

NORTHEAST FISHERIES SCIENCE CENTER FISHERIES SAMPLING BRANCH OBSERVER DATA ENTRY MANUAL 2016



U.S. Department of Commerce
NOAA Fisheries Service
National Marine Fisheries Service
Northeast Fisheries Science Center
Fisheries Sampling Branch
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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: Amy Martins, National Marine Fisheries Service, Northeast Fisheries Science Center, Fisheries Sampling 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 11/30/2015.

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Superscript indicates relevant programs for that section:

N = Northeast Fisheries Observer Program (NEFOP)

I = Industry Funded Scallop Program (IFS)

A = At Sea Monitoring Program (ASM)

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Introduction

The National Marine Fisheries Service (NMFS) Northeast Fisheries Science Center (NEFSC) Fisheries Sampling Branch (FSB) collections, maintains, and distributes data for scientific and management purposes in the northwest Atlantic Ocean. FSB manages three separate but related observer programs: the Northeast Fisheries Observer Program (NEFOP), the Industry Funded Scallop (IFS) Observer Program, and the At Sea Monitoring (ASM) Program. For the purposes of this manual, “observers” refers to any observer/monitor working for the FSB.

The purpose of this guide is to provide FSB 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 [FSB Observer Operations Manual](#) provides detailed protocols and methods for observer data collection, and the [FSB Observer On Deck 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 or worksheet, and accompanying at-sea data entry screen, if applicable. The logs labeled “NMFS NEFSC Fisheries Observer Program” are intended for use on NEFOP and IFS trips, whereas the logs labeled “NMFS NEFSC At-Sea Monitoring Program” should be used on ASM trips. In many cases, the ASM logs represent a subset of the data fields collected on NEFOP and IFS trips. The instructions for each data field are the same for all programs, unless otherwise noted. In the instructions, an asterisk (*) indicates fields which are collected on ASM trips. All fields should be collected on NEFOP and IFS trips, unless otherwise noted.

Detailed information for each fishery, such as background information, definitions, sampling protocols, and common scenarios are found in the [FSB 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.

An asterisk (*) indicates fields which are collected on ASM trips. All fields should be collected on NEFOP and IFS trips, unless otherwise noted. 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.

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 FSB to verify Safety Examination.
6a	Safety Decal Number	Obtain from decal or USCG documentation.	6 characters	
6b	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 SRSAT 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 used USCG documentation.
20b (back)	EVIC date issued	Printed on issued EVIC.	MM/YY	Leave blank if used USCG documentation.

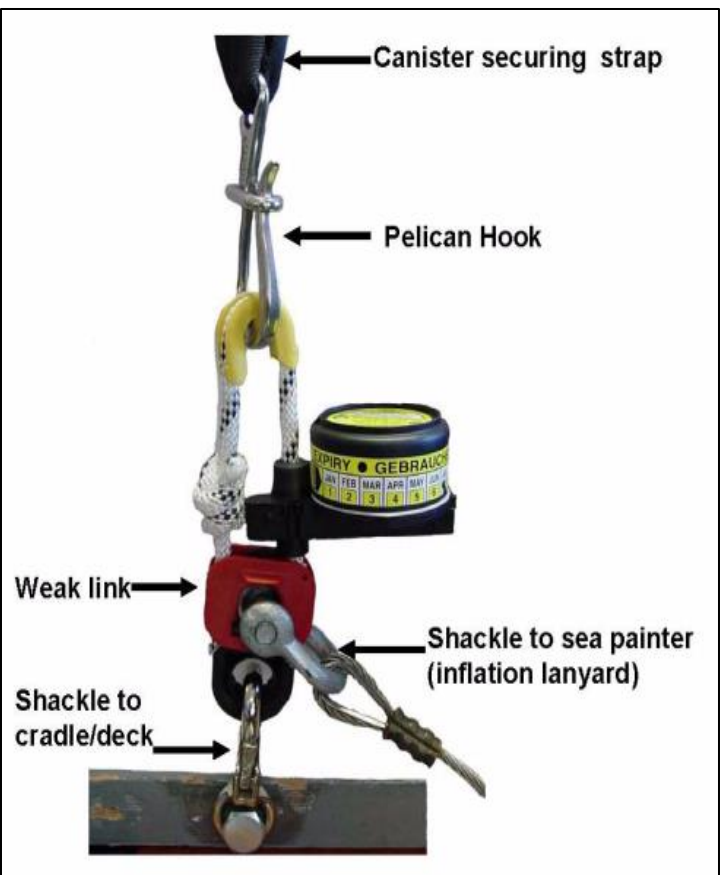
¹ When an EPIRB is correctly registered, it can greatly enhance Search and Rescue efforts.

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 EPRIB 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

Stability comments

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

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

20 I visually inspected the EPIRB; Record EVIC information below if one was issued
 EVIC number Date issued (MM/YY)

I used a previously issued EVIC; Record EVIC information below
 EVIC number Date issued (MM/YY)

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

Signature _____

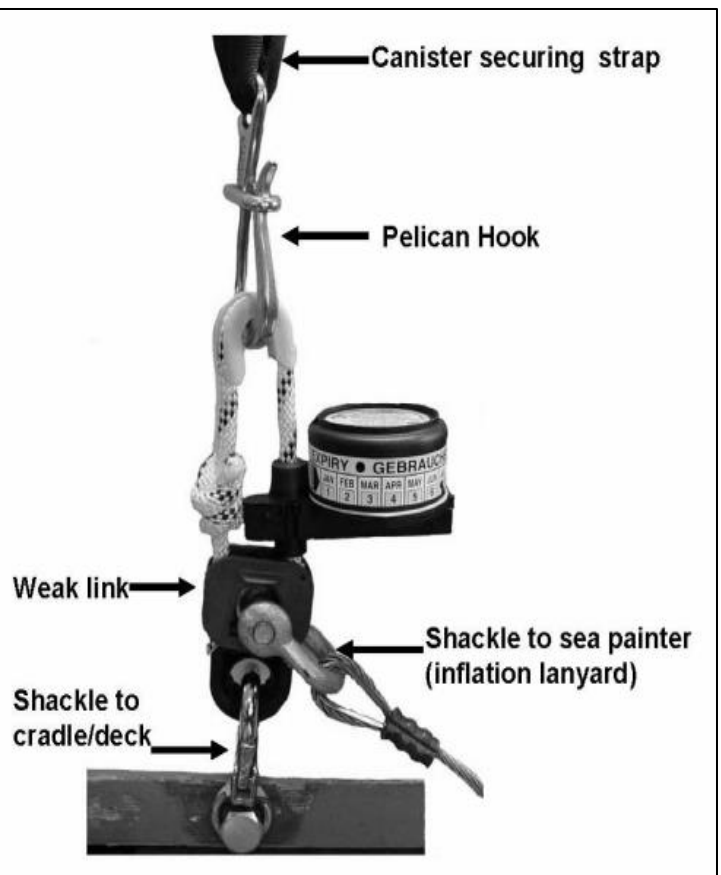
Date _____

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Safety Comments

Stability comments

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

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

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

 Date issued

0	5	1	6
---	---	---	---

 (MM/YY)

I used a previously issued EVIC; Record EVIC information below
 EVIC number

--	--	--	--	--

 Date issued

--	--	--	--

 (MM/YY)

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

Signature Observer Lee

Date 05/01/2016

Vessel and Trip Information Log

Each fishing trip is defined as the moment the vessel leaves the dock and then returns to either the same port or a different port. A single observer deployment may span multiple trips, depending on the vessel activity. Examples:

- Vessel leaves Port A, goes fishing, and returns to Port A.
 - This is one observed trip.
- Vessel leaves Port A, 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.
 - The transit time from leaving Port B to landing in Port A is a second observed trip.
- Vessel leaves Port A, picks up a crew member in Port B, goes fishing, anchors 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 landing in Port B is one observed trip.
 - The time from leaving Port B to anchoring in Port C is a second observed trip.
 - The time from leaving Port C to landing in Port B is a third observed trip.
 - The transit time from leaving Port B until landing in Port A is a third observed trip.

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).	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. See Appendix G – Sector and Fleet Codes	3-digit code	Leave blank if not observing a sector trip (NEFOP and IFS only).
4	Fleet Code	Obtain from captain. See Appendix G2 – Fleet Codes.	3-digit code	Leave blank if observing a sector 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> seabird/ <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 (vertebrae or heads)	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.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
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.	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 FSB staff for data entry. Observers: leave blank.	6 digits	Cannot be unknown.
16*	Date Sailed	When the vessel leaves the dock. Beach Seine: when the dory leaves the trailer and heads out through the surf to set the gear.	MM/DD/YY	Cannot be unknown.
17*	Time Sailed	Local time the vessel leaves the dock.	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 and carrier 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 and carrier 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 FSB 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 ties up, not always port name on boat.	N/A	Record most specific location possible (county or state).
26	Port Code	Filled in by FSB 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	Dash.
28	Crew Size	Include captain.	Up to 2 digits	Dash.

