = 0.45 kilograms 1 kilogram = 2.20 pounds 1 standard ton = 2000 pounds 1 metric ton = 2204.60 pounds 1 metric ton = 1000 kilograms	
	Metric Units	Circular Measure
	1 meter = 100 centimeters 1 kilogram = 1000 grams 1 liter = 1000 milliliters mega = 1,000,000 kilo = 1,000 deca = 10 deci = 0.1 (tenth) centi = 0.01 (hundredth) milli = 0.001 (thousandth)	60 seconds = 1 minute 60 minutes = 1 degree 90 degrees = 1 quadrant
		Volume
		1 liter = 1.05 quarts 1 liter = 0.26 gallons 1 gallon = 3.78 liters

Gillnet Monofilament

Twine Size	Diameter (mm)	Old Size	Twine Size	Diameter (mm)	Old Size
3	0.28	69	14	0.62	-
4	0.33	104	16	0.66	-
6	0.40	139	18	0.70	-
7	0.45	-	20	0.74	-
8	0.47	177	24	0.81	-
10	0.52	208	30	0.90	-
12	0.57	277	40	1.05	-
General Twine Size Codes: 000 = Unknown, 998 = Combination					

LORAN Station Codes

LORAN Station	First digit will be
W	1
X	2
Y	4
Z	6

Appendix E – Trip Extensions

Trip Extension	Description
A	Aborted (non-gillnet)
C	Gillnet, complete fish sampling
D	Gillnet, complete fish sampling, aborted
E	Gillnet, set only, complete
L	Gillnet, limited fish sampling
M	Gillnet, limited fish sampling, aborted
N	Gillnet, set only, limited
T	Transit, no product onboard, no intent to fish
U	Transit, product onboard, no intent to fish
-	All other trips (represented as X in the electronic data)

If your trip sails in December but lands on or after January 1st, it should be assigned Trip Number “001”, since it is the first trip to land in the new calendar year.

Example: Observer Green, who has been assigned identifier A02, is on her third trip of the calendar year, and it is a limited fish sampling gillnet trip. The observer/trip identifier is recorded as A02003L.

Aborted Trips: Defined as when the gear is not used (set, hauled, or washed) regardless of the duration of the trip. An aborted trip is considered to be a unique trip and trip identifier is to be numbered accordingly.

Set Only Gillnet Trips (ASM and NEFOP): The observer is onboard for only the setting of gear. No gear is hauled; therefore no catch is retained. Do not complete any gear or haul logs. Set Only trips are **not** considered aborted trips.

Complete Fish Sampling Trips (ASM and NEFOP): The observer will record complete catch data, i.e., both kept and discarded information, for all hauls on “complete fish sampling” gillnet trips. All hauls on these trips should be observed, with all kept and discarded catch recorded. In addition, biological sampling of the entire catch will occur after **every haul**, with an emphasis placed on sampling discarded species.

Limited Fish Sampling Trips (NEFOP only): The observer will record only the kept catch for all hauls on “limited fish sampling” gillnet trips. All hauls on these trips will be recorded as unobserved, as the observer will conduct protected species haul watches. In addition, biological sampling of the kept catch will occur daily after the **last haul only**.

Appendix F – Program Codes

Program Code	Description
000	Standard Sea Sampling Trips
010*	Training/Certification Trips
020	Alternative Platform
030	Mid-Atlantic Sea Turtle Trips
040	Social Sciences
101	Pinger Tester Trips
130	US/Canada Management Area
150	Regular B-DAS Program
170	Small Mesh Redfish Exemption
171	SNE Monkfish ASM Exemption
172	XLM Gillnet BSA 2 and 4 ASM Exemption
201	Scallop Access Area, Nantucket Lightship
202	Scallop Access Area, Closed Area I
203	Scallop Access Area, Closed Area II
208	Scallop Access Area, Mid-Atlantic
209	Scallop Access Area, Elephant Trunk Flex
210	Scallop Access Area, Nantucket Lightship West
211	Scallop Access Area, Nantucket Lightship South
212	Scallop Access Area, Nantucket Lightship North
213	Scallop Access Area, Nantucket Lightship South Deep
230	At-Sea Monitor (ASM)
231	At-Sea Monitor, US/Canada Management Area
232	At-Sea Monitor, Regular B-DAS Program
233	At-Sea Monitor, CA I Haddock Hook SAP
234	At-Sea Monitor, CA II Yellowtail Flounder/Haddock SAP
235	At-Sea Monitor, Small Mesh Redfish Exemption
260	Industry Funded Monitoring, Herring, ASM
261	Industry Funded Monitoring, Herring, NEFOP Supplemental Coverage
270	Industry Funded Monitoring, Herring, Portside Sampling
271	Industry Funded Monitoring, Herring, Portside Sampling Supplemental Coverage

*All other program codes **except** “000” supersede this program code, including ASM program codes. Be sure to record “Training Trip” in the COMMENTS section.

ASM
HVF
IFS
NEFOP
NEFOP or IFS

Appendix G – Sector and Fleet Codes

Appendix G1 – Sector ID Codes

Sector Code	Description
002	Common Pool - Groundfish
003	GB Cod Fixed Gear Sector
005	Sustainable Harvest Sector 1
006	Maine Coast Community Sector
007	Northeast Fishery Sector VII
008	Northeast Fishery Sector IV
009	Northeast Fishery Sector VIII
010	Northeast Fishery Sector XI
011	Northeast Fishery Sector XII
012	Northeast Fishery Sector II
013	Northeast Fishery Sector III
014	Northeast Fishery Sector I
015	Northeast Fishery Sector X
016	Northeast Fishery Sector XIII
017	Northeast Fishery Sector IX
018	Northeast Fishery Sector V
020	Northeast Fishery Sector VI
021	Northeast Coastal Communities Sector
022	Sustainable Harvest Sector 3
026	Sustainable Harvest Sector 2
999	Other, comment

Appendix G2 – Fleet Codes

Fleet Code	Description
000*	Standard Observer Trip
046	Limited Access Scallop Trip
047	General Category Scallop Trip
049	Processor Vessel
050	Carrier Vessel
999	Other, comment

*Record "000" if trip does not fit any other code listed

Appendix H – Vendor ID Codes

Vendor ID Code	Description
00	Unknown
01	A.I.S. Inc. NMFS Funded
02	A.I.S. Inc, Industry Funded
04	East West Technical Services, Industry Funded
06	FMRD Personnel
07	A.I.S. Inc, NMFS ASM Funded
08	East West Technical Services, NMFS ASM Funded
11	A.I.S. Inc, Industry ASM Funded
12	East West Technical Services, Industry ASM Funded
16	Fathom Research LLC, Industry Funded
18	Fathom Research LLC, Industry ASM Funded
20	Saltwater Inc, Industry Funded
21	Saltwater Inc, NMFS Funded

If any additional Observer Service Providers are approved in the future, new codes will be added.

Appendix I – Gear Codes

Gear Code	Description
353	Beam Trawl, Fish
350	Beam Trawl, Other/NK Species
352	Beam Trawl, Scallop
386	Dredge, Clam, Hydraulic
383	Dredge, Crab
381	Dredge, Other/NK Species
132	Dredge, Scallop, Sea
320	Fyke Net, Other/NK Species
105	Gill Net, Anchored-Floating, Fish
116	Gill Net, Drift-Floating, Fish
117	Gill Net, Drift-Sink, Fish
100	Gill Net, Fixed Or Anchored, Sink, Other/NK Species
102	Gill Net, Stake, Other
020	Handline (Rod & Reel)
021	Handline, Auto Jig
030	Harpoon, Other/NK Species
031	Harpoon, Swordfish
070	Haul Seine, Beach, Common
010	Longline, Bottom
040	Longline, Pelagic
200	Pot/Trap, Lobster Offshore NK
301	Pots + Traps, Blue Crab
183	Pots + Traps, Conch
300	Pots + Traps, Crab Other
181	Pots + Traps, Fish
186	Pots + Traps, Hagfish
180	Pots + Traps, Other/NK Species
190	Pots + Traps, Shrimp
142	Pound Net, Fish
121	Purse Seine, Herring
122	Purse Seine, Mackerel
123	Purse Seine, Menhaden
120	Purse Seine, Other/NK Species
124	Purse Seine, Tuna
360	Scottish Seine
050	Trawl, Otter, Bottom, Fish
057	Trawl, Otter, Bottom, Haddock Separator
150	Trawl, Otter, Bottom, Large Mesh Belly Panel
054	Trawl, Otter, Bottom, Ruhle
052	Trawl, Otter, Bottom, Scallop
058	Trawl, Otter, Bottom, Shrimp
053	Trawl, Otter, Bottom, Twin
370	Trawl, Otter, Midwater
170	Trawl, Otter, Midwater Paired
450	Trawl, Shrimp, Twinned
060	Troll Line, Other/NK Species

Appendix J – Time Lost Codes

Time Lost Code	Description
00	Unknown
01	Gear Conflict With Another Vessel
02	Gear Damage Repair
03	Vessel Mechanical Failure/Repair
04	Awaiting Arrival Of Other Vessel
05	Enforcement Boarding
06	Medical Emergency
07	Weather Conditions
08	Marine Mammal Interaction
09	Gear Loss (time spent trying to retrieve the gear)
99	Other, comment

Appendix K – Weather Codes

Used on all Haul Logs and the Protected Species Sighting Log.

Weather Code	Description
00	Unknown
01	Clear
02	Partly Cloudy
03	Continuous layers of clouds
04	Drizzle
05	Rain
06	Showers
07	Thunderstorms
08	Rain and fog
09	Fog or thick haze
10	Snow, or rain and snow mixed
11	Blowing snow
99	Other, comment

Appendix L – Gear Condition Codes

Used on all Haul Logs, with specific codes for each fishery. If the condition does not affect the performance of the gear during fishing (e.g., damage caused after the gear was fully brought onboard), it should be recorded as the appropriate “no gear damage” code for that gear type.

Bottom Trawl, Pair and Single Mid-water Trawl, Scallop Trawl, and Twin Trawl

- 010 = No gear damage, or very few small, scattered holes.
- 020 = Wings twisted or torn, not exceeding 50% of meshes.
- 030 = Wings twisted or torn, exceeding 50% of meshes.
- 040 = Square and/or bosom torn, not exceeding 50% of meshes.
- 050 = Square and/or bosom torn, exceeding 50% of meshes.
- 060 = Belly torn, not exceeding 25% of meshes.
- 070 = Belly torn, exceeding 25% of meshes.
- 080 = Codend and/or extension piece torn, not exceeding 10% of meshes.
- 090 = Codend and/or extension piece torn, exceeding 10% of meshes.
- 100 = Hang-up, causing gear to be hauled back before scheduled time; minor damage.
- 110 = Parted legs, sweep or head rope.
- 120 = Tear-up exceeding gear condition of above codes, but not total net destruction.
- 130 = Obstruction in the gear, such as a large amount of fixed gear, boulders, etc.
- 140 = Crossed doors.
- 150 = Unintentional open codend.
- 160 = Major hang-up or tear-up, or loss of gear.
- 170 = Grate clogged with fish or debris.