² See top of page 8 for definition of an observed trip.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
29*	Dealer's Name	Obtain from captain. If no dealer, use "No Catch", "No Sale", "Bait", or "Home Consumption" as appropriate.	N/A	"Unknown".
30*	Vessel Trip Report (VTR) Serial Number	Obtain from captain. Comment on any additional VTR numbers used.	Up to 15 digits	"00000000".
30a*	eVTR Trip ID	Obtain from captain. ASM logs/screens only. NEFOP and IFS: record in field #30.	Up to 15 digits	Dash if not used.
31	Steam Time	Time between vessel leaving the dock 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).	Hours, to the nearest tenth	Dash. Dash for all Beach Seine trips.
32	Trip Type	Single or Multiple Gear.	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.	Tons, to the nearest hundredth	Check "Unknown".
34*	Fuel Used	Obtain from captain at end of trip.	Gallons, whole	Check "Unknown".
35*	Damage and Loss Estimated Cost	Obtain from captain at end of trip. Does not include normal wear and tear. Describe in comments.	Dollars, whole	Check "Unknown".
36*	Supplies Cost	Obtain from captain. Ex: gloves, boot liners, knives, picks, hooks, boxes, bags, ties, rags, tape.	Dollars, whole	Check "Unknown".
37*	Food Cost	Obtain from captain. Include drinking water and observer's food, if paid by vessel.	Dollars, whole	Check "Unknown".
38*	Ice Cost	Obtain from captain. If vessel makes its own ice, record "0.00". If no ice used, record "0.00".	Dollars, whole	Check "Unknown".
39*	Fuel price per gallon	Obtain from captain before leaving port.	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.	Dollars, whole	Check "Unknown".
41*	Oil Cost	Obtain from captain. May be purchased for more than one trip; only record the cost for this trip.	Dollars, whole	Check "Unknown".
42*	Bait Cost	Obtain from captain.	Dollars, whole	Check "Unknown".

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
43*	Primary Gear Name	Used on the majority of hauls. If tie, record gear with most nets (gillnet) or highest kept catch. 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.	Check one	Cannot be unknown if gear listed.
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.	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".	Whole number	Dash. Dash if gear not used.
51*	Target Species	Obtain from captain at beginning of trip. Be as specific as possible. See Appendix T – Species Codes. Cannot target dressed species (parts).	NEFOP and IFS: up to 5 unique species/group names per box ASM: record secondary target species under 51a	Dash if gear not used.
*51a	Target Species 2	Obtain from captain at beginning of trip. ASM only. See Appendix T – Species Codes.	N/A	Dash if no secondary target species.
52	Target Species Code	Filled in by FSB staff for data entry. Observers: leave blank.	4-digit code	Cannot be unknown.
53	Time Lost Reason Code	See Appendix J – Time Lost Codes.	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.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
57	Primary Species Landed	Greatest total number of pounds landed (kept and sold). See Appendix T – Species Codes.	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.
59	Soaked	Yes/No. In a solution other than seawater.	Check one	“9”
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)	Dash and record estimated time in comments.
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)	Dash and record estimated time in comments.

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
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.
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

A transit trip is defined as when the vessel is moving between ports with no intention to engage in fishing activities. The Transit Trip Log is a variation of the Vessel and Trip 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
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 05/01/16

IN-OFFICE	DATE RECEIVED	
	EDITED BY	
	DEPLOYMENT ID	

OBS/TRIP ID A 9 9 1 0 1 -	PROGRAM CODE 0 0 0	SECTOR ID	FLEET 046	VENDOR ID 02	INCIDENTAL TAKES <input type="checkbox"/> N <input checked="" type="checkbox"/> B <input type="checkbox"/> M <input type="checkbox"/> T	AGE STRUCTURES <input type="checkbox"/> Env. <input checked="" type="checkbox"/> Froz.	WHOLE FISH <input checked="" type="checkbox"/> N <input type="checkbox"/> Y	FIELD DIARY <input type="checkbox"/> N <input checked="" type="checkbox"/> Y	COMMENT LOG <input checked="" type="checkbox"/> N <input type="checkbox"/> Y
VESSEL NAME # 1 Comorant	VESSEL NUMBER # 1 663242	VESSEL PERMIT # 1 141859	PORT SAILED (CITY, STATE) CODE New Bedford, MA		DATE SAILED mm/dd/yy 1 0 / 1 3 / 1 6	TIME SAILED 24 h 15 : 30			
VESSEL NAME # 2	VESSEL NUMBER # 2	VESSEL PERMIT # 2	PORT LANDED (CITY, STATE) CODE New Bedford, MA		DATE LANDED mm/dd/yy 1 0 / 2 6 / 1 6	TIME LANDED 24 h 23 : 02			
HOME PORT (CITY,STATE) CODE Cape May, NJ	EXP. TRIP DUR 14 day(s)	CREW SIZE (INCLUDE CAPT) 6	DEALER'S NAME Bergie's Seafood Inc.		VTR SERIAL NUMBER 10287421	STEAM TIME (calc) hrs 12 3			

TRIP TYPE Single Gear 1 <input checked="" type="checkbox"/> Multiple Gear 2 <input type="checkbox"/>	TRIP COSTS									
ICE USED	FUEL USED	DAMAGE/LOSS *	SUPPLIES *	FOOD	ICE (PER TON)	FUEL (PER GAL)	WATER	OIL	BAIT	
24 . 5 0 tn	6500 gal	\$ 450 . 00	\$ 1000 . 00	\$ 2000 . 00	\$ 60 . 0 0	\$ 3 . 6 5	\$ 50 . 00	\$ 350 . 00	\$ 0 . 00	

GEAR INFORMATION (IN USE & STOWED)								TIME LOST *	
PRIMARY GEAR	CODE	USED?	# ONBRD	# SOAK	CAPT EXP (yrs)	TARGET SPECIES	CODE(S)	REASON	AMOUNT
Sea Scallop Dredge	1 3 2	No 0 Yes 1 <input checked="" type="checkbox"/>	2	0	20	Sea Scallops		07	12.8 hrs
OTHER GEAR 1 Handline	020	No 0 <input checked="" type="checkbox"/> Yes 1	1	0				02	3.5 hrs
OTHER GEAR 2		No 0 Yes 1							
OTHER GEAR 3		No 0 Yes 1							

# TRIP HAULS 273	# UNOBSERVED HAULS 130	PRIMARY SPECIES LANDED Sea Scallops	PHOTOS? <input type="checkbox"/> N <input checked="" type="checkbox"/> Y	SCALLOP TRIPS ONLY		
		SOAKED? No 0 <input checked="" type="checkbox"/> Yes 1	# OF BAGS 340	AVERAGE WGT/BAG 48 lb		

Damage = new sweep chain
Supplies = scallop bgs, wire ties, gloves, tape

Time lost 02 (gear damage) - winch broke after haul 114. Crew worked on fixing it from 02:00 to 05:30. Fixed and started fishing again.

DATE ARRIVED AT DOCK mm/dd/yy 1 0 / 1 3 / 1 6	TIME ARRIVED 24 h 14 : 45
DATE DISEMBARKED mm/dd/yy 1 0 / 2 6 / 1 6	TIME DISEMBARKED 24 h 23 : 30

Only fill in for first trip of deployment

Only fill in for last trip of deployment

* Fields that require a comment

TRANSIT TRIP LOG
NMFS FISHERIES OBSERVER PROGRAM
OBTRP OBTRG OBTRS 05/01/16

IN-OFFICE	DATE RECEIVED	
	EDITED BY	
	DEPLOYMENT ID	

OBS/TRIP ID A 9 9 1 0 1 T	PROGRAM CODE 0 0 0	SECTOR ID	FLEET 046	VENDOR ID 02	INCIDENTAL TAKES <input checked="" type="checkbox"/> N <input type="checkbox"/> B <input type="checkbox"/> M <input type="checkbox"/> T	AGE STRUCTURES Env. <input type="checkbox"/> Froz. <input type="checkbox"/>	WHOLE FISH <input checked="" type="checkbox"/> N <input type="checkbox"/> Y	FIELD DIARY <input type="checkbox"/> N <input checked="" type="checkbox"/> Y	COMMENT LOG <input checked="" type="checkbox"/> N <input type="checkbox"/> Y
VESSEL NAME # 1 Comorant	VESSEL NUMBER # 1 663242	VESSEL PERMIT # 1 141859	PORT SAILED (CITY, STATE) CODE Fairhaven, MA		DATE SAILED mm/dd/yy 1 0 / 1 3 / 1 6	TIME SAILED 24 h 14 : 45			
VESSEL NAME # 2	VESSEL NUMBER # 2	VESSEL PERMIT # 2	PORT LANDED (CITY, STATE) CODE New Bedford, MA		DATE LANDED mm/dd/yy 1 0 / 1 3 / 1 6	TIME LANDED 24 h 15 : 02			
HOME PORT (CITY,STATE) CODE Cape May, NJ	EXP. TRIP DUR day(s) 6	CREW SIZE (INCLUDE CAPT) 6	DEALER'S NAME NO CATCH		VTR SERIAL NUMBER	STEAM TIME (calc) hrs			

TRIP TYPE Single Gear 1 <input checked="" type="checkbox"/> Multiple Gear 2	ICE USED _____ tn	FUEL USED _____ gal	DAMAGE/LOSS * Unknown <input checked="" type="checkbox"/>	SUPPLIES * Unknown <input checked="" type="checkbox"/>	FOOD Unknown <input checked="" type="checkbox"/>	ICE (PER TON) Unknown <input checked="" type="checkbox"/>	FUEL (PER GAL) Unknown <input checked="" type="checkbox"/>	WATER Unknown <input checked="" type="checkbox"/>	OIL Unknown <input checked="" type="checkbox"/>	BAIT Unknown <input checked="" type="checkbox"/>
TRIP COSTS										
			\$ _____ .00	\$ _____ .00	\$ _____ .00	\$ _____ .00	\$ _____ .00	\$ _____ .00	\$ _____ .00	\$ _____ .00