Gillnet and Beach Seine

- 210 = No gear damage, or very few small, scattered holes.
- 220 = Small number of torn or tangled meshes, not exceeding 25% of any one net, each net may be torn slightly.
- 230 = Less than 50% of the nets have less than 50% of the meshes torn or tangled.
- 240 = 50% or more of the nets have less than 50% of the meshes torn or tangled.
- 250 = Less than 50% of the nets are obstructed by a large object.
- 260 = 50% or more of the nets are obstructed by a large object.
- 270 = Less than 50% of the nets have 50% or more of the meshes torn or tangled.
- 280 = 50% or more of the nets have 50% or more of the meshes torn or tangled.
- 290 = Nets in the string totally balled up.

Lobster, Crab, and Fish Pot

- 410 = No gear damage.
- 420 = Less than 25% of the pots have enough damage to allow the target species to be released. This damage includes loss of the escape panel.
- 430 = Between 25% and 50% of the pots have enough damage to allow the target species to be released.
- 440 = Greater than 50% of the pots have enough damage to allow the target species to be released.
- 450 = Less than 25% of the pots are unfishable.
- 460 = Between 25% and 50% of the pots are unfishable.
- 470 = Greater than 50% of the pots are unfishable.

Purse Seine

- 510 = No or insignificant gear damage.
- 520 = Minor wrap of wire around gear.
- 530 = Major wrap of wire around gear.
- 540 = Minor tear-ups of net, not exceeding total of 5% of the net.
- 550 = Tear-up exceeding code 540, but not total net destruction.
- 580 = Total net destruction.

Longline

610 = No gear damage, or only a few hooks missing.

620 = Less than 50% of gear fouled, e.g., weather/oceanic conditions caused the gear to become tangled, or otherwise lowered the fishability of the gear.

630 = Greater than 50% of gear fouled, e.g., weather/oceanic conditions caused the gear to become tangled, or otherwise lowered the fishability of the gear.

640 = Less than 50% of hooks missing.

650 = Greater than 50% of hooks missing.

660 = Parted off, no damage.

670 = Parted off, less than 50% of gear damaged.

680 = Gear completely damaged or tangled, or completely lost.

Scallop Dredge

710 = No gear damage or insignificant gear damage.

711 = Hang-up, causing gear to be hauled back before scheduled time; minor damage.

712 = Chains (rock, tickler, sweep) detached.

713 = Twine top torn but was able to be repaired.

714 = Twine top torn completely and had to be replaced.

715 = One dredge fished on top of the other dredge (Rider on dredge).

716 = Hydraulic issue (e.g., hose leak or blown, winch broken).

717 = Obstruction in the gear, such as large amount of fixed gear, boulders, etc.

720 = Chain bag broken, partially detached or lost.

730 = Several rings destroyed.

740 = Club stick caught in twine top, chains or chain bag. Club stick detached from chain bag.

750 = One dredge turned over.

760 = Two dredges turned over.

770 = Dredges crossed.

780 = One dredge lost or totally damaged.

790 = Two dredges lost or totally damaged.

Clam/Quahog Dredge

810 = No gear damage, or insignificant gear damage.

820 = Dredge turned over.

830 = Towline fouled around hose.

840 = Bag split.

850 = Bottom of dredge fractured.

860 = Bent knife frame/carrier.

870 = Broken knife frame/carrier.

880 = Broken knife/blade.

890 = Dredge lost.

All Gear Types

000 = Unknown. Explain in COMMENTS.

990 = Other. Specify in COMMENTS.

Appendix M – Fish Disposition Codes

Used on all Haul Logs, the Length Frequency Log, and the Individual Animal Log. Record as intent when discarded, and for kept catch, captain's intent when observer left boat. Disposition codes should be decided after consultation with the captain. Do not assume disposition codes, even if you have recently observed on this vessel, gear, fishery, etc. There are several factors that may change dispositions for species on a trip by trip basis such as which permits the vessel is currently fishing under, annual and seasonal changes in federal or state regulations, and which state the vessel is landing in, so dispositions must be obtained each trip. At a minimum, obtain the disposition category (e.g., regulations vs market) and record with the "reason not specified" for that category.

If more than one discard reason applies to a discarded species, separate the species onto two or more lines, and record the appropriate weights and discard reasons for each. However, if there is one overriding reason for the discard of all animals of a species group, do not attempt to break this group into smaller discard reason groups.

Example: Captain said all Summer flounder caught are discarded because "does not have a permit" (025). Therefore, any undersized Summer flounder on this trip are still recorded as disposition 025.

Exception: American lobster should be categorized into specific disposition codes, with the following priority: size (012/013), with eggs (024), v-notched (022), soft-shelled (023), shell disease (037), any other regulatory/market reason.

Discard, Market

001 = No market, reason not specified.

002 = No market, too small.

003 = No market, too large.

004 = No market, quota filled.

005 = No market, won't keep until trip end.

006 = Not sold, but retained by vessel for alternate program.

007 = Not sold, but retained by observer for science purposes. The animal is discarded by the vessel, but retained whole by the observer for species identification, training, etc. Record the weight of the retained animal(s) separate from any other catch of this species.

008 = No market, brought onboard only for the purpose of observer sampling.

009 = No market, discarded only because it was a female.

Discard, Regulations

011 = Regulations prohibit retention, reason not specified.

012 = Regulations prohibit retention, too small.

013 = Regulations prohibit retention, too large.

014 = Regulations prohibit retention, quota filled.

015 = Regulations prohibit retention, no quota in area (seasonal closure).

022 = Regulations prohibit retention, v-notched.

023 = Regulations prohibit retention, soft-shelled.

024 = Regulations prohibit retention, with eggs.

025 = Regulations prohibit any retention (including no permit).

Discard, Quality

030 = Poor quality, grey meat and/or parasites observed (ONLY for Sea Scallops).

- 031 = Poor quality, reason not specified.
- 032 = Poor quality, due to sand flea damage.
- 033 = Poor quality, due to seal damage.
- 034 = Poor quality, due to shark damage.
- 035 = Poor quality, due to cetacean damage.
- 036 = Poor quality, due to hagfish damage.
- 037 = Poor quality, due to shell disease.
- 038 = Poor quality, due to gear damage.
- 039 = Poor quality, previously discarded fish. Only record for fish parts indicative of dressed catch. Record the species name as "Fish NK", record "U" in the dressed/round field, and describe the species/parts in comments (e.g., "fish nk = monkfish heads and skate racks").

Not Brought Onboard

- 040 = Not brought onboard, operational discards.
- 041 = Not brought onboard, reason not specified.
- 042 = Not brought onboard, gear damage prevented capture.
- 043 = Not brought onboard, fell out/off of gear.
- 044 = Not brought onboard, considered to have no market value.
- 045 = Not brought onboard, safety reason.
- 046 = Not brought onboard, mechanical failure.
- 047 = Not brought onboard, spiny dogfish clogging pump.
- 048 = Not brought onboard, vessel capacity filled.
- 049 = Not brought onboard, not enough fish to pump aboard.
- 070 = Not brought onboard, quality of fish.
- 071 = Not brought onboard, clogged pump, other.

Discard, Debris/Shells

- 053 = Debris. Includes all single or disarticulated bones.
- 054 = Empty shells.

Upgrading/Market Driven Selectivity

- 062 = Upgraded. If a fish is "upgraded" or "high graded," and a previously kept fish is discarded and replaced with one that is larger (or of higher quality/value), record the discarded animal(s) and weight discarded on the Haul Log corresponding to the haul in which the animal(s) was (were) originally caught, and code it 062 for fish disposition. Be sure to subtract the weight of the animal(s) from the original kept record. Use cumulative sum if species had been kept on multiple prior hauls. Upgrading may result in dressed discard weights.
- 063 = Vessel retaining only certain size for best price due to trip quota in effect.
- 064 = Vessel retaining only certain size for best price due to price differential.

Kept

Kept is defined as brought on board the vessel and retained until the vessel has landed. Fish that may be discarded by the dealer should still be recorded as "kept".

- 100 = Kept, to sell general.

110 = Kept, transferred to another vessel. Record the name and hull number of the vessel to which the catch is transferred. Typically used in the pair trawl fishery when there is no observer on the other boat.

170 = Kept, used for bait.

171 = Kept, for consumption by captain/crew (not sold).

172 = Kept, regulations prohibit discards at sea.

General

These codes should not be used frequently. Always provide a comment explaining why a generic code was used.

000 = Discarded, reason unknown.

099 = Discarded other, record the discard reason in COMMENTS.

199 = Kept, other.

900 = Unknown.

Appendix N – Estimation Method Codes

Used on all Haul Logs and the INDIVIDUAL ANIMAL LOG.

Estimation Method Code	Description
00	Unknown
01	Actual, Spring Scale
02	Volume To Volume
03	Basket/Tote Count
04	Estimated By Captain/Crew
05	Tally
06	Visually Estimated
07	Cumulative Sum Method
10	Catch Composition Log Extrapolation
11	Actual, Electronic (Marel) Scale
12	Trap Subsample
13	Count To Count
14	Weight To Weight
98	Combination, comment
99	Other, comment

See the Catch Estimation section of the Observer Operations Manual for detailed information and examples of the estimation methods. Brief summaries of some methods are also in fishery specific sections of the Observer On-Deck Reference Guide.

Appendix O – Net Name, Type, and Builder Codes

Used on all Trawl Gear Characteristics Logs. See the Trawl Fisheries section in the Observer Operations Manual for descriptions.

Appendix O1 – Net Name Codes

Net Name Code	Description
00	Unknown
01	Trouser Trawl
02	Beam Trawl
03	Twin Trawl
04	Bottom Trawl
05	Semi-Pelagic Trawl
06	Pelagic Trawl
99	Other, comment

Appendix O2 – Net Type Codes

Net Type Code			Description
2-Seam	4-Seam	Seams Unknown	
89	90	88	Balloon Trawl
	24		Box Trawl
31	30	32	Eliminator Trawl
11	12	10	Flatfish Trawl
13			Flounder Trawl
01	02	08	Flynet
86	87	85	Groundfish Trawl
03	04	09	Haddock Separator Trawl
	18		Millionaire Trawl
66	67	65	Monkfish Trawl
76	77	75	Pelagic Pair Trawl
74	78	73	Pelagic Single Trawl
21	22	20	Raised Footrope Trawl
	15		Ruhle Trawl
	16		Rope Separator Trawl
61	62	60	Scallop Trawl
06	07	05	Separator Trawl
26	27	25	Shrimp Trawl
34	35	33	Shrimp Trynet
81	82	80	Shuman Trawl
71	72	70	Sweepless Trawl
91	92	00	Unknown Trawl
99			Other, comment

Appendix 03 – Net Builder Codes

Net Builder Code	Description
00	Unknown
01	Custom Built*
02	Le Drezen
03	Levine Marine Supply
04	Noreastern Trawl Systems, Ltd.
05	Smart Net Systems, Ltd.
06	Swan Net Gundry
07	Wanchese Trawl Supply
08	Wilcox Trawls
09	Superior Trawl
10	Trawlworks, Inc.
11	Dantrawl
12	Reidar's Manufacturing, Inc.
13	Christiansen's Nets
14	Jeff Flagg
15	Shumann
16	Yankee
17	IMP Group
18	Veidarfaer
19	Gearwork
20	VT Fishing Gear Supplies
21	Jamestown Trawl
99	Other, comment

*Custom Built (01) means built by someone other than a professional net builder (e.g., the captain or a crew member). A customized net built by a professional net builder should be listed with the appropriate code for that builder, or with "Other" (99) if the net builder is not listed.