GEAR INFORMATION (IN USE & STOWED)								TIME LOST *	
PRIMARY GEAR	CODE	USED?	# ONBRD	# SOAK	CAPT EXP (yrs)	TARGET SPECIES	CODE(S)	REASON	AMOUNT
Sea Scallop Dredge	1 3 2	No <input checked="" type="checkbox"/> Yes <input type="checkbox"/>	2	0	20	Sea Scallops			_____ hrs
OTHER GEAR 1	CODE	USED? No <input checked="" type="checkbox"/> Yes <input type="checkbox"/>	# ONBRD	# SOAK	CAPT EXP (yrs)	TARGET SPECIES	CODE(S)		_____ hrs
Handline	020		1	0					_____ hrs
OTHER GEAR 2	CODE	USED? No <input checked="" type="checkbox"/> Yes <input type="checkbox"/>	# ONBRD	# SOAK	CAPT EXP (yrs)	TARGET SPECIES	CODE(S)		_____ hrs
OTHER GEAR 3	CODE	USED? No <input checked="" type="checkbox"/> Yes <input type="checkbox"/>	# ONBRD	# SOAK	CAPT EXP (yrs)	TARGET SPECIES	CODE(S)		_____ hrs

# TRIP HAULS 0	# UNOBSERVED HAULS 0	PRIMARY SPECIES LANDED NONE	PHOTOS? <input checked="" type="checkbox"/> N <input type="checkbox"/> Y	SCALLOP TRIPS ONLY		
				SOAKED? No 0 9	# OF BAGS	AVERAGE WGT/BAG _____ lb

COMMENTS Transit to pick up ice before fishing Captain did not fill out VTR for this trip	FISH ONBOARD? <input checked="" type="checkbox"/> N <input type="checkbox"/> Y	DATE ARRIVED AT DOCK mm/dd/yy 1 0 / 1 3 / 1 6	TIME ARRIVED 24 h 13 : 57
		DATE DISEMBARKED mm/dd/yy _____ / _____ / _____	TIME DISEMBARKED 24 h _____ : _____

* Fields that require a comment

Only fill in for first trip of deployment

Only fill in for last trip of deployment

VESSEL AND TRIP INFORMATION LOG
NMFS FISHERIES AT-SEA MONITORING PROGRAM
ASMTRP ASMTRG 05/01/16

IN-OFFICE	DATE RECEIVED	/ /
	EDITED BY	
	DEPLOYMENT ID	

OBS/TRIP ID A 9 9 0 0 2 -	PROGRAM CODE 2 3 1	SECTOR ID CODE 0 1 6	VENDOR ID CODE 09
INCIDENTAL TAKES <input checked="" type="checkbox"/> N <input type="checkbox"/> B <input type="checkbox"/> M <input type="checkbox"/> T		PHOTOS <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES	FIELD DIARY <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES
VESSEL NAME Fishing Boat	VESSEL NUMBER 1234567	VESSEL PERMIT NUMBER 123456	
PORT SAILED (CITY, STATE) Point Judith, RI	DATE SAILED (mm/dd/yy) 10 / 06 / 16	TIME SAILED (24 hr) 03 : 43	
PORT LANDED (CITY, STATE) Point Judith, RI	DATE LANDED (mm/dd/yy) 1 0 / 0 8 / 1 6	TIME LANDED (24 hr) 23 : 49	
DEALER'S NAME South Pier Seafood	VTR SERIAL # 12345678	eVTR TRIPID	

TRIP COSTS

ICE USED (ton) <u>4 . 7 5</u> <input type="checkbox"/> UNKNOWN	FUEL USED (gal) <u>950</u> <input type="checkbox"/> UNKNOWN	DAMAGE \$ <u>200</u> . 00 <input type="checkbox"/> UNKNOWN	SUPPLIES \$ <u>75</u> . 00 <input type="checkbox"/> UNKNOWN	FOOD \$ <u>300</u> . 00 <input type="checkbox"/> UNKNOWN
ICE/TON \$ <u>75</u> . <u>0 0</u> <input type="checkbox"/> UNKNOWN	FUEL/GAL \$ <u>3</u> . <u>4 3</u> <input type="checkbox"/> UNKNOWN	WATER \$ <u>10</u> . 00 <input type="checkbox"/> UNKNOWN	OIL \$ <u>90</u> . 00 <input type="checkbox"/> UNKNOWN	BAIT \$ <u>0</u> . 00 <input type="checkbox"/> UNKNOWN

GEAR INFORMATION

PRIMARY GEAR Trawl, Bottom, Otter, Fish	CODE 0 5 0	TARGET SPECIES 1 Haddock	TARGET SPECIES 2 Winter Flounder
OTHER GEAR 1	CODE <input type="text"/>	TARGET SPECIES 1	TARGET SPECIES 2
OTHER GEAR 2	CODE <input type="text"/>	TARGET SPECIES 1	TARGET SPECIES 2

COMMENTS Only fill in for first trip of deployment	DATE ARRIVED (mm/dd/yy) 10 / 06 / 16	TIME ARRIVED AT DOCK (24 hr) 03 : 15
	DATE DISEMBARKED 10 / 09 / 16	TIME DISEMBARKED (24 hr) 00 : 15
Only fill in for last trip of deployment		

Damages = parted wire
Supplies = gloves, knives
Other dealers = Fishy Fish Market and Doc's Fish Inc.

TRANSIT TRIP LOG
NMFS FISHERIES AT-SEA MONITORING PROGRAM
ASMTRP ASMTRG 05/01/16

IN-OFFICE	DATE RECEIVED	/ /
	EDITED BY	
	DEPLOYMENT ID	

OBS/TRIP ID A 9 9 0 0 2 -	PROGRAM CODE 2 3 1	SECTOR ID CODE 0 1 6	VENDOR ID CODE 09
INCIDENTAL TAKES <input checked="" type="checkbox"/> N <input type="checkbox"/> B <input type="checkbox"/> M <input type="checkbox"/> T		PHOTOS <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES	FIELD DIARY <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES
VESSEL NAME Fishing Boat	VESSEL NUMBER 1234567	VESSEL PERMIT NUMBER 123456	
PORT SAILED (CITY, STATE) Point Judith, RI	DATE SAILED (mm/dd/yy) 10 / 06 / 16	TIME SAILED (24 hr) 03 : 43	
PORT LANDED (CITY, STATE) Point Judith, RI	DATE LANDED (mm/dd/yy) 1 0 / 0 8 / 1 6	TIME LANDED (24 hr) 23 : 49	
DEALER'S NAME NO CATCH	VTR SERIAL # 12345678	eVTR TRIPID	

TRIP COSTS

ICE USED (ton) <u>4 . 7 5</u> <input checked="" type="checkbox"/> UNKNOWN	FUEL USED (gal) <u>950</u> <input checked="" type="checkbox"/> UNKNOWN	DAMAGE \$ <u>200</u> . 00 <input checked="" type="checkbox"/> UNKNOWN	SUPPLIES \$ <u>75</u> . 00 <input checked="" type="checkbox"/> UNKNOWN	FOOD \$ <u>300</u> . 00 <input checked="" type="checkbox"/> UNKNOWN
ICE/TON \$ <u>75</u> . <u>0 0</u> <input checked="" type="checkbox"/> UNKNOWN	FUEL/GAL \$ <u>3</u> . <u>4 3</u> <input checked="" type="checkbox"/> UNKNOWN	WATER \$ <u>10</u> . 00 <input checked="" type="checkbox"/> UNKNOWN	OIL \$ <u>90</u> . 00 <input checked="" type="checkbox"/> UNKNOWN	BAIT \$ <u>0</u> . 00 <input checked="" type="checkbox"/> UNKNOWN

GEAR INFORMATION

PRIMARY GEAR Trawl, Bottom, Otter, Fish	CODE 0 5 0	TARGET SPECIES 1 Haddock	TARGET SPECIES 2 Winter Flounder
OTHER GEAR 1	CODE <input type="text"/>	TARGET SPECIES 1	TARGET SPECIES 2
OTHER GEAR 2	CODE <input type="text"/>	TARGET SPECIES 1	TARGET SPECIES 2
COMMENTS Only fill in for first trip of deployment	DATE ARRIVED (mm/dd/yy) 10 / 06 / 16	TIME ARRIVED AT DOCK (24 hr) 03 : 15	
	DATE DISEMBARKED 10 / 09 / 16	TIME DISEMBARKED (24 hr) 00 : 15	

Damages = parted wire
Supplies = gloves, knives
Other dealers = Fishy Fish Market and Doc's Fish Inc.

FISH ONBOARD?
 NO YES

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: Amy Martins, National Marine Fisheries Service, Northeast Fisheries Science Center, Fisheries Sampling 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 11/30/2015.