Appendix P – Bait Codes

Used on [LONGLINE HAUL LOG](#) and [LOBSTER, CRAB, AND FISH POT HAUL LOG](#). Record multiple baits in order by weight heaviest to lightest and comment on any additional baits that do not fit in the bait fields on the haul logs.

Appendix P1 – Bait Kind Codes

Bait Kind Code	Description
00	Unknown
01	Mackerel
02	Herring
03	Squid
04	Artificial, including lures and jigs*
05	Redfish
06	Sardine
07	Scad
08	Skate
09	Clams
10	Fish with binders/casings
11	Eel
12	Menhaden
13	Tuna
97	Mixed, comment**
99	Other, comment

*If artificial bait kind (04), dash the fields for bait pounds, type, and condition.

**Mixed (97) means multiple kinds but not differentiated by the captain (e.g., mixture of groundfish remains from a processing facility).

Appendix P2 – Bait Type Codes

Bait Type Code	Description
0	Unknown
1	Whole
2	Cut (e.g., fish racks, frames, or bellies)
3	Live
4	Processed (e.g., remains pressed into sausage)
9	Other, comment

Appendix P3 – Bait Condition Codes

Condition of bait when gear was set.

Bait Condition Code	Description
0	Unknown
1	Previously frozen
2	Fresh
3	Salted
6	Frozen
7	Semi-Frozen
8	Combination, comment
9	Other, comment

Appendix Q – Entanglement Codes

Used on [MARINE MAMMAL, SEA TURTLE, AND SEABIRD INCIDENTAL TAKE LOG](#).

00 = Unknown.

01 = Fell from gear at a point unknown, i.e., the animal fell from the gear, but the time during haulback when this occurred is unknown.

02 = Fell from gear before exiting water, i.e., the animal was still under water when it fell from the gear.

03 = Fell from gear once hauled out of the water, i.e., the animal was mostly/completely out of the water when it fell from the gear because the weight and pulling action of the net caused the animal to fall from the gear.

04 = Fell from gear due to force of roller, i.e., the animal reached the haulback roller and the roller's force caused it to fall from the gear.

05 = Removal requires cutting of gear/animal, i.e., the gear and/or the animal is cut in order to remove the animal from the gear.

06 = Removal does NOT require cutting of gear/animal, i.e., pulling, unwrapping, unrolling, and/or detangling the gear allows the animal to be removed from the gear, without cutting the gear and/or the animal.

08 = Caught in wings of trawl net.

10 = Seabird caught, gangion attached to mainline.

12 = Hooked, ingested.

13 = Hooked, beak.

14 = Hooked, head.

15 = Hooked, flipper.

16 = Hooked, carapace.

17 = Hooked, other/unknown, describe the hooked entanglement situation in COMMENTS.

18 = Caught inside dredge chain bag.

19 = On top of dredge or dredge frame.

20 = Caught in dredge frame or in between bales.

21 = Caught inside dredge in twine top.

22 = Caught on sweep/tickler/rock chains.

23 = Caught in bridles/cables/warp.

24 = Inside mouth of trawl net.

25 = Inside belly of trawl net.

26 = Inside codend of trawl net.

27 = Caught in sweep or footrope of trawl net.

28 = Contact with vessel or vessel equipment other than fishing gear.

29 = Entangled in gear other than vessel's fishing gear (e.g., ghost gear caught by vessel)

30 = Caught in the catch pump

31 = Entrapped/caught in bunt of purse seine

32 = Entrapped/caught in net/wing of purse seine

33 = Caught in Buoyline

99 = Other, describe the entanglement situation in COMMENTS.

If more than one code applies, choose the code that describes the **primary entanglement/interaction**.

Appendix R – Animal Condition Codes

Used on [MARINE MAMMAL, SEA TURTLE, AND SEABIRD INCIDENTAL TAKE LOG](#) and [PROTECTED SPECIES SIGHTING LOG](#).

00 = Unknown, explain why you cannot identify the animal condition in COMMENTS.

01 = Alive, see COMMENTS.

04 = Alive, hook/gear in/around mouth, attempt to determine where in the mouth the hook is, etc. and describe in COMMENTS.

05 = Alive, hook/gear in/around flipper, e.g., hook in the flipper or gear around the flipper, describe more fully in COMMENTS.

06 = Alive, hook/gear in/around another single body part, e.g., hook in the neck or plastron; specify which in COMMENTS.

07 = Alive, hook/gear in/around several body parts, describe more fully in COMMENTS.

08 = Alive, seen by captain and/or crew ONLY.

09 = Alive, resuscitated (turtle).

10 = Dead, condition unknown.

11 = Dead, fresh.

12 = Dead, moderately decomposed.

13 = Dead, severely decomposed.

14 = Dead, seen by captain and/or crew ONLY.

If more than one code applies, choose the code that describes the **most specific condition** of the animal.

See the [Protected Species](#) section of the [Observer Operations Manual](#) for more information on assigning condition codes for each animal type.

Appendix S – Animal Behavior Codes

Used on [PROTECTED SPECIES SIGHTING LOG](#).

If the animal(s) exhibit(s) multiple behaviors, record the code for the initial behavior only, and describe all subsequent behaviors in COMMENTS. If multiple initial animal behaviors exist for one sighting, record the lowest numerical code which applies, and record the other behaviors in COMMENTS.

If there are a large number of animals (same species) that appear to be in a cohesive group, record the initial behavior of the majority of the animals. If a large number of animals (same species) appear to be in distinct groups behaving differently, record each group as a separate sighting.

00 = Unknown.

01 = Near gear, physical contact.

02 = Near gear, within 50 meters.

03 = Near gear, within 51 to 150 meters.

04 = Feeding on catch.

05 = Porpoising: the animal(s) is (are) splashing along at the surface, breaking the surface regularly, showing most of the body.

06 = Bow riding: the animal(s) is (are) observed keeping pace with the vessel on the bow wave.

07 = Breaching: the animal(s) emerge(s) from the water and crash(es) down on a flank, back or belly.

08 = Swimming at surface: the animal(s) is (are) observed several times surfacing “normally”, each surfacing at some irregular distance from the previous one; it (they) appear(s) to be just moving along.

09 = Milling: the animal(s) is (are) rolling at the surface with no direction, making short dives without moving along. Often a group activity.

10 = Motionless at surface (or dead).

11 = Vessel avoidance: the animal(s) abruptly change(s) its (their) swimming direction or behavior to avoid the vessel; a startling, alarming, fleeing reaction.

12 = Vessel attraction: the animal(s) change(s) its (their) swimming direction to approach the vessel, such as a pod of dolphins purposefully heading toward the vessel to bow ride.

99 = Other, describe the animal behavior in COMMENTS.

Appendix T – Species Codes and Logs

SPP = primarily recorded on Haul Logs; if tagged, record on [INDIVIDUAL ANIMAL LOG](#).

IAL = primarily recorded on [INDIVIDUAL ANIMAL LOG](#).

SPP/IAL = recorded on [INDIVIDUAL ANIMAL LOG](#) *except* in the gillnet fisheries.

INC = always recorded on the [MARINE MAMMAL, SEA TURTLE, AND SEABIRD INCIDENTAL TAKE LOG](#).

Species Code	Common Name(s)	Scientific Name	Log
0010	ALEWIFE	<i>Alosa pseudoharengus</i>	SPP
6632	ALLIGATORFISH	<i>Aspidophoroides monopterygius</i>	SPP
0030	AMBERJACK, NK	<i>Seriola</i>	IAL
0060	ANCHOVY, BAY	<i>Anchoa mitchilli</i>	SPP
6860	ANCHOVY, NK	Engraulidae	SPP
6645	ANCHOVY, STRIPED	<i>Anchoa hepsetus</i>	SPP
6878	ANEMONE, NK	Actiniaria, Ceriantharia	SPP
1710	ARGENTINE, ATLANTIC	<i>Argentina silus</i>	SPP
0180	BARRACUDA, NK	Sphyraenidae	IAL
6627	BARRELFISH	<i>Hyperoglyphe perciformis</i>	SPP
4180	BASS, STRIPED	<i>Morone saxatilis</i>	SPP
6611	BATFISH, ATLANTIC	<i>Dibranchius atlanticus</i>	SPP
6610	BATFISH, NK	Ogcocephalidae	SPP
6626	BEARDFISH	<i>Polymixia lowei</i>	SPP
6100	BIRD, NK	Aves	INC
6629	BLENNY, NK (FISH)	Blenniidae	SPP
0230	BLUEFISH	<i>Pomatomus saltatrix</i>	SPP
6623	BOARFISH, DEEPBODY	<i>Antigonia capros</i>	SPP
6607	BOARFISH, NK	Caproidae	SPP
6624	BOARFISH, SHORTSPINE	<i>Antigonia combatia</i>	SPP
6883	BONE, NK		SPP
0330	BONITO, ATLANTIC	<i>Sarda sarda</i>	SPP/IAL
6101	BOOBY, BROWN	<i>Sula leucogaster</i>	INC
6102	BOOBY, MASKED	<i>Sula dactylatra</i>	INC
6136	BUFFLEHEAD	<i>Bucephala albeola</i>	INC
0511	BUTTERFISH	<i>Peprilus triacanthus</i>	SPP
3610	CAPELIN	<i>Mallotus villosus</i>	SPP
0630	CARP	<i>Cyprinus carpio</i>	SPP
7430	CLAM, BLOOD ARK	<i>Anadara ovalis</i>	SPP
7640	CLAM, NK	Bivalvia	SPP
7600	CLAM, RAZOR	<i>Ensis directus</i>	SPP
7630	CLAM, SOFT-SHELLED	<i>Mya arenaria</i>	SPP
7650	CLAM, STIMPSON'S SURF (ARTIC)	<i>Mactromeris polynyma</i>	SPP
7690	CLAM, SURF	<i>Spisula solidissima</i>	SPP
6896	CLAPPER, CLAM		SPP
6894	CLAPPER, NK		SPP
6898	CLAPPER, OCEAN QUAHOG		SPP
6895	CLAPPER, SCALLOP		SPP
0570	COBIA	<i>Rachycentron canadum</i>	IAL
0818	COD, ATLANTIC	<i>Gadus morhua</i>	SPP
0812	COD, ATLANTIC (CHEEKS)	<i>Gadus morhua</i>	SPP
6885	CORAL, SOFT, NK	Alcyonacea	SPP
6880	CORAL, STONY, NK	Scleractinia	SPP
6111	CORMORANT, DOUBLE CRESTED	<i>Phalacrocorax auritus</i>	INC
6112	CORMORANT, GREAT	<i>Phalacrocorax carbo</i>	INC
6113	CORMORANT, NK	<i>Phalacrocorax</i>	INC

Species Code	Common Name(s)	Scientific Name	Log
6625	CORNETFISH, BLUESPOTTED	<i>Fistularia tabacaria</i>	SPP
7000	CRAB, BLUE	<i>Callinectes sapidus</i>	SPP
7140	CRAB, CANCER, NK	<i>Cancer</i>	SPP
7141	CRAB, CANCER, NK (CLAWS)	<i>Cancer</i>	SPP
7100	CRAB, DEEP SEA, RED	<i>Chaceon quinque-dens</i>	SPP
7101	CRAB, DEEP SEA, RED (BUTCHERED)	<i>Chaceon quinque-dens</i>	SPP
7102	CRAB, DEEP SEA, RED (PARTIALLY PROCESSED)	<i>Chaceon quinque-dens</i>	SPP
7080	CRAB, GREEN	<i>Carcinus maenas</i>	SPP
6868	CRAB, HERMIT, NK	Paguroidea	SPP
7240	CRAB, HORSESHOE	<i>Limulus polyphemus</i>	SPP
7110	CRAB, JONAH	<i>Cancer borealis</i>	SPP
7111	CRAB, JONAH (CLAWS)	<i>Cancer borealis</i>	SPP
7010	CRAB, LADY	<i>Ovalipes ocellatus</i>	SPP
6866	CRAB, NORTHERN STONE	<i>Lithodes maja</i>	SPP
7120	CRAB, ROCK	<i>Cancer irroratus</i>	SPP
7121	CRAB, ROCK (CLAWS)	<i>Cancer irroratus</i>	SPP
7185	CRAB, SNOW	<i>Chionoecetes opilio</i>	SPP
6865	CRAB, SPECKLED, NK	<i>Arenaeus cribrarius</i>	SPP
7150	CRAB, SPIDER, NK	Majoidea	SPP
7151	CRAB, SPIDER, PORTLY	<i>Libinia emarginata</i>	SPP
7130	CRAB, TRUE, NK	Brachyura	SPP
0840	CRAPPIE, NK	<i>Pomoxis</i>	SPP
0900	CROAKER, ATLANTIC	<i>Micropogonias undulatus</i>	SPP
0930	CUNNER (YELLOW PERCH)	<i>Tautoglabrus adspersus</i>	SPP
0960	CUSK	<i>Brosme brosme</i>	SPP
6861	CUSK-EELS, NK	Ophidiidae	SPP
6640	CUTLASSFISH, ATLANTIC	<i>Trichiurus lepturus</i>	SPP
0985	DEALFISH (RIBBONFISH)	<i>Trachipterus arcticus</i>	SPP
6810	DEBRIS, FISHING GEAR ⁸		SPP
6802	DEBRIS, GLASS ⁸		SPP
6801	DEBRIS, METAL ⁸		SPP
6800	DEBRIS, NK ⁸		SPP
6830	DEBRIS, PLASTIC ⁸		SPP
6805	DEBRIS, ROCK		SPP
6820	DEBRIS, WOOD ⁸		SPP
3390	DOGFISH, BLACK	<i>Centroscyllium fabricii</i>	SPP
3460	DOGFISH, CHAIN	<i>Scyliorhinus retifer</i>	SPP
3501	DOGFISH, NK	<i>Mustelus, Squalus</i>	SPP
3508	DOGFISH, NK (FINS)	<i>Mustelus, Squalus</i>	SPP
3502	DOGFISH, NK (TAILS)	<i>Mustelus, Squalus</i>	SPP
3511	DOGFISH, SMOOTH	<i>Mustelus canis</i>	SPP
3518	DOGFISH, SMOOTH (FINS)	<i>Mustelus canis</i>	SPP
3512	DOGFISH, SMOOTH (TAILS)	<i>Mustelus canis</i>	SPP
3521	DOGFISH, SPINY	<i>Squalus acanthias</i>	SPP
3522	DOGFISH, SPINY (BELLYFLAPS)	<i>Squalus acanthias</i>	SPP
3528	DOGFISH, SPINY (FINS)	<i>Squalus acanthias</i>	SPP
3524	DOGFISH, SPINY (TAILS)	<i>Squalus acanthias</i>	SPP
6941	DOLPHIN, BOTTLENOSE	<i>Tursiops truncatus</i>	INC
6961	DOLPHIN, CLYMENE	<i>Stenella clymene</i>	INC
6940	DOLPHIN, COMMON (SADDLEBACK)	<i>Delphinus delphis</i>	INC

⁸ Describe in comments.

Species Code	Common Name(s)	Scientific Name	Log
6962	DOLPHIN, FRASER'S	<i>Lagenodelphis hosei</i>	INC
6997	DOLPHIN, NK (MAMMAL)	Delphinidae	INC
6942	DOLPHIN, RISSO'S	<i>Grampus griseus</i>	INC
6957	DOLPHIN, ROUGH TOOTH	<i>Steno bredanensis</i>	INC
6944	DOLPHIN, SPINNER	<i>Stenella longirostris</i>	INC
6901	DOLPHIN, SPOTTED, ATLANTIC	<i>Stenella frontalis</i>	INC
6943	DOLPHIN, SPOTTED, NK	<i>Stenella</i>	INC
6963	DOLPHIN, SPOTTED, PANTROPICAL	<i>Stenella attenuata</i>	INC
6952	DOLPHIN, STRIPED	<i>Stenella coeruleoalba</i>	INC
6951	DOLPHIN, WHITEBEAKED	<i>Lagenorhynchus albirostris</i>	INC
6936	DOLPHIN, WHITESIDED	<i>Lagenorhynchus acutus</i>	INC
1050	DOLPHINFISH, NK (MAHI MAHI)	<i>Coryphaena</i>	IAL
1880	DORY, BUCKLER (JOHN)	<i>Zenopsis conchifera</i>	SPP
1890	DORY, NK	Zeidae	SPP
6131	DOVEKIE	<i>Alle alle</i>	INC
6609	DRAGONFISH, BOA	<i>Stomias boa</i>	SPP
1090	DRUM, BANDED	<i>Larimus fasciatus</i>	SPP
1060	DRUM, BLACK	<i>Pogonias cromis</i>	SPP
6797	DRUM, NK	Sciaenidae	SPP
1070	DRUM, RED	<i>Sciaenops ocellatus</i>	SPP
6892	ECHINODERM, NK	Echinodermata	SPP
1150	EEL, AMERICAN	<i>Anguilla rostrata</i>	SPP
1160	EEL, CONGER	<i>Conger oceanicus</i>	SPP
6862	EEL, GARDEN, NK	<i>Heteroconger</i>	SPP
1170	EEL, NK	Anguilliformes	SPP
6859	EEL, SLENDER SNIPE	<i>Nemichthys scolopaceus</i>	SPP
6875	EELGRASS	<i>Zostera marina</i>	SPP
6613	EELPOUT, NK	Zoarcidae	SPP
6858	EGGS, ELASMOBRANCH, NK		SPP
6856	EGGS, FISH, NK		SPP
6857	EGGS, MOLLUSCA, NK		SPP
6855	EGGS, NK		SPP
8018	EGGS, SQUID, ATLANTIC LONGFIN	<i>Doryteuthis pealeii</i> (eggs)	SPP
6135	EIDER, COMMON	<i>Somateria mollissima</i>	INC
3850	ESCOLAR	<i>Lepidocybium flavobrunneum</i>	IAL
6796	FILEFISH, NK	Monacanthidae	SPP
5260	FISH, NK ⁹		SPP
1240	FLOUNDER, AMERICAN PLAICE	<i>Hippoglossoides platessoides</i>	SPP
1270	FLOUNDER, FOURSPOT	<i>Paralichthys oblongus</i>	SPP
1290	FLOUNDER, GULFSTREAM	<i>Citharichthys arctifrons</i>	SPP
6886	FLOUNDER, LEFTYE, NK	Bothidae	SPP
1260	FLOUNDER, NK	Pleuronectiformes	SPP
1300	FLOUNDER, SOUTHERN	<i>Paralichthys lethostigma</i>	SPP
1219	FLOUNDER, SUMMER (FLUKE)	<i>Paralichthys dentatus</i>	SPP
1250	FLOUNDER, WINDOWPANE (SAND DAB)	<i>Scophthalmus aquosus</i>	SPP
1200	FLOUNDER, WINTER (BLACKBACK)	<i>Pseudopleuronectes americanus</i>	SPP
1220	FLOUNDER, WITCH (GREY SOLE)	<i>Glyptocephalus cynoglossus</i>	SPP
1230	FLOUNDER, YELLOWTAIL	<i>Limanda ferruginea</i>	SPP
6141	FRIGATEBIRD, MAGNIFICENT	<i>Fregata magnificens</i>	INC
6161	FULMAR, NORTHERN	<i>Fulmarus glacialis</i>	INC

⁹ Can be used for mix of fish and invertebrate species that cannot be differentiated.