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, Fisheries Sampling 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, Fisheries Sampling Branch
National Marine Fisheries Service
Northeast Fisheries Science Center
166 Water Street
Woods Hole, MA 02543-1097

Questions or Comments:
Gina Shield
508-495-2139

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

Request Date 05 / 01 / 16

Observer Trip ID # A99012L

Vessel Name JO JO

USCG Doc # 1234567

Date Landed 05 / 01 / 16

JOHN SMITH

John Smith

PRINT Name

Signature

PRINT Mailing Address:

PO BOX 1234

GLOUCESTER, 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 # A99012L

Date Requested 05/01/16

Mail Request To:

Chief, Fisheries Sampling Branch
National Marine Fisheries Service
Northeast Fisheries Science Center
166 Water Street
Woods Hole, MA 02543-1097

Questions or Comments:

Gina Shield
508-495-2139

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 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 for a list of species and the log(s) on which to record them.

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 Log(s).

If there are insufficient lines on one form for all species caught on this 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.
G*	Haul Observed?	Yes/No. Observed: record all catch (kept & discarded). Unobserved: only record discard information for IALs and Incidental Takes. Hauls with a <u>Discard Log</u> : mark unobserved and record all catch.	Check one	Cannot be unknown.
H	On-Effort?	Yes/No. Intentionally present to witness haulback, regardless of haul observed.	Check one	Cannot be unknown.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
I	Catch?	Yes/No. Any living or non-living items, regardless of status or disposition.	Check one	"9".
J*	Incidental Take?	Yes/No. If Yes, complete <u>Marine Mammal, Sea Turtle, and Seabird Incidental Take Log.</u>	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.	Whole knots	Dash.
M	Wind Direction	Estimated by observer and/or captain. Beginning of haul.	Compass degrees	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	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.
S*	Set/Haul Locations	See Appendix C – Set/Haul Time Definitions. See Appendix D – Conversion Tables. Can be obtained from captain's logbook.	Latitude/Longi tude, to the nearest tenth of a minute OR LORAN station bearings	3-digit statistical area. See Appendix A – Northeast Statistical Areas.
S2*	Statistical Area	ASM only, if coordinates are not available.	3-digit code	Leave blank if coordinates entered.
T	Water Temperature	Collected at the end of the haul (set begin for purse seine). Use a thermometer provided by FSB or your observer provider to obtain this temperature. 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	Dash.

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
U*	Target Species	Obtain from captain before gear is hauled. Be as specific as possible. See Appendix T – Species Codes. 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 FSB staff for data entry. Observers: leave blank.	4-digit code	Cannot be unknown.
W*	Sample Weight Multiplier	Calculated on the <u>Catch Estimation Worksheet</u> .	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).

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
A’*	Species Name	See Appendix T – Species Codes.	N/A	Cannot be unknown.
B’	Species Code	Filled in by FSB 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. 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 it was weighed. Dressed “parts” include fins, wings, tails, livers, and chunks.	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 05/01/16

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 °		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 E T	BEGIN Q / / R : END / / :	Station 1	Latitude / Bearing S	Station 2	Longitude / Bearing	° T ° . F	U	V

HAUL INFO								
H A U L	BEGIN / / :	9960 -		9960 -				
	END / / :	9960 -		9960 -				

COMMENTS

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
A'	B'	C'	D'	E'	F'	G'							
1		.					11		.				
2		.					12		.				
3		.					13		.				
4		.					14		.				
5		.					15		.				
6		.					16		.				
7		.					17		.				
8		.					18		.				
9		.					19		.				
10		.					20		.				

"GENERIC" HAUL LOG
NMFS FISHERIES AT-SEA MONITORING PROGRAM
ASMHAU ASMSP 05/01/16

OBS/TRIP ID	A
DATE LANDED mm/yy	B /
PAGE #	C of

GEAR CODE <input type="text"/> <input type="text"/> <input type="text"/> D	GEAR NUMBER <input type="text"/> <input type="text"/> E	HAUL NUMBER <input type="text"/> <input type="text"/> <input type="text"/> F	HAUL OBSERVED? YES <input type="checkbox"/> NO <input type="checkbox"/> G	INC TAKE? YES <input type="checkbox"/> NO <input type="checkbox"/> J
WEATHER CODE K	WAVE HEIGHT N ft	GEAR COND CODE P	TARGET SPECIES 1 U	TARGET SPECIES 2 U2
HAUL INFO	DATE mm/dd/yy	TIME 24 hours	LATITUDE/LONGITUDE (DD MM.M)	
BEGIN HAUL	Q / /	R :	S	or (STAT AREA)* S2
END HAUL	/ /	:		

COMMENTS _____

* Enter only if latitude/longitude coordinates are not available

SAMPLE WEIGHT MULTIPLIER W _____

SPECIES NAME	SAMP. WEIGHT	POUNDS	DISP CODE	D/R	EST. METH.	SPECIES NAME	SAMP. WEIGHT	POUNDS	DISP CODE	D/R	EST. METH.
A'	C'	D'	E'	F'	G'						
1	_____					11	_____				
2	_____					12	_____				
3	_____					13	_____				
4	_____					14	_____				
5	_____					15	_____				
6	_____					16	_____				
7	_____					17	_____				
8	_____					18	_____				
9	_____					19	_____				
10	_____					20	_____				

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 submittal with the trip, it should be incited on the Vessel and Trip Information Log by checking the "Y" box next to the Fishermen's Comment Log and placed 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
05/01/16

OBS/ TRIP ID	A
DATE LAND (mm/yy)	B /
PAGE #	C OF
EVENT DATE (mm/dd/yy)	1 / /

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	3	NO 0 _____ YES 1 _____ 4

COMMENTS

5

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: Amy Martins, National Marine Fisheries Service, Northeast Fisheries Science Center, Fisheries Sampling 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 10/31/2018.

FISHERMEN'S COMMENT LOG
NMFS FISHERIES OBSERVER PROGRAM
05/01/16

OBS/ TRIP ID	A99015-
DATE LAND (mm/yy)	11 / 16
PAGE #	1 OF 1
EVENT DATE (mm/dd/yy)	11 / 12 / 16

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?
Cormorant	663242	NO 0 <u>X</u> YES 1

COMMENTS

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: Amy Martins, National Marine Fisheries Service, Northeast Fisheries Science Center, Fisheries Sampling 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 10/31/2018.

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. 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. Height of an un-stretched net panel, excluding tie downs. Average if variable.	Whole feet	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. Average if variable.	Fraction	Dash.
7	Twine Size Number	Obtain from captain. See Appendix D – Conversion Tables.	3-digit number	“000”.
8	Twine Size – Actual or Estimated?	Actual (measured) or Estimated (captain provided).	Check one	“0”.
9	Floatline Material	Obtain from captain. Describe “other” on line 9A.	Check one	“0”.
10	Leadline Weight	Obtain from captain. Weighted average.	Pounds, to the nearest tenth	Dash.
11	Floats Used?	Visually confirm.	Check one	“9”.
12	Distance Between Floats	Obtain from captain. Average.	Whole feet.	Dash. Leave blank if Floats Used = “No”.
13*	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”.
14*	Tiedown Length	Obtain from captain. Average.	Feet, to the nearest tenth	Dash. Leave blank if Tiedown Used = “No”.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
15	Spaces Between Nets Used?	Visually confirm. Spaces >= 2.5 feet between nets.	Check one	"9".
16	Number of Spaces Between Nets	Count or obtain from captain. Total.	Whole number	Dash. Leave blank if Spaces Used = "No".
17	Space Width	Measure or obtain from captain. Average.	Whole feet	Dash. Leave blank if Spaces Used = "No".
18	Droplines Used	Visually confirm.	Check one	"9".
19	Dropline Length	Obtain from captain. Float at surface to floatline.	Whole feet	Dash. Leave blank if Droplines Used = "No".
20	Additional Weights Used?	Visually confirm.	Check one	"9".
21	Weight of Additional Weights	Obtain from captain. Total weight; does not include leadline.	Whole pounds	Dash. Leave blank if Additional Weights Used = "No".
22	Anchors Used?	Visually confirm.	Check one	"9".
23	Number of Anchors	Count.	Whole number	Dash. Leave blank if Anchors Used = "No".
24	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".
25	Anchor Weight – Actual or Estimated?	Actual (stamped) or Estimate (captain).	Check one	"0". Leave blank if Anchors Used = "No".
26	Anchor Type	Visually confirm. Describe "other" or "combination" on line 26A.	Check one	"0". Leave blank if Anchors Used = "No".
27	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".
28*	Active Marine Mammal Deterrent Devices (Pingers) Used?	Visually confirm. When gear was set.	Check one	"9".
29	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".
30	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".
31	AMMDD Brand(s)	Visually confirm. Describe "other" or "combination" on line 31A.	Check one	"00". Leave blank if AMMDD Used = "No".