Species Code	Common Name(s)	Scientific Name	Log
6171	GANNET, NORTHERN	<i>Morus bassanus</i>	INC
6660	GAPER, RED EYE	<i>Chaunax stigmaeus</i>	SPP
6152	GREBE, HORNED	<i>Podiceps auritus</i>	INC
6150	GREBE, NK	Podicipedidae	INC
6153	GREBE, PIED BILLED	<i>Podilymbus podiceps</i>	INC
6154	GREBE, RED NECKED	<i>Podiceps grisegena</i>	INC
6671	GRENADIER, COMMON (MARLIN SPIKE)	<i>Nezumia bairdii</i>	SPP
6672	GRENADIER, HOLLOWSNOUT	<i>Caelorinchus caelorhincus</i>	SPP
1380	GRENADIER, NK	Macrouridae	SPP
1370	GRENADIER, ROUGHEAD	<i>Macrourus berglax</i>	SPP
5240	GROUND FISH, NK		SPP
1410	GROUPE, NK	Epinephelinae	IAL
1414	GROUPE, SNOWY	<i>Hyporthodus niveatus</i>	IAL
1440	GRUNT, NK	Haemulidae	SPP
6181	GUILLEMOT, BLACK	<i>Cephus grylle</i>	INC
6201	GULL, BLACK-HEADED	<i>Chroicocephalus ridibundus</i>	INC
6202	GULL, BONAPARTE'S	<i>Chroicocephalus philadelphia</i>	INC
6203	GULL, FRANKLIN'S	<i>Leucophaeus pipixcan</i>	INC
6204	GULL, GLAUCOUS	<i>Larus hyperboreus</i>	INC
6205	GULL, GREAT BLACK-BACK	<i>Larus marinus</i>	INC
6206	GULL, HERRING	<i>Larus argentatus</i>	INC
6207	GULL, ICELAND	<i>Larus glaucoides</i>	INC
6215	GULL, IVORY	<i>Pagophila eburnea</i>	INC
6208	GULL, LAUGHING	<i>Leucophaeus atricilla</i>	INC
6209	GULL, LESSER BLACK-BACK	<i>Larus fuscus</i>	INC
6210	GULL, LITTLE	<i>Hydrocoloeus minutus</i>	INC
6211	GULL, MEW	<i>Larus canus</i>	INC
6200	GULL, NK	Laridae	INC
6212	GULL, RING BILLED	<i>Larus delawarensis</i>	INC
6216	GULL, ROSS'S	<i>Rhodostethia rosea</i>	INC
6213	GULL, SABINE'S	<i>Xema sabini</i>	INC
6214	GULL, THAYER'S	<i>Larus thayeri</i>	INC
6863	GUNNEL, ROCK	<i>Pholis gunnellus</i>	SPP
1477	HADDOCK	<i>Melanogrammus aeglefinus</i>	SPP
1500	HAG FISH, ATLANTIC	<i>Myxine glutinosa</i>	SPP
6604	HAKE, BLUE	<i>Antimora rostrata</i>	SPP
6603	HAKE, LONGFIN	<i>Phycis chesteri</i>	SPP
6600	HAKE, NK	Merlucciidae, Phycinae	SPP
5080	HAKE, OFFSHORE (BLACK WHITING)	<i>Merluccius albidus</i>	SPP
1520	HAKE, RED (LING)	<i>Urophycis chuss</i>	SPP
1551	HAKE, RED/WHITE MIX	<i>Urophycis</i>	SPP
5090	HAKE, SILVER (WHITING)	<i>Merluccius bilinearis</i>	SPP
6615	HAKE, SOUTHERN	<i>Urophycis floridana</i>	SPP
6602	HAKE, SPOTTED	<i>Urophycis regia</i>	SPP
1539	HAKE, WHITE	<i>Urophycis tenuis</i>	SPP
1544	HAKE, WHITE (HEADS)	<i>Urophycis tenuis</i>	SPP
6605	HAKELING (METALLIC CODLING)	<i>Physiculus fulvus</i>	SPP
1590	HALIBUT, ATLANTIC	<i>Hippoglossus hippoglossus</i>	SPP
1580	HALIBUT, GREENLAND	<i>Reinhardtius hippoglossoides</i>	SPP
1656	HARVEST FISH	<i>Peprilus paru</i>	SPP
1685	HERRING, ATLANTIC	<i>Clupea harengus</i>	SPP
1740	HERRING, ATLANTIC THREAD	<i>Opisthonema oglinum</i>	SPP

Species Code	Common Name(s)	Scientific Name	Log
1120	HERRING, BLUEBACK	<i>Alosa aestivalis</i>	SPP
1670	HERRING, NK	Clupeidae	SPP
1660	HERRING, ROUND	<i>Etrumeus teres</i>	SPP
1280	HOGCHOCKER	<i>Trinectes maculatus</i>	SPP
1790	HOGFISH	<i>Lachnolaimus maximus</i>	SPP
6690	HOUNDFISH	<i>Tylosurus crocodilus</i> , <i>T. acus</i>	IAL
8990	INVERTEBRATE, NK	Invertebrata	SPP
0870	JACK, CREVALLE	<i>Caranx hippos</i>	SPP
6780	JACK, NK	Carangidae	SPP
6301	JAEGER, LONG TAILED	<i>Stercorarius longicaudus</i>	INC
6302	JAEGER, PARASITIC	<i>Stercorarius parasiticus</i>	INC
6303	JAEGER, POMARINE	<i>Stercorarius pomarinus</i>	INC
6871	JELLYFISH, NK	Scyphozoa, Cubozoa	SPP
6618	KINGFISH, GULF	<i>Menticirrhus littoralis</i>	SPP
1970	KINGFISH, NK	<i>Menticirrhus</i>	SPP
6616	KINGFISH, NORTHERN	<i>Menticirrhus saxatilis</i>	SPP
6617	KINGFISH, SOUTHERN	<i>Menticirrhus americanus</i>	SPP
6311	KITTIWAKE, BLACK-LEGGED	<i>Rissa tridactyla</i>	INC
2680	LADYFISH	<i>Elops saurus</i>	SPP
6631	LAMPREY, NK	Petromyzontidae	SPP
6872	LAMP SHELL, NK	Brachiopoda	SPP
2060	LANCE, SAND, NK	Ammodytes	SPP
6774	LANCETFISH, NK	Alepisauridae	IAL
6608	LANTERNFISH, NK	Myctophidae	SPP
6787	LEATHERJACKET	<i>Oligoplites saurus</i>	SPP
6647	LIZARDFISH, NK	Synodontidae	SPP
7270	LOBSTER, AMERICAN	<i>Homarus americanus</i>	SPP
6786	LOOKDOWN	<i>Selene vomer</i>	SPP
6322	LOON, ARCTICA	<i>Gavia arctica</i>	INC
6323	LOON, COMMON	<i>Gavia immer</i>	INC
6321	LOON, NK	Gaviidae	INC
6324	LOON, RED-THROATED	<i>Gavia stellata</i>	INC
6760	LOUVAR	<i>Luvarus imperialis</i>	IAL
2100	LUMPFISH	<i>Cyclopterus lumpus</i>	SPP
6635	LUMPSUCKER, ATLANTIC SPINY	<i>Eumicrotremus spinosus</i>	SPP
2120	MACKEREL, ATLANTIC	<i>Scomber scombrus</i>	SPP
6648	MACKEREL, BULLET	<i>Auxis rochei</i>	SPP
2150	MACKEREL, ATLANTIC CHUB	<i>Scomber colias</i>	SPP
1320	MACKEREL, FRIGATE	<i>Auxis thazard</i>	IAL
1940	MACKEREL, KING	<i>Scomberomorus cavalla</i>	SPP/IAL
6649	MACKEREL, NK	<i>Scombrini</i>	SPP
6638	MACKEREL, SNAKE, NK	Gempylidae	SPP
3840	MACKEREL, SPANISH	<i>Scomberomorus maculatus</i>	SPP
6964	MANATEE, WEST INDIAN	<i>Trichechus manatus</i>	INC
6991	MARINE MAMMAL, NK	Cetacea, Pinnipedia, Trichechidae	INC
2171	MARLIN, BLUE	<i>Makaira nigricans</i>	IAL
2181	MARLIN, NK (BILLFISHES)	Istiophoridae	IAL
2161	MARLIN, WHITE	<i>Kajikia albida</i>	IAL
2210	MENHADEN, ATLANTIC	<i>Brevoortia tyrannus</i>	SPP
6103	MERGANSEER, NK	Anatidae	INC
6770	MOLA, NK	Molidae	IAL
6772	MOLA, OCEAN SUNFISH	<i>Mola mola</i>	IAL

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6771	MOLA, SHARPTAIL	<i>Masturus lanceolatus</i>	IAL
6773	MOLA, SLENDER	<i>Ranzania laevis</i>	IAL
8040	MOLLUSK, NK	Mollusca	SPP
0124	MONKFISH (GOOSEFISH)	<i>Lophius americanus</i>	SPP
0119	MONKFISH (GOOSEFISH) (HEADS)	<i>Lophius americanus</i>	SPP
0123	MONKFISH (GOOSEFISH) (LIVERS)	<i>Lophius americanus</i>	SPP
0120	MONKFISH (GOOSEFISH) (TAILS)	<i>Lophius americanus</i>	SPP
6785	MOONFISH, ATLANTIC	<i>Selene setapinnis</i>	SPP
2341	MULLET, NK	Mugilidae	SPP
2350	MULLET, STRIPED	<i>Mugil cephalus</i>	SPP
6636	MUMMICHOG	<i>Fundulus heteroclitus</i>	SPP
6330	MURRE, NK	<i>Uria</i>	INC
6332	MURRE, THICK-BILLED	<i>Uria lomvia</i>	INC
6331	MURRE, THIN-BILLED	<i>Uria aalge</i>	INC
7810	MUSSEL, NK	Mytilidae	SPP
6966	NARWHAL	<i>Monodon monoceros</i>	INC
0190	NEEDLEFISH, ATLANTIC	<i>Strongylura marina</i>	IAL
1330	NEEDLEFISH, NK	Belonidae	SPP
6341	NODDY, BROWN	<i>Anous stolidus</i>	INC
2500	OCEAN POUT	<i>Zoarces americanus</i>	SPP
7860	OCTOPUS, NK	Octopoda	SPP
6639	OILFISH	<i>Ruvettus pretiosus</i>	IAL
6579	OLDSQUAW	<i>Clangula hyemalis</i>	INC
2490	OPAH	<i>Lampris guttatus</i>	IAL
7898	OYSTER, COMMON	<i>Crassostrea virginica</i>	SPP
7921	OYSTER, EUROPEAN FLAT	<i>Ostrea edulis</i>	SPP
5250	PELAGIC FISH, NK		IAL
6351	PELICAN, BROWN	<i>Pelecanus occidentalis</i>	INC
3110	PERCH, SAND	<i>Diplectrum formosum</i>	SPP
5060	PERCH, WHITE	<i>Morone americana</i>	SPP
5170	PERCH, YELLOW	<i>Perca flavescens</i>	SPP
7980	PERIWINKLE, COMMON	<i>Littorina littorea</i>	SPP
6791	PERMIT	<i>Trachinotus falcatus</i>	SPP
6362	PETREL, BERMUDA	<i>Pterodroma cahow</i>	INC
6363	PETREL, BLACK-CAPPED	<i>Pterodroma hasitata</i>	INC
6364	PETREL, FEA'S	<i>Pterodroma feae</i>	INC
6361	PETREL, SOUTH TRINIDAD	<i>Pterodroma arminjoniana</i>	INC
6371	PHALAROPE, RED	<i>Phalaropus fulicarius</i>	INC
6372	PHALAROPE, RED-NECKED	<i>Phalaropus lobatus</i>	INC
2580	PIGFISH	<i>Orthopristis chrysoptera</i>	SPP
6781	PILOTFISH	<i>Naukrates ductor</i>	SPP
2670	PINFISH	<i>Lagodon rhomboides</i>	SPP
6621	PIPEFISH/SEAHORSE, NK	Syngnathidae	SPP
2695	POLLOCK	<i>Pollachius virens</i>	SPP
6777	POMFRET, ATLANTIC	<i>Brama brama</i>	SPP
6776	POMFRET, BIGSCALE	<i>Taractichthys longipinnis</i>	SPP
6578	POMFRET, NK	Bramidae	SPP
6788	POMPANO, AFRICAN	<i>Alectis ciliaris</i>	SPP
2720	POMPANO, FLORIDA	<i>Trachinotus carolinus</i>	SPP
6646	PORCUPINE FISH	<i>Diodon hystrix</i>	SPP
3320	PORGY, NK	Sparidae	SPP
3300	PORGY, RED	<i>Pagrus pagrus</i>	SPP