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
32	Passive Marine Mammal Deterrent Devices Used?	Visually confirm. When gear was set.	Check one	"9".
33	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".
34*	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.
35*	Corresponding Mesh Size	Obtain from captain. Stretched length.	Inches, to the nearest hundredth	
36*	Mesh Size – Actual or Estimated?	Actual (measured) or Estimated (captain).	Circle one	"0". Leave blank if filling out Mesh Size Range.
37*	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.
38	Net Color	Visually confirm. "Multicolor" refers to a mix of colors within 1 net; "combination" refers to nets of various colors connected in a string.	Check one	"00".
39	Number of High Flyers	Count. Total (sum both sides).	Whole number	Dash.
40	Number of Buoys	Count. Total connected to the buoyline (sum both sides).	Whole number	Dash.
41	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.
42	Surface Line Type Code	Obtain from captain.	Check one	"0".
43	Surface Line Diameter	Obtain from captain. Average.	Inches, in fractional form	Dash. Leave blank if no surface line used.
44	Surface System Mark?	Yes/No. Visually confirm.	Check one	"9".
45	Groundline Used?	Yes/No. Visually confirm.	Check one	"9".
46	Groundline Length	Obtain from captain. Total (sum both sides).	Whole feet	Dash. Leave blank if Groundline Used = "No".
47	Groundline Type Code	Obtain from captain..	Check one	"0".
48	Groundline Diameter	Obtain from captain. Average.	Inches, in fractional form	Dash. Leave blank if Groundline Used = "No".
49	Number of Buoylines	Count. Does not include line from vessel to gear.	Whole number	Dash.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
50	Buoyline Length	Obtain from captain. Average.	Whole feet	Dash. Leave blank if Number of Buoylines = 0.
51	Buoyline Type Code	Obtain from captain.	Check one	"0".
52	Buoyline Percent Sinking/Neutrally Buoyant ⁴	Obtain from captain. Average.	Whole percent	Dash. Leave blank if Number of Buoylines = 0 or Buoyline Type Code ≠ "8".
53	Buoyline Percent Floating ⁴	Obtain from captain. Average.	Whole percent	Dash. Leave blank if Number of Buoylines = 0.
54	Buoyline Diameter	Obtain from captain. Average.	Inches, in fractional form	Dash. Leave blank if Number of Buoylines = 0.
55	Buoyline Mark?	Yes/No. Visually confirm. 4" colored mark mid-way on buoyline.	Check one	"9". Leave blank if Number of Buoylines = 0.
56	Weak Links Used on Surface?	Yes/No. Visually confirm.	Check one	"9".
57	Number of Surface Weak Links	Obtain from captain. Total (sum both sides).	Whole number	Dash. Leave blank if Surface Weak Links Used = "No".
58	Surface Weak Link Type Code	Visually confirm..	Check one	"0". Leave blank if Surface Weak Links Used = "No".
59	Weak Links Used on String?	Yes/No. Visually confirm.	Check one	"9".
60	Number of String Weak Links	Obtain from captain. Total (all nets).	Whole number	Dash. Leave blank if String Weak Links Used = "No".
61	String Weak Link Type Code	Visually confirm..	Check one	"0". Leave blank if String Weak Links Used = "No".

⁴ #52 and #53 must add up to 100

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

DIAGRAMS FOR REFERENCE ONLY

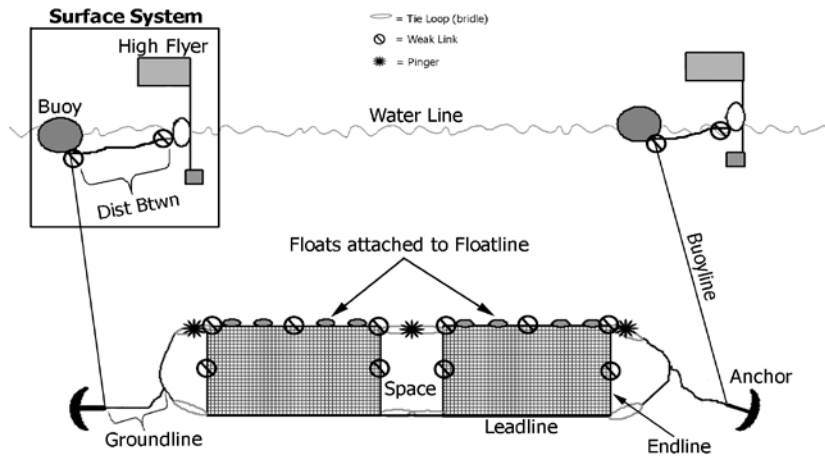
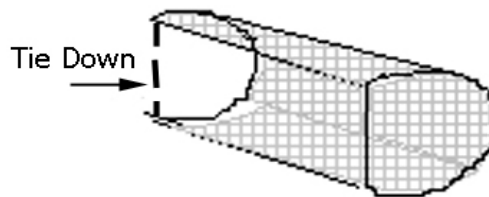


Photo Credit: NOAA Fisheries Service Northeast Regional Office (Original image modified to include additional information).



FOR OFFICE USE ONLY

GILLNET GEAR LOG (FRONT)
NMFS FISHERIES AT-SEA MONITORING PROGRAM
ASMGGG 05/01/16

OBS/TRIP ID	A
DATE LANDED mm/yy	B /
PAGE #	C ___ of ___

GEAR CODE [][][] D	GEAR # [][] 1	# OF NETS 2	NET LENGTH 3 ft	NET HEIGHT 4 ____ . ____ ft	TIEDOWNS USED? YES <input type="checkbox"/> 13 NO <input type="checkbox"/>	TIEDOWN LENGTH 14 ____ . ____ ft
---------------------------------	---------------------------	-----------------------	------------------------------	--	---	---

MESH SIZES (Fill out mesh MEASUREMENTS OR RANGE)

MEASUREMENTS (in.)				OR	RANGE (in.)		PINGERS USED? 28 YES <input type="checkbox"/> NO <input type="checkbox"/>
# NETS @	MESH SIZE	ACTUAL EST			MINIMUM		
____	____ . ____	<input type="checkbox"/>	<input type="checkbox"/>		37		
34	35	36		____ . ____			
____	____ . ____	<input type="checkbox"/>	<input type="checkbox"/>	MAXIMUM			
____	____ . ____	<input type="checkbox"/>	<input type="checkbox"/>	____ . ____			

COMMENTS

GEAR CODE [][][]	GEAR # [][]	# OF NETS	NET LENGTH ft	NET HEIGHT ____ . ____ ft	TIEDOWNS USED? YES <input type="checkbox"/> NO <input type="checkbox"/>	TIEDOWN LENGTH ____ . ____ ft
------------------------	------------------	-----------	------------------	------------------------------	---	----------------------------------

MESH SIZES (Fill out mesh MEASUREMENTS OR RANGE)

MEASUREMENTS (in.)				OR	RANGE (in.)		PINGERS USED? YES <input type="checkbox"/> NO <input type="checkbox"/>
# NETS @	MESH SIZE	ACTUAL EST			MINIMUM		
____	____ . ____	<input type="checkbox"/>	<input type="checkbox"/>		____ . ____		
____	____ . ____	<input type="checkbox"/>	<input type="checkbox"/>	MAXIMUM			
____	____ . ____	<input type="checkbox"/>	<input type="checkbox"/>	____ . ____			

COMMENTS

GILLNET GEAR LOG (FRONT)
NMFS FISHERIES AT-SEA MONITORING PROGRAM
ASMGGG 05/01/16

OBS/TRIP ID	A99002C
DATE LANDED mm/yy	10 / 16
PAGE #	1 of 1

GEAR CODE	GEAR #	# OF NETS	NET LENGTH	NET HEIGHT	TIEDOWNS USED?	TIEDOWN LENGTH
1 0 0	0 1	10	300 ft	10.0 ft	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	3.0 ft

MESH SIZES (Fill out mesh MEASUREMENTS OR RANGE)

MEASUREMENTS (in.)				OR	RANGE (in.)		PINGERS USED? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
# NETS @	MESH SIZE	ACTUAL EST			MINIMUM	MAXIMUM	
7	10.00	<input type="checkbox"/>	<input checked="" type="checkbox"/>				
3	11.00	<input type="checkbox"/>	<input checked="" type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>				

COMMENTS

GEAR CODE	GEAR #	# OF NETS	NET LENGTH	NET HEIGHT	TIEDOWNS USED?	TIEDOWN LENGTH
1 0 0	0 2	6	300 ft	8.5 ft	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	_____ _____. ____ ft

MESH SIZES (Fill out mesh MEASUREMENTS OR RANGE)

MEASUREMENTS (in.)				OR	RANGE (in.)		PINGERS USED? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
# NETS @	MESH SIZE	ACTUAL EST			MINIMUM	MAXIMUM	
		<input type="checkbox"/>	<input type="checkbox"/>		6.25		
		<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>		7.50		

COMMENTS

GILLNET GEAR LOG (BACK)
NMFS FISHERIES AT-SEA MONITORING PROGRAM
ASMGGG 05/01/16

OBS/TRIP ID	
DATE LANDED mm/yy	/
PAGE #	__ of __

GEAR CODE □□□	GEAR # □□	# OF NETS	NET LENGTH ft	NET HEIGHT ____ . ____ ft	TIEDOWNS USED? YES <input type="checkbox"/> NO <input type="checkbox"/>	TIEDOWN LENGTH ____ . ____ ft
------------------	--------------	-----------	------------------	------------------------------	---	----------------------------------

MESH SIZES (Fill out mesh MEASUREMENTS OR RANGE)

MEASUREMENTS (in.)				OR	RANGE (in.)		PINGERS USED? YES <input type="checkbox"/> NO <input type="checkbox"/>
# NETS @	MESH SIZE	ACTUAL EST			MINIMUM		
____	____ . ____	<input type="checkbox"/>	<input type="checkbox"/>		____ . ____		
____	____ . ____	<input type="checkbox"/>	<input type="checkbox"/>		MAXIMUM		
____	____ . ____	<input type="checkbox"/>	<input type="checkbox"/>	____ . ____			

COMMENTS

GEAR CODE □□□	GEAR # □□	# OF NETS	NET LENGTH ft	NET HEIGHT ____ . ____ ft	TIEDOWNS USED? YES <input type="checkbox"/> NO <input type="checkbox"/>	TIEDOWN LENGTH ____ . ____ ft
------------------	--------------	-----------	------------------	------------------------------	---	----------------------------------

MESH SIZES (Fill out mesh MEASUREMENTS OR RANGE)

MEASUREMENTS (in.)				OR	RANGE (in.)		PINGERS USED? YES <input type="checkbox"/> NO <input type="checkbox"/>
# NETS @	MESH SIZE	ACTUAL EST			MINIMUM		
____	____ . ____	<input type="checkbox"/>	<input type="checkbox"/>		____ . ____		
____	____ . ____	<input type="checkbox"/>	<input type="checkbox"/>		MAXIMUM		
____	____ . ____	<input type="checkbox"/>	<input type="checkbox"/>	____ . ____			

COMMENTS

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.	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 on Gillnet Gear Characteristics Log.	Whole number	Dash.
5*	Number of Nets Hauled	Visually confirm.	Whole number Rounded up 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.	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" on line 11A.	Check one	"00".