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6960	PORPOISE, HARBOR	<i>Phocoena phocoena</i>	INC
6998	PORPOISE/DOLPHIN, NK	Phocoenidae, Delphinidae	INC
6379	PTERODROMA, NK	<i>Pterodroma</i>	INC
4300	PUFFER, NK (BURRFISH)	Tetraodontidae	SPP
4290	PUFFER, NORTHERN	<i>Sphoeroides maculatus</i>	SPP
6381	PUFFIN, ATLANTIC	<i>Fratercula arctica</i>	INC
7488	QUAHOG, HARD SHELL CLAM	<i>Mercenaria</i>	SPP
7540	QUAHOG, OCEAN (BLACK CLAM)	<i>Arctica islandica</i>	SPP
3270	RAVEN, SEA	<i>Hemitripteris americanus</i>	SPP
6739	RAY, BULLNOSE	<i>Myliobatis freminvillii</i>	SPP
6741	RAY, BUTTERFLY, NK	<i>Gymnura</i>	IAL
6742	RAY, BUTTERFLY, SMOOTH	<i>Gymnura micrura</i>	IAL
6743	RAY, BUTTERFLY, SPINY	<i>Gymnura altavela</i>	IAL
6740	RAY, COWNOSE	<i>Rhinoptera bonasus</i>	SPP
6745	RAY, DEVIL	<i>Mobula hypostoma</i>	IAL
6700	RAY, EAGLE, NK	Myliobatidae	IAL
6720	RAY, MANTA, ATLANTIC	<i>Manta birostris</i>	IAL
6715	RAY, MANTA, NK	Mobulidae	IAL
6753	RAY, NK	Rajiformes	IAL
6730	RAY, TORPEDO	<i>Torpedo nobiliana</i>	IAL
2870	RAY, SICKLEFIN (CHILEAN) DEVIL	<i>Mobula tarapacana</i>	IAL
2880	RAY, SPINETAIL DEVIL	<i>Mobula japanica</i>	IAL
6391	RAZORBILL	<i>Alca torda</i>	INC
2400	REDFISH, ACADIAN	<i>Sebastes fasciatus</i>	SPP
2430	REDFISH, GOLDEN	<i>Sebastes norvegicus</i>	SPP
6750	REMORA, NK	Echeneidae	SPP
6644	RIBBONFISH, NK	Trachipteridae	SPP
6643	RIBBONFISH, POLKA-DOT	<i>Desmodema polystictum</i>	SPP
6642	RIBBONFISH, SCALLOPED	<i>Zu cristatus</i>	SPP
6606	ROCKLING, FOURBEARD	<i>Enchelyopus cimbrius</i>	SPP
6876	ROCKWEED, NK	<i>Ascorphyllum, Fucus</i>	SPP
2420	ROSEFISH, BLACK BELLY	<i>Helicolenus dactylopterus</i>	SPP
6778	ROUGHY, BIG	<i>Gephyroberyx darwinii</i>	SPP
6779	ROUGHY, NK	Trachichthyidae	SPP
2130	RUNNER, BLUE	<i>Caranx crysos</i>	SPP
6630	SAILFISH	<i>Istiophorus platypterus</i>	IAL
3050	SALMON, ATLANTIC	<i>Salmo salar</i>	IAL
3080	SALMON, CHINOOK	<i>Oncorhynchus tshawytscha</i>	IAL
3070	SALMON, COHO	<i>Oncorhynchus kisutch</i>	IAL
3090	SALMON, NK	<i>Oncorhynchus</i>	IAL
3060	SALMON, PINK	<i>Oncorhynchus gorbuscha</i>	IAL
6874	SAND DOLLAR	<i>Echinarachnius parma</i>	SPP
3196	SAURY, ATLANTIC	<i>Scomberesox saurus</i>	SPP
6784	SCAD, BIGEYE	<i>Selar crumenophthalmus</i>	SPP
6782	SCAD, MACKEREL	<i>Decapterus macarellus</i>	SPP
3310	SCAD, ROUGH	<i>Trachurus lathami</i>	SPP
7990	SCALLOP, BAY	<i>Argopecten irradians</i>	SPP
7970	SCALLOP, CALICO	<i>Argopecten gibbus</i>	SPP
7950	SCALLOP, ICELANDIC	<i>Chlamys islandica</i>	SPP
7960	SCALLOP, NK	Pectinidae	SPP
8009	SCALLOP, SEA	<i>Placopecten magellanicus</i>	SPP
6612	SCORPIONFISH, NK	Scorpaenidae	SPP

Species Code	Common Name(s)	Scientific Name	Log
6521	SCOTER, BLACK	<i>Melanitta nigra</i>	INC
6520	SCOTER, NK	<i>Melanitta</i>	INC
6523	SCOTER, SURF	<i>Melanitta perspicillata</i>	INC
6522	SCOTER, WHITE-WINGED	<i>Melanitta fusca</i>	INC
6678	SCULPIN, LONGHORN	<i>Myoxocephalus octodecemspinosus</i>	SPP
3260	SCULPIN, NK	Cottidae	SPP
3295	SCUP	<i>Stenotomus chrysops</i>	SPP
3350	SEA BASS, BLACK	<i>Centropristis striata</i>	SPP
3330	SEA BASS, NK	Serranidae	SPP
8060	SEA CUCUMBER, NK	Holothuroidea	SPP
6873	SEA PANSY	<i>Renilla reniformis</i>	SPP
6884	SEA PEN, NK	Pennatulacea	SPP
6869	SEA POTATO	<i>Leathesia difformis</i>	SPP
3430	SEA ROBIN, ARMORED	Peristegidae	SPP
3410	SEA ROBIN, NK	Triglidae	SPP
3400	SEA ROBIN, NORTHERN	<i>Prionotus carolinus</i>	SPP
3420	SEA ROBIN, STRIPED	<i>Prionotus evolans</i>	SPP
6879	SEA SQUIRT, NK	Ascidacea	SPP
8050	SEA URCHIN, NK	<i>Strongylocentrotus</i>	SPP
6984	SEAL, BEARDED	<i>Erignathus barbatus</i>	INC
6996	SEAL, GRAY	<i>Halichoerus grypus</i>	INC
6995	SEAL, HARBOR	<i>Phoca vitulina concolor</i>	INC
6981	SEAL, HARP	<i>Pagophilus groenlandicus</i>	INC
6982	SEAL, HOODED	<i>Cystophora cristata</i>	INC
6985	SEAL, LARGA (SPOTTED)	<i>Phoca largha</i>	INC
6994	SEAL, NK	Phocidae	INC
6986	SEAL, RIBBON	<i>Histriophoca fasciata</i>	INC
6983	SEAL, RINGED	<i>Pusa hispida</i>	INC
3340	SEATROUT, NK (WEAKFISHES)	<i>Cynoscion</i>	SPP
3450	SEATROUT, SPOTTED	<i>Cynoscion nebulosus</i>	SPP
8171	SEAWEED, NK	Chlorophyta, Phaeophyta, Rhodophyta	SPP
3474	SHAD, AMERICAN	<i>Alosa sapidissima</i>	SPP
1340	SHAD, GIZZARD	<i>Dorosoma cepedianum</i>	SPP
1730	SHAD, HICKORY	<i>Alosa mediocris</i>	SPP
6864	SHANNY, NK	Stichaeidae	SPP
4771	SHARK, ATLANTIC ANGEL	<i>Squatina dumeril</i>	IAL
4941	SHARK, ATLANTIC SHARPNOSE	<i>Rhizoprionodon terraenovae</i>	IAL
4948	SHARK, ATLANTIC SHARPNOSE (FINS)	<i>Rhizoprionodon terraenovae</i>	SPP
4961	SHARK, BASKING	<i>Cetorhinus maximus</i>	IAL
4968	SHARK, BASKING (FINS)	<i>Cetorhinus maximus</i>	SPP
4831	SHARK, BIGNOSE	<i>Carcharhinus altimus</i>	IAL
4838	SHARK, BIGNOSE (FINS)	<i>Carcharhinus altimus</i>	SPP
4871	SHARK, BLACK TIP	<i>Carcharhinus limbatus</i>	IAL
4878	SHARK, BLACK TIP (FINS)	<i>Carcharhinus limbatus</i>	SPP
5030	SHARK, BLACKNOSE	<i>Carcharhinus acronotus</i>	IAL
4931	SHARK, BLUE (BLUE DOG)	<i>Prionace glauca</i>	IAL
4938	SHARK, BLUE (BLUE DOG) (FINS)	<i>Prionace glauca</i>	SPP
6758	SHARK, BLUNTNOSE SIXGILL	<i>Hexanchus griseus</i>	IAL
4760	SHARK, BONNETHEAD	<i>Sphyrna tiburo</i>	IAL
4891	SHARK, BULL	<i>Carcharhinus leucas</i>	IAL
4898	SHARK, BULL (FINS)	<i>Carcharhinus leucas</i>	SPP
4971	SHARK, CARCHARHINID, NK	<i>Carcharhinus</i>	IAL

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4978	SHARK, CARCHARHINID, NK (FINS)	<i>Carcharhinus</i>	SPP
4841	SHARK, DUSKY	<i>Carcharhinus obscurus</i>	IAL
4848	SHARK, DUSKY (FINS)	<i>Carcharhinus obscurus</i>	SPP
4990	SHARK, FINETOOTH	<i>Carcharhinus isodon</i>	IAL
4750	SHARK, GREENLAND	<i>Somniosus microcephalus</i>	IAL
3860	SHARK, HAMMERHEAD, GREAT	<i>Sphyrna mokarran</i>	IAL
4951	SHARK, HAMMERHEAD, NK	Sphyrnidae	IAL
4958	SHARK, HAMMERHEAD, NK (FINS)	Sphyrnidae	SPP
4781	SHARK, HAMMERHEAD, SCALLOPED	<i>Sphyrna lewini</i>	IAL
4788	SHARK, HAMMERHEAD, SCALLOPED (FINS)	<i>Sphyrna lewini</i>	SPP
4791	SHARK, HAMMERHEAD, SMOOTH	<i>Sphyrna zygaena</i>	IAL
4798	SHARK, HAMMERHEAD, SMOOTH (FINS)	<i>Sphyrna zygaena</i>	SPP
4921	SHARK, LEMON	<i>Negaprion brevirostris</i>	IAL
4928	SHARK, LEMON (FINS)	<i>Negaprion brevirostris</i>	SPP
3581	SHARK, MAKO, LONGFIN	<i>Isurus paucus</i>	IAL
3588	SHARK, MAKO, LONGFIN (FINS)	<i>Isurus paucus</i>	SPP
3571	SHARK, MAKO, NK	<i>Isurus</i>	IAL
3572	SHARK, MAKO, NK (CHUNKS)	<i>Isurus</i>	SPP
3578	SHARK, MAKO, NK (FINS)	<i>Isurus</i>	SPP
3551	SHARK, MAKO, SHORTFIN	<i>Isurus oxyrinchus</i>	IAL
3558	SHARK, MAKO, SHORTFIN (FINS)	<i>Isurus oxyrinchus</i>	SPP
4861	SHARK, NIGHT	<i>Carcharhinus signatus</i>	IAL
4868	SHARK, NIGHT (FINS)	<i>Carcharhinus signatus</i>	SPP
3591	SHARK, NK	Chondrichthyes	IAL
3592	SHARK, NK (CHUNKS)	Chondrichthyes	SPP
3597	SHARK, NK (FINS, DRIED)	Chondrichthyes	SPP
3598	SHARK, NK (FINS, FRESH/FROZEN)	Chondrichthyes	SPP
3481	SHARK, NURSE	<i>Ginglymostoma cirratum</i>	IAL
3488	SHARK, NURSE (FINS)	<i>Ginglymostoma cirratum</i>	SPP
4901	SHARK, OCEANIC WHITETIP	<i>Carcharhinus longimanus</i>	IAL
4908	SHARK, OCEANIC WHITETIP (FINS)	<i>Carcharhinus longimanus</i>	SPP
4981	SHARK, PELAGIC, NK		IAL
4988	SHARK, PELAGIC, NK (FINS)		SPP
4811	SHARK, PORBEAGLE (MACKEREL SHARK)	<i>Lamna nasus</i>	IAL
4818	SHARK, PORBEAGLE (MACKEREL SHARK) (FINS)	<i>Lamna nasus</i>	SPP
3491	SHARK, SAND TIGER	<i>Carcharias taurus</i>	IAL
3498	SHARK, SAND TIGER (FINS)	<i>Carcharias taurus</i>	SPP
4821	SHARK, SANDBAR (BROWN SHARK)	<i>Carcharhinus plumbeus</i>	IAL
4828	SHARK, SANDBAR (BROWN SHARK) (FINS)	<i>Carcharhinus plumbeus</i>	SPP
6756	SHARK, SEVENGILL SHARPNOSE	<i>Hepttranchias perlo</i>	IAL
4851	SHARK, SILKY	<i>Carcharhinus falciformis</i>	IAL
4858	SHARK, SILKY (FINS)	<i>Carcharhinus falciformis</i>	SPP
6755	SHARK, SMALLTOOTH SAND TIGER	<i>Odontaspis ferox</i>	IAL
4881	SHARK, SPINNER	<i>Carcharhinus brevipinna</i>	IAL
4888	SHARK, SPINNER (FINS)	<i>Carcharhinus brevipinna</i>	SPP
3531	SHARK, THRESHER	<i>Alopias vulpinus</i>	IAL
3538	SHARK, THRESHER (FINS)	<i>Alopias vulpinus</i>	SPP
3541	SHARK, THRESHER, BIGEYE	<i>Alopias superciliosus</i>	IAL
3548	SHARK, THRESHER, BIGEYE (FINS)	<i>Alopias superciliosus</i>	SPP
4911	SHARK, TIGER	<i>Galeocerdo cuvier</i>	IAL
4918	SHARK, TIGER (FINS)	<i>Galeocerdo cuvier</i>	SPP
4801	SHARK, WHITE	<i>Carcharodon carcharias</i>	IAL

Species Code	Common Name(s)	Scientific Name	Log
4808	SHARK, WHITE (FINS)	<i>Carcharodon carcharias</i>	SPP
6401	SHEARWATER, AUDUBON'S	<i>Puffinus lherminieri</i>	INC
6407	SHEARWATER, CORY'S	<i>Calonectris diomedea</i>	INC
6402	SHEARWATER, GREATER	<i>Ardenna gravis</i>	INC
6403	SHEARWATER, LITTLE	<i>Puffinus assimilis</i>	INC
6405	SHEARWATER, MANX	<i>Puffinus puffinus</i>	INC
6400	SHEARWATER, NK	<i>Puffinus, Calonectris, Ardena</i>	INC
6406	SHEARWATER, SOOTY	<i>Ardenna grisea</i>	INC
3560	SHEEPSHEAD	<i>Archosargus probatocephalus</i>	SPP
6882	SHELL, NK		SPP
6897	SHELL, SCALLOP		SPP
6893	SHELLFISH, NK	Mollusca, Crustacea, Echinodermata	SPP
7370	SHRIMP, MANTIS	Stomatopoda	SPP
7350	SHRIMP, NK	Caridea, Dendrobranchiata	SPP
7360	SHRIMP, PANDALID, NK (NORTHERN)	Pandalidae	SPP
7380	SHRIMP, PENAEID, NK (SOUTHERN)	Penaeidae	SPP
7330	SHRIMP, ROYAL RED	<i>Pleoticus robustus</i>	SPP
7340	SHRIMP, SCARLET	<i>Aristaeopsis edwardsiana</i>	SPP
6881	SHRIMP, SHORE, NK	<i>Palaemonetes</i>	SPP
3620	SILVERSIDE, ATLANTIC	<i>Menidia menidia</i>	SPP
3630	SILVERSIDE, NK	Atherinidae	SPP
3680	SKATE, BARNDOR	<i>Dipturus laevis</i>	SPP
3681	SKATE, BARNDOR (WINGS)	<i>Dipturus laevis</i>	SPP
3720	SKATE, CLEARNOSE	<i>Raja eglanteria</i>	SPP
3721	SKATE, CLEARNOSE (WINGS)	<i>Raja eglanteria</i>	SPP
3660	SKATE, LITTLE	<i>Leucoraja erinacea</i>	SPP
3661	SKATE, LITTLE (WINGS)	<i>Leucoraja erinacea</i>	SPP
3730	SKATE, LITTLE/WINTER, NK ¹⁰	<i>Leucoraja erinacea, L. ocellata</i>	SPP
3731	SKATE, LITTLE/WINTER, NK (WINGS) ¹⁰	<i>Leucoraja erinacea, L. ocellata</i>	SPP
3650	SKATE, NK	Rajidae	SPP
3651	SKATE, NK (WINGS)	Rajidae	SPP
3640	SKATE, ROSETTE	<i>Leucoraja garmani</i>	SPP
3641	SKATE, ROSETTE (WINGS)	<i>Leucoraja garmani</i>	SPP
3690	SKATE, SMOOTH	<i>Malacoraja senta</i>	SPP
3691	SKATE, SMOOTH (WINGS)	<i>Malacoraja senta</i>	SPP
3700	SKATE, THORNY	<i>Amblyraja radiata</i>	SPP
3701	SKATE, THORNY (WINGS)	<i>Amblyraja radiata</i>	SPP
3670	SKATE, WINTER (BIG)	<i>Leucoraja ocellata</i>	SPP
3671	SKATE, WINTER (BIG) (WINGS)	<i>Leucoraja ocellata</i>	SPP
6411	SKIMMER, BLACK	<i>Rynchops niger</i>	INC
6304	SKUA, GREAT	<i>Stercorarius skua</i>	INC
6300	SKUA, NK	Stercorariidae	INC
6305	SKUA, SOUTH POLAR	<i>Stercorarius maccormicki</i>	INC
3710	SMELT, RAINBOW	<i>Osmerus mordax</i>	SPP
6870	SNAIL, MOONSHHELL, NK	Naticidae	SPP
6877	SNAIL, NK	Gastropoda	SPP
6628	SNAKEBLENNY	<i>Lumpenus lampretaeformis</i>	SPP
3754	SNAPPER, DOG	<i>Lutjanus jocu</i>	SPP
3360	SNAPPER, NK	Lutjanidae	SPP
3764	SNAPPER, RED	<i>Lutjanus campechanus</i>	SPP

¹⁰ Only to be used for skates under 35cm in length that cannot be distinguished.

Species Code	Common Name(s)	Scientific Name	Log
3740	SNAPPER, VERMILLION	<i>Rhomboplites aurorubens</i>	SPP
6633	SNIEFISH, LONGSPINE	<i>Macroramphosus scolopax</i>	SPP
6622	SNIEFISH, NK	Centriscidae	SPP
6634	SNIEFISH, SLENDER	<i>Macroramphosus gracilis</i>	SPP
3810	SPADEFISH	<i>Chaetodipterus faber</i>	SPP
6641	SPEARFISH, LONGBILL	<i>Tetrapturus pfluegeri</i>	IAL
6867	SPONGE, NK	Porifera	SPP
4060	SPOT	<i>Leiostomus xanthurus</i>	SPP
8010	SQUID, ATLANTIC LONGFIN	<i>Doryteuthis pealeii</i>	SPP
8030	SQUID, NK	Teuthida	SPP
8020	SQUID, SHORTFIN	<i>Illex illecebrosus</i>	SPP
0240	SQUIRRELFISH, NK	Holocentridae	SPP
6891	STARFISH, BRITTLE, NK	Ophiuroidea	SPP
8280	STARFISH, SEASTAR, NK	Asteroidea	SPP
6620	STARGAZER, NK	Uranoscopidae	SPP
0310	STARGAZER, NORTHERN	<i>Astroscopus guttatus</i>	SPP
6712	STINGRAY, ATLANTIC	<i>Dasyatis sabina</i>	IAL
6711	STINGRAY, BLUNTNOSE	<i>Dasyatis say</i>	IAL
6705	STINGRAY, NK	Myliobatoidei	IAL
6775	STINGRAY, PELAGIC	<i>Pteroplatytrygon violacea</i>	IAL
6710	STINGRAY, ROUGHTAIL	<i>Dasyatis centroura</i>	IAL
6713	STINGRAY, SOUTHERN	<i>Dasyatis americana</i>	IAL
6853	STOMACH CONTENTS, EMPTY		SPP
6852	STOMACH CONTENTS, FISH, NK		SPP
6851	STOMACH CONTENTS, INVERTEBRATE, NK		SPP
6850	STOMACH CONTENTS, NK		SPP
6431	STORM PETREL, BAND-RUMPED	<i>Oceanodroma castro</i>	INC
6432	STORM PETREL, LEACH'S	<i>Oceanodroma leucorhoa</i>	INC
6430	STORM PETREL, NK	Hydrobatidae	INC
6433	STORM PETREL, WHITE-FACED	<i>Pelagodroma marina</i>	INC
6434	STORM PETREL, WILSON	<i>Oceanites oceanicus</i>	INC
4200	STURGEON, ATLANTIC	<i>Acipenser oxyrinchus</i>	IAL
4211	STURGEON, NK	Acipenseridae	IAL
4220	STURGEON, SHORT-NOSE	<i>Acipenser brevirostrum</i>	IAL
4230	SUCKER, FRESHWATER, NK	Catostomidae	SPP
4260	SUNFISH, FRESHWATER, NK	Centrarchidae	SPP
4328	SWORDFISH	<i>Xiphias gladius</i>	IAL
4327	SWORDFISH (CHUNKS)	<i>Xiphias gladius</i>	IAL
4320	SWORDFISH (GUTTED)	<i>Xiphias gladius</i>	IAL
4350	TARPON	<i>Megalops atlanticus</i>	IAL
4380	TAUTOG (BLACKFISH)	<i>Tautoga onitis</i>	SPP
6501	TERN, ARCTIC	<i>Sterna paradisaea</i>	INC
6513	TERN, BLACK	<i>Chlidonias niger</i>	INC
6502	TERN, BRIDLED	<i>Onychoprion anaethetus</i>	INC
6503	TERN, CASPIAN	<i>Hydroprogne caspia</i>	INC
6504	TERN, COMMIC	<i>Sterna hirundo, S. paradisaea</i>	INC
6505	TERN, COMMON	<i>Sterna hirundo</i>	INC
6506	TERN, FORSTER'S	<i>Sterna forsteri</i>	INC
6507	TERN, GULL-BILLED	<i>Gelochelidon nilotica</i>	INC
6508	TERN, LITTLE	<i>Sternula albifrons</i>	INC
6500	TERN, NK	Sterninae	INC
6509	TERN, ROSEATE	<i>Sterna dougallii</i>	INC