⁵ Record '0' if less than half of one net panel is hauled and there is **no** catch. Record '1' if less than one half of one net panel is hauled and there is catch.

GILLNET HAUL LOG
NMFS FISHERIES OBSERVER PROGRAM
OBS/ TRIP ID _____ **A**
DATE LAND (mm/yy) _____ **B** / _____
PAGE # _____ **C** OF

GEAR CODE D	GEAR # E	HAUL # F	HAUL OBS? NO 0 G YES 1 _____	ON-EFFORT? NO 0 H YES 1 _____	MM WATCH? NO 0 I YES 1 _____	CATCH? NO 0 J YES 1 _____	INC TAKE? NO 0 K YES 1 _____	WEATHER CODE K	WIND SPEED L DIRECTION M °	WAVE HEIGHT N	DEPTH, HAUL BEGIN BOTTOM O LEADLINE 2
--------------------	-----------------	-----------------	---	--	---	--	---	--------------------------	--	-------------------------	---

SET INFO	DATE AND TIME mm/dd/yy 24 hours	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)				ESTIMATED SOAK DURATION	TARGET SPECIES	CODE(S)	GEAR COND CODE
S E T	BEGIN Q / / : END / / :	Station 1 9960 -	Latitude / Bearing S	Station 2 9960 -	Longitude / Bearing	3	U	V	P
HAUL INFO						WATER TEMP	NUMBER OF NETS SET 4	IF MM DETERRENTS USED: ACTIVE PASSIVE	
H A U L	BEGIN / / : END / / :	9960 -		9960 -		° T F	HAULED 5	HAULED 7	9
COMMENTS							LOST 6	LOST 8	10

SAMPLE WEIGHT MULTIPLIER
W

SET METHOD **11**

Unknown 00 _____ Visual 05 _____
 Temperature 01 _____ Mixed 98 _____
 Bottom Contours 02 _____ Other 99 _____
 Compass/Loran 03 _____ **11A** _____
 Tide/Current 04 _____

SPECIES	NAME	CODE	SUB-SAMPLE WEIGHT	POUNDS	DISP CODE	WEIGHT		SPECIES	NAME	CODE	SUB-SAMPLE WEIGHT	POUNDS	DISP CODE	WEIGHT	
						D/R	EST METHOD CODE							D/R	EST METHOD CODE
A'		B'	C'	D'	E'	F'	G'								
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															

GILLNET HAUL LOG
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OBS/ TRIP ID	A99089C
DATE LAND (mm/yy)	10 / 16
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GEAR CODE 1 0 0	GEAR # 0 2	HAUL # 0 0 2	HAUL OBS? NO 0 YES 1 X	ON-EFFORT? NO 0 YES 1 X	MM WATCH? NO 0 X YES 1	CATCH? NO 0 YES 1 X	INC TAKE? NO 0 X YES 1	WEATHER CODE	WIND SPEED DIRECTION °	WAVE HEIGHT ft	DEPTH, HAUL BEGIN BOTTOM LEADLINE 90 fm 90 fm
---------------------------	----------------------	------------------------	-------------------------------------	--------------------------------------	-------------------------------------	----------------------------------	-------------------------------------	--------------	---------------------------------	-------------------	---

SET INFO	DATE AND TIME mm/dd/yy 24 hours	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)				ESTIMATED SOAK DURATION	TARGET SPECIES	CODE(S)	GEAR COND CODE
		Station 1	Latitude / Bearing	Station 2	Longitude / Bearing				
S E T	BEGIN / / : END / / :	9960 -		9960 -					
		9960 -		9960 -		72.0 hrs	NUMBER OF NETS SET 15	IF MM DETERRENTS USED: ACTIVE PASSIVE	
HAUL INFO						WATER TEMP	HAULED 15	HAULED 17 ---	
H A U L	BEGIN 10 / 07 /16 07 : 54 END 10 / 07 /16 09 : 05	9960 -	40° 48.3	9960 -	71° 26.8	°	LOST 0	LOST 0 ---	
		9960 -	40° 48.4	9960 -	71° 26.5	54.4 F			

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

SAMPLE WEIGHT MULTIPLIER

	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
1	Monkfish (tail)		.	59	100	D	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		.				

GILLNET HAUL LOG
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OBS/TRIP ID	A
DATE LANDED mm/yy	B /
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GEAR CODE <input type="text"/> D <input type="text"/>	GEAR NUMBER <input type="text"/> E <input type="text"/>	HAUL NUMBER <input type="text"/> F <input type="text"/>	HAUL OBSERVED? YES <input type="checkbox"/> NO <input type="checkbox"/> G	INC TAKE? YES <input type="checkbox"/> NO <input type="checkbox"/> J	
WEATHER CODE K	WAVE HEIGHT N ft	GEAR COND CODE P	TARGET SPECIES 1 U	TARGET SPECIES 2 U2	
HAUL INFO	DATE mm/dd/yy	TIME 24 hours	LATITUDE/LONGITUDE (DD MM.M)		
BEGIN HAUL	Q / /	R :	S		S2
END HAUL	/ /	:			

COMMENTS _____ * Enter only if latitude/longitude coordinates are not available

SOAK DURATION 3 ____ . ____ hrs	# PINGERS HAULED 7
# NETS HAULED 5	# PINGERS LOST 8
SAMPLE WEIGHT MULTIPLIER W _____	

SPECIES NAME	SAMP. WEIGHT	POUNDS	DISP CODE	D/R	EST. METH.	SPECIES NAME	SAMP. WEIGHT	POUNDS	DISP CODE	D/R	EST. METH.
A'	C'	D'	E'	F'	G'						
1	_____					11	_____				
2	_____					12	_____				
3	_____					13	_____				
4	_____					14	_____				
5	_____					15	_____				
6	_____					16	_____				
7	_____					17	_____				
8	_____					18	_____				
9	_____					19	_____				
10	_____					20	_____				

GILLNET HAUL LOG
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OBS/TRIP ID	A99002C
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GEAR CODE 1 0 0	GEAR NUMBER 0 1	HAUL NUMBER 0 0 1	HAUL OBSERVED? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	INC TAKE? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	
WEATHER CODE 01	WAVE HEIGHT 2 ft	GEAR COND CODE 210	TARGET SPECIES 1 Monkfish	TARGET SPECIES 2 Winter Skate	
HAUL INFO	DATE mm/dd/yy	TIME 24 hours	LATITUDE/LONGITUDE (DD MM.M)		
BEGIN HAUL	10 / 04 / 16	13 : 52	LATITUDE 41° 25.5	LONGITUDE 71° 26.4	or (STAT AREA)*
END HAUL	10 / 04 / 16	15 : 34	41° 27.3	71° 26.9	

COMMENTS	* Enter only if latitude/longitude coordinates are not available	
	SOAK DURATION 24 . 0 hrs	# PINGERS HAULED 15
	# NETS HAULED 15	# PINGERS LOST 0
	SAMPLE WEIGHT MULTIPLIER _____	

SPECIES NAME	SAMP. WEIGHT	POUNDS	DISP CODE	D/R	EST. METH.	SPECIES NAME	SAMP. WEIGHT	POUNDS	DISP CODE	D/R	EST. METH.
1 Monkfish (tails)	_____	59	100	D	01		_____				
2 Monkfish (livers)	_____	12.5	100	D	01		_____				
3 Monkfish	_____	350	100	R	03		_____				
4 Winter Skate	_____	35	100	D	04		_____				
5 Little Skate	_____	100	002	R	03		_____				
6 Jonah Crab	_____	50	001	R	05		_____				
7 American Lobster	_____	7.2	100	R	01		_____				
8 Sponge, NK	_____	3	001	R	06		_____				
	_____						_____				
	_____						_____				

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 Gear/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). See the beach seine fishery definitions below and GEAR NUMBER(S) (#1) for more information on defining and numbering gears.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Gear Number	Unique identifier for each beach seine or beach anchored gillnet. 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. 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 Size – Actual or Estimated?	Actual (measured) or Estimated (captain).	Circle one	"0".
8	Bunt Mesh Count, Vertical	Obtain from captain or count.	Whole number	Dash.
9	Bunt Hanging Ratio	Obtain from captain or measure ratio of floatline to stretched mesh.	Fraction	Dash.
10	Bunt Twine Size Number	Obtain from captain. See Appendix D – Conversion Tables.	3-digit number	"000".
11	Bunt Twine Size – Actual or Estimated?	Actual (measured) or Estimated (captain provided).	Check one	"0".
12	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.
13	Bunt Twine Color Code	Visually confirm.	2-digit code	"00".
14	Bunt Material	Obtain from captain or visually confirm. Describe "Other" on line 14A.	Check one	"0".
15	Floatline Material	Obtain from captain. Describe "Other" on line 15A.	Check one	"0".
16	Wash Net Used?	Yes/No.	Check one	"9".
17	Wash Net Length	Obtain from captain.	Whole Feet	Dash.
18	Floats Used?	Yes/No.	Check one	"9".
19	Distance Between Floats	Obtain from captain.	Whole Feet	Dash.
20	Anchors Used?	Visually confirm.	Check one	"9".