Species Code	Common Name(s)	Scientific Name	Log
6510	TERN, ROYAL	<i>Thalasseus maximus</i>	INC
6511	TERN, SANDWICH	<i>Thalasseus sandvicensis</i>	INC
6512	TERN, SOOTY	<i>Onychoprion fuscatus</i>	INC
4440	TILEFISH, BLUELINE	<i>Caulolatilus microps</i>	SPP
4460	TILEFISH, GOLDEN	<i>Lopholatilus chamaeleonticeps</i>	SPP
4470	TILEFISH, NK	Malacanthidae	SPP
6637	TOADFISH, NK	Batrachoididae	SPP
4510	TOADFISH, OYSTER	<i>Opsanus tau</i>	SPP
4530	TOMCOD, ATLANTIC	<i>Microgadus tomcod</i>	SPP
4560	TRIGGERFISH, NK	Balistidae	SPP
4590	TRIPLETAIL	<i>Lobotes surinamensis</i>	IAL
6443	TROPICBIRD, NK	<i>Phaethon</i>	INC
6442	TROPICBIRD, RED-BILLED	<i>Phaethon aethereus</i>	INC
6441	TROPICBIRD, WHITE-TAILED	<i>Phaethon lepturus</i>	INC
4150	TROUT, STEELHEAD	<i>Salmo gairdneri</i>	IAL
4701	TUNA, ALBACORE	<i>Thunnus alalunga</i>	IAL
4702	TUNA, ALBACORE (CHUNKS)	<i>Thunnus alalunga</i>	SPP
4691	TUNA, BIG EYE	<i>Thunnus obesus</i>	IAL
4692	TUNA, BIG EYE (CHUNKS)	<i>Thunnus obesus</i>	SPP
4641	TUNA, BLACKFIN	<i>Thunnus atlanticus</i>	IAL
4642	TUNA, BLACKFIN (CHUNKS)	<i>Thunnus atlanticus</i>	SPP
4670	TUNA, BLUEFIN	<i>Thunnus thynnus</i>	IAL
4676	TUNA, BLUEFIN (CHUNKS)	<i>Thunnus thynnus</i>	SPP
4657	TUNA, NK	Thunnini, Sardini	IAL
4658	TUNA, NK (CHUNKS)	Thunnini, Sardini	SPP
4656	TUNA, NK (DRESSED)	Thunnini, Sardini	IAL
4661	TUNA, SKIPJACK	<i>Katsuwonus pelamis</i>	SPP/IAL
4662	TUNA, SKIPJACK (CHUNKS)	<i>Katsuwonus pelamis</i>	SPP
4711	TUNA, YELLOWFIN	<i>Thunnus albacares</i>	IAL
4712	TUNA, YELLOWFIN (CHUNKS)	<i>Thunnus albacares</i>	SPP
4681	TUNNY, LITTLE (FALSE ALBACORE)	<i>Euthynnus alletteratus</i>	SPP/IAL
4682	TUNNY, LITTLE (FALSE ALBACORE) (CHUNKS)	<i>Euthynnus alletteratus</i>	SPP
8090	TURTLE, GREEN	<i>Chelonia mydas</i>	INC
8140	TURTLE, HAWKSBILL	<i>Eretmochelys imbricata</i>	INC
8100	TURTLE, KEMP'S RIDLEY	<i>Lepidochelys kempii</i>	INC
8120	TURTLE, LEATHERBACK	<i>Dermochelys coriacea</i>	INC
8130	TURTLE, LOGGERHEAD	<i>Caretta caretta</i>	INC
8160	TURTLE, NK	Testudines	INC
8161	TURTLE, NK, HARD-SHELL	Cheloniidae	INC
8180	TURTLE, OLIVE RIDLEY	<i>Lepidochelys olivacea</i>	INC
8110	TURTLE, SLIDER, POND	<i>Trachemys scripta</i>	IAL
8150	TURTLE, SNAPPER	<i>Chelydra serpentina</i>	IAL
8081	TURTLE, TERRAPIN	<i>Malaclemys terrapin</i>	IAL
6854	UNKNOWN LIVING MATTER		SPP
4720	WAHOO	<i>Acanthocybium solandri</i>	IAL
6965	WALRUS	<i>Odobenus rosmarus</i>	INC
3446	WEAKFISH (SQUETEAGUE)	<i>Cynoscion regalis</i>	SPP
6993	WHALE, BALEEN, NK	Mysticeti	INC
6911	WHALE, BEAKED, BOTTLENOSE	<i>Hyperoodon ampullatus</i>	INC
6954	WHALE, BEAKED, CUVIER'S	<i>Ziphius cavirostris</i>	INC
6908	WHALE, BEAKED, DENSE	<i>Mesoplodon densirostris</i>	INC
6907	WHALE, BEAKED, GERVAIS'	<i>Mesoplodon europaeus</i>	INC

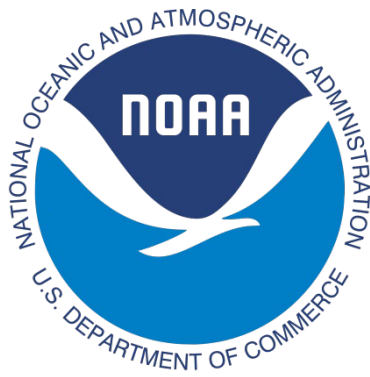
Species Code	Common Name(s)	Scientific Name	Log
6953	WHALE, BEAKED, NK	Mesoplodon	INC
6909	WHALE, BEAKED, SOWERBY'S	<i>Mesoplodon bidens</i>	INC
6910	WHALE, BEAKED, TRUE'S	<i>Mesoplodon mirus</i>	INC
6958	WHALE, BELUGA	<i>Delphinapterus leucas</i>	INC
6947	WHALE, BLUE	<i>Balaenoptera musculus</i>	INC
6988	WHALE, BRYDE'S	<i>Balaenoptera edeni</i>	INC
6905	WHALE, DWARF SPERM	<i>Kogia sima</i>	INC
6930	WHALE, FALSE KILLER	<i>Pseudorca crassidens</i>	INC
6929	WHALE, FIN/SEI	<i>Balaenoptera physalus</i> , <i>B. borealis</i>	INC
6931	WHALE, FIN	<i>Balaenoptera physalus</i>	INC
6933	WHALE, HUMPBACK	<i>Megaptera novaeangliae</i>	INC
6950	WHALE, KILLER	<i>Orcinus orca</i>	INC
6987	WHALE, MELON-HEADED	<i>Peponocephala electra</i>	INC
6945	WHALE, MINKE	<i>Balaenoptera acutorostrata</i>	INC
6999	WHALE, NK (CETACEAN, NK)	<i>Cetacea</i>	INC
6904	WHALE, PILOT, LONG-FIN	<i>Globicephala melas</i>	INC
6992	WHALE, PILOT, NK	<i>Globicephala</i>	INC
6903	WHALE, PILOT, SHORT-FIN	<i>Globicephala macrorhynchus</i>	INC
6955	WHALE, PYGMY KILLER	<i>Feresa attenuata</i>	INC
6956	WHALE, PYGMY SPERM	<i>Kogia breviceps</i>	INC
6946	WHALE, RIGHT, NORTHERN	<i>Eubalaena glacialis</i>	INC
6932	WHALE, SEI	<i>Balaenoptera borealis</i>	INC
6948	WHALE, SPERM	<i>Physeter macrocephalus</i>	INC
6980	WHALE, TOOTHED, NK	Odontoceti	INC
7760	WHELK, CHanneled	<i>Busycotypus canaliculatus</i>	SPP
7750	WHELK, CONCH	Strombidae	SPP
7770	WHELK, KNOBBED	<i>Busycon carica</i>	SPP
7780	WHELK, LIGHTNING	<i>Busycon sinistrum</i>	SPP
7740	WHELK, NK	Busyconinae	SPP
5120	WOLFFISH, ATLANTIC	<i>Anarhichas lupus</i>	SPP
6681	WOLFFISH, NORTHERN	<i>Anarhichas denticulatus</i>	SPP
5100	WOLFFISH, SPOTTED	<i>Anarhichas minor</i>	SPP
8230	WORM, BLOOD	<i>Glycera dibranchiata</i>	SPP
8250	WORM, NK	<i>Nereis</i>	SPP
5130	WRECKFISH	<i>Polyprion americanus</i>	IAL
6790	WRYMOUTH	<i>Cryptacanthodes maculatus</i>	SPP

If exact species code does not exist in this list, use the next most generic code and comment on the species.

Appendix U – Common Species Abbreviations

The following abbreviations can be used as part of any species name except for incidental takes. If not listed here, the word should be written out fully as listed in [APPENDIX T – SPECIES CODES AND LOGS](#). Periods after abbreviations are encouraged. Capitalization is not required as long as the meaning is clear.

Abbreviation	Short For	Example
Ac.	Acadian	Ac. Redfish
Am.	American	Am. Lobster
Atl.	Atlantic	Atl. Cod
Dog.	Dogfish	Spiny Dog.
Elasmo.	Elasmobranch	Eggs, Elasmo.
Fish. Gr.	Fishing Gear	Debris, Fish. Gr.
Fl.	Flounder	Winter Fl.
Herr.	Herring	Atl. Herr.
Invert.	Invertebrate	Invert., NK
LF	Long-finned	Atl. LF Squid
LH	Longhorn	LH Sculpin
Mack.	Mackerel	Atl Mack.
Moll.	Mollusca	Eggs, Moll.
Monk.	Monkfish	Monk. Tails
N.	Northern	N. Sea Robin
S.	Southern	S. Kingfish
Sea Star	Starfish, Sea Star	Sea Star, NK
SF	Short-finned	SF Squid
Sk.	Skate	Winter Sk.



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