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
21	Number of Anchors	Count.	Whole number	Dash. Leave blank if Anchors Used = "No".
22	Anchor Type	Visually confirm. Describe "Other" or "Combination" on line 22A.	Check one	"0". 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 Weight – Actual or Estimated?	Actual (stamped) or Estimate (captain).	Check one	"0". Leave blank if Anchors Used = "No".
25	Leadline Weight	Obtain from captain. Weighted average.	Pounds, to the nearest tenth	Dash.
26	Active Marine Mammal Deterrent Devices (Pingers) Used?	Visually confirm. When gear was set.	Check one	"9".
27	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".
28	AMMDD Brand(s)	Visually confirm. Describe "Other" or "Combination" on line 28A.	Check one	"00". Leave blank if AMMDD Used = "No".
29	AMMDD Frequency	Obtain from captain. Majority, or highest frequency if equal number.	Kilohertz	Dash. 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	Wing Net Number	Starting with the net closest to the beach.	Whole number	Cannot be unknown for first net.
33	Wing Net Length	Obtain from captain. Total length along floatline. Do not include the length of the bunt or wash net.	Whole feet	Dash.
34	Wing Net Height	Obtain from captain. Do not calculate. Height of the endline.	Feet, to the nearest tenth	Dash.
35	Wing Net Mesh Size	Obtain from captain.	Inches, to the nearest hundredth	Dash.
36	Wing Mesh Size – Actual or Estimated?	Actual (measured) or Estimated (captain).	Circle one	"0".
37	Wing Mesh Count, Vertical	Obtain from captain or count.	Whole number	Dash.
38	Wing Hanging Ratio	Obtain from captain or measure ratio of floatline to stretched mesh.	Fraction	Dash.
39	Wing Twine Size Number	Obtain from captain. See Appendix D – Conversion Tables.	3-digit number	"000".

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
40	Wing Twine Size – Actual or Estimated?	Actual (measured) or Estimated (captain provided).	Check one	“0”.
41	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.
42	Wing Twine Color Code	Visually confirm.	2-digit code	“00”.
43	Wing Net Material	Obtain from captain or visually confirm. Describe “Other” on line 43A.	Check one	“0”.

BEACH SEINE GEAR / BEACH ANCHORED GILLNET GEAR CHARACTERISTICS LOG
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OBS/ TRIP ID	A
DATE LAND (mm/yy)	B /
PAGE #	C <input type="checkbox"/> OF <input type="checkbox"/>

GEAR CODE D <input type="text"/>	GEAR NUMBER(S) 1	NUMBER OF NETS 2
BUNT CHARACTERISTICS: USED? No (0) Yes (1) 3 LENGTH 4 ft HEIGHT 5 ft MESH SIZE 6 in (circle one) A / E 7 MESH COUNT, VERTICAL 8 HANGING RATIO 9 / TWINE SIZE 10 (circle one) A / E 11 # STRANDS 12 COLOR CODE 13 NET MATERIAL 14 Unknown 0 Nylon 1 Other 9 14A	GEAR CHARACTERISTICS: USED? NO YES MEASUREMENTS WASH NET 16 0 1 Length 17 ft FLOATS 18 0 1 Dist Between 19 ft ANCHOR (S) 20 0 1 Number 21 Type 22 Unknown 0 Danforth-style 1 Weight (total) 23 lb Dead Weight 2 Combination 8 Actual 1 24 Other 9 Estimated 2 22A LEADLINE WEIGHT 25 lbs / net MM DETERRENT DEVICES USED? ACTIVE 26 0 1 Brand(s) 28 Unknown 00 Number 27 Dukane 01 Airmar 02 Frequency 29 kHz Fumunda 03 Combination 98 Other 99 28A PASSIVE 30 0 1 Number 31	WING CHARACTERISTICS: Net # 32 Net # Net # Net # Net # LENGTH (ft) 33 HEIGHT (ft) 34 MESH SIZE (in) 35 A / E (circle) A / E 36 A / E A / E A / E A / E MESH COUNT, VERTICAL 37 HANGING RATIO / 38 / / / / TWINE SIZE 39 A / E (circle) A / E 40 A / E A / E A / E A / E # STRANDS 41 COLOR CODE 42 NET MATERIAL 43 Unknown 0 0 0 0 0 Nylon 1 1 1 1 1 Other 9 9 9 9 9 43A
FLOATLINE MATERIAL Unknown 15 0 Floating (foam core) 1 Twisted polypropylene 2 Other 9 15A	COLOR CODES Unknown 00 Multi-color 07 Clear 01 Red 08 White 02 Orange 09 Pink 03 Purple 10 Black 04 Combinator 98 Green 05 Other 99 Blue 06	COMMENTS

BEACH SEINE GEAR / BEACH ANCHORED GILLNET GEAR CHARACTERISTICS LOG
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OBS/ TRIP ID	A99011-
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GEAR CODE 0 7 0	GEAR NUMBER(S) 1	NUMBER OF NETS 2
BUNT CHARACTERISTICS: USED? No (0) Yes(1) <input checked="" type="checkbox"/> X	GEAR CHARACTERISTICS: USED? NO YES MEASUREMENTS	WING CHARACTERISTICS: Net # <u>1</u> Net # <u>2</u> Net # <u> </u> Net # <u> </u> Net # <u> </u>
LENGTH 30 ft	WASH NET 0 <input checked="" type="checkbox"/> 1 <u> </u> Length <u> </u> ft	LENGTH (ft) 200 250 <u> </u> <u> </u> <u> </u>
HEIGHT 8.0 ft	FLOATS 0 <u> </u> 1 <input checked="" type="checkbox"/> Dist Between 5 ft	HEIGHT (ft) 10.0 12.5 <u> </u> <u> </u> <u> </u>
MESH SIZE 4.0 in (circle one) A / <input checked="" type="checkbox"/> E	ANCHOR (S) 0 <u> </u> 1 <input checked="" type="checkbox"/> <u> </u>	MESH SIZE (in) 4.50 4.25 <u> </u> <u> </u> <u> </u>
MESH COUNT, VERTICAL 25	Number 4 Type Unknown 0 <u> </u>	A / E (circle) A / <input checked="" type="checkbox"/> E A / <input checked="" type="checkbox"/> E A / E A / E A / E
HANGING RATIO 1 / 2	Weight (total) 110 lb Danforth-style 1 <u> </u>	MESH COUNT, VERTICAL 25 20 <u> </u> <u> </u> <u> </u>
TWINE SIZE 10 (circle one) A / <input checked="" type="checkbox"/> E	Actual 1 <u> </u> Other 9 <u> </u>	HANGING RATIO 1 / 2 1 / 2 <u> </u> <u> </u> <u> </u>
# STRANDS 3	Estimated 2 <input checked="" type="checkbox"/> <u> </u> danforth & sandbags	TWINE SIZE 10 10 <u> </u> <u> </u> <u> </u>
COLOR CODE 04	LEADLINE WEIGHT 37 lbs / net	A / E (circle) A / <input checked="" type="checkbox"/> E A / <input checked="" type="checkbox"/> E A / E A / E A / E
NET MATERIAL Unknown 0 <u> </u> Nylon 1 <input checked="" type="checkbox"/> <u> </u> Other 9 <u> </u>	MM DETERRENT DEVICES USED? ACTIVE 0 <input checked="" type="checkbox"/> 1 <u> </u> Brand(s)	# STRANDS 1 1 <u> </u> <u> </u> <u> </u>
	Number <u> </u> Unknown 0 <u> </u> Dukane 1 <u> </u> Airmar 2 <u> </u> Fumunda 3 <u> </u> Combinator 8 <u> </u> Other 9 <u> </u>	COLOR CODE 05 02 <u> </u> <u> </u> <u> </u>
	PASSIVE 0 <input checked="" type="checkbox"/> 1 <u> </u> Number <u> </u>	NET MATERIAL Unknown 0 <u> </u> 0 <u> </u> 0 <u> </u> 0 <u> </u> 0 <u> </u> Nylon 1 <input checked="" type="checkbox"/> <u> </u> 1 <input checked="" type="checkbox"/> <u> </u> 1 <u> </u> 1 <u> </u> 1 <u> </u> Other 9 <u> </u> 9 <u> </u> 9 <u> </u> 9 <u> </u> 9 <u> </u>
FLOATLINE MATERIAL Unknown 0 <u> </u> Floating (foam core) 1 <u> </u> Twisted polypropylene 2 <input checked="" type="checkbox"/> <u> </u> Other 9 <u> </u>	COLOR CODES Unknown 00 Multi-color 07 Clear 01 Red 08 White 02 Orange 09 Pink 03 Purple 10 Black 04 Combinator 98 Green 05 Other 99 Blue 06	COMMENTS Anchors: 2 (25 lb) danforths on beach and 2 (30 lb) sand bags on end of net LL Weight: 50 lbs / 600 ft * 450 ft = 37.5 lbs

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 Gear/Beach Anchored Gillnet Gear Characteristics Log Error! Not a valid result for table..	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
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OBS/ TRIP ID	A
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PAGE #	C <input type="checkbox"/> OF <input type="checkbox"/>

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

HAUL INFO	DATE (mm/dd/yy)	TIME (24 hrs)	LATITUDE/LONGITUDE (DD MM.M) - LORAN (XXXXX)				EST SOAK DUR	WATER TEMP	TARGET SPECIES	CODE(S)
BEGIN	Q / /	R :	Station 1	Latitude/Bearing	Station 2	Longitude/Bearing	2	T ° F	U	V
END	/ /	:	9960-	S	9960-		hrs			

COMMENTS	NUMBER OF NETS	IF MM DETERRENTS USED	
	SET <u>3</u>	ACTIVE	PASSIVE
	HAULED <u>4</u>	HAULED <u>6</u>	<u>8</u>
	LOST <u>5</u>	LOST <u>7</u>	<u>9</u>

SPECIES		POUNDS	DISP CODE	WEIGHT		SPECIES		POUNDS	DISP CODE	WEIGHT	
NAME	CODE			D/R	ESTIMATION METHOD	NAME	CODE			D/R	ESTIMATION METHOD CODE
1	A'	B'	D'	E'	F'	G'	11				
2							12				
3							13				
4							14				
5							15				
6							16				
7							17				
8							18				
9							19				
10							20				

BEACH SEINE / BEACH ANCHORED GILLNET HAUL LOG
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GEAR CODE 0 7 0	GEAR # 0 1	HAUL # 0 0 1	HAUL OBS? NO 0 _____ YES 1 X	MM WATCH? NO 0 _____ YES 1 X	CATCH? NO 0 _____ YES 1 X	INC TAKE? NO 0 X _____ YES 1 _____	WEATHER CODE 02	WIND SPEED 7 kn DIRECTION 45 °		WAVE HEIGHT 1 ft	GEAR COND CODE 210
HAUL INFO	DATE (mm/dd/yy)	TIME (24 hrs)	LATITUDE/LONGITUDE (DD MM.M) - LORAN (XXXXX)				EST SOAK DUR	WATER TEMP	TARGET SPECIES		CODE(S)
BEGIN	06 / 26 / 16	05 : 16	Station 1	Latitude/Bearing	Station 2	Longitude/Bearing		°	Weakfish		
END	06 / 26 / 16	06 : 03	9960-	35 ° 13.8	9960-	75 ° 32.8	14.3 hrs	61.0 F			

COMMENTS

Net set approximately at 15:00 yesterday.

Fishing in Hatteras Bight.

NUMBER OF NETS	IF MM DETERRENTS USED
SET 2	ACTIVE PASSIVE
HAULED 2	HAULED _____
LOST 0	LOST _____

SPECIES		POUNDS	DISP CODE	WEIGHT		SPECIES		POUNDS	DISP CODE	WEIGHT	
NAME	CODE			D/R	ESTIMATIO N METHOD	NAME	CODE			D/R	ESTIMATION 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.

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. 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	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.
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.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
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. 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.
20	Distance Between Gangions	Obtain from captain. Average distance between gangions.	Whole feet	Dash.
21	Gangion Diameter	Obtain from captain.	Millimeter to the nearest tenth	Dash.
22	Gangion Test	Obtain from captain.	Whole pounds	Dash.
23	Gangion Length	Obtain from captain. Do not include leader length. If more than 2 gangion lengths, record additional in comments.	Whole feet	Dash.
24	Gangion Count	Obtain from captain. Number of gangion at given length.	Whole number	Dash.
25	Gangion Material	Visually confirm or obtain from captain.	1-digit code	"0".
26	Gangion Color	Visually confirm.	2-digit code	"00".
27	Number of Buoylines	Count. Does not include line from vessel to gear.	Whole number	Dash.
28	Buoyline Length	Obtain from captain. Average.	Whole feet	Dash. Leave blank if Number of Buoylines = 0.
29	Buoyline Type Code	Obtain from captain..	Check one	"0".
30	Buoyline Percent Sinking/Neutrally Buoyant ⁶	Obtain from captain. Average.	Whole percent	Dash. Leave blank if Number of Buoylines = 0 or Buoyline Type Code ≠ "8".
31	Buoyline Percent Floating ⁵	Obtain from captain. Average.	Whole percent	
32	Buoyline Diameter	Obtain from captain. Average.	Inches, in fractional form	Dash. Leave blank if Number of Buoylines = 0.
33	Buoyline Mark?	Yes/No. Visually confirm. 4" colored mark mid-way on buoyline.	Check one	"9". Leave blank if Number of Buoylines = 0.
34	Groundline Used?	Yes/No. Visually confirm.	Check one	"9".
35	Groundline Length	Obtain from captain. Total (sum both sides).	Whole feet	Dash. Leave blank if Groundline Used = "No".
36	Groundline Type Code	Obtain from captain..	Check one	"0".

⁶ #30 and #31 must add up to 100

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
37	Groundline Diameter	Obtain from captain. Average.	Inches, in fractional form	Dash. Leave blank if Groundline Used = "No".
38	Number of High Flyers	Count. Total (sum both sides).	Whole number	Dash.
39	Number of Buoys	Count. Total connected to the buoyline (sum both sides).	Whole number	Dash.
40	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.
41	Surface Line Type Code	Obtain from captain.	Check one	"0".
42	Surface Line Diameter	Obtain from captain. Average.	Inches, in fractional form	Dash. Leave blank if no surface line used.
43	Surface System Mark?	Yes/No. Visually confirm.	Check one	"9".
44	Weak Links Used on Surface?	Yes/No. Visually confirm.	Check one	"9".
45	Number of Surface Weak Links	Obtain from captain. Total (sum both sides).	Whole number	Dash. Leave blank if Surface Weak Links Used = "No".
46	Surface Weak Link Type Code	Visually confirm..	Check one	"0". Leave blank if Surface Weak Links Used = "No".
47	Weak Links Used on String?	Yes/No. Visually confirm.	Check one	"9".
48	Number of String Weak Links	Obtain from captain. Total (all nets).	Whole number	Dash. Leave blank if String Weak Links Used = "No".
49	String Weak Link Type Code	Visually confirm..	Check one	"0". Leave blank if String Weak Links Used = "No".
50	Floats Used?	Yes/No. Visually confirm each type of float used.	Check one	"9".
51	Number of Floats	Obtain from captain.	Whole number	Dash.
52	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.
53	Light Sticks Used	Yes/No. Visually confirm.	Check one	"9".
54	Light Stick Color	Visually confirm..	2-digit code	"00".
55	Light Stick Number	Obtain from captain.	Whole number	Dash.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
56	Dropline Length	Obtain from captain. Record average length.	Whole feet	Dash.
57	Distance between Droplines	Obtain from captain.	Whole feet	Dash.
58	Swivels Used?	Yes/No. Visually confirm.	Check one	"9".
59	Number of Swivels per Gangions	Obtain from captain.	Whole number	Dash.
60	Number of Radio Beacons	Visually confirm or obtain from captain.	Whole number	Dash.
61	Number of Radar Reflectors	Visually confirm or obtain from captain.	Whole number	Dash.

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OBS/TRIP ID	A
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GEAR CODE D		GEAR NUMBER(S)		NUMBER OF HOOKS		SECTION LENGTH		NUMBER OF SECTIONS	
<input type="text"/>		1		2		3		4	
								nm	
MAINLINE		LEADERS		BUOYLINE		SURFACE SYSTEM		FLOATS **	
# OF STRANDS 5 _____		USED? 10 NO 0 YES 1 _____		# of Buoylines 27 _____		# of High Flyers 38 _____		TYPE NO YES NUMBER AVG HOOKS BETWEEN	
DIAMETER 6 ____ . ____ mm		LENGTH 11 _____ ft		Length (avg) 28 _____ ft		# of Buoys 39 _____		Unknown 0 ____ 1 ____	
TEST 7 _____ lbs		TEST 12 _____ lbs		Type Code 29 _____		Surface Line Length (avg) 40 _____ ft		Polyball 0 ____ 1 ____	
MATERIAL 8 _____		MATERIAL 13 _____		Percent of Type 30 31 _____ % / _____ %		Type Code 41 _____		Bullet/Daub 0 ____ 1 ____	
COLOR 9 _____				(sinking/floating)		Diameter 42 ____ / ____ in		Other 0 ____ 1 ____	
HOOKS		ANCHOR USED? 17				Mark? 43 NO 0 YES 1 _____		LIGHT STICKS USED? **	
BRAND MODEL/PATTERN SIZE		NO 0 YES _____		Diameter 32 ____ / ____ in		Mark? 43 NO 0 YES 1 _____		NO 0 YES 1 53	
14 15 16		WEIGHT 18 lbs		Mark? 33 NO 0 YES 1 _____		Diameter 42 ____ / ____ in		COLOR 54	
		Actual 19 1 _____				Mark? 43 NO 0 YES 1 _____		NUMBER 55	
		Estimated 2 _____						DROPLINE **	
GANGIONS		LENGTH		GROUNDLINE		WEAK LINKS		SWIVELS	
DISTANCE BETWEEN 20 _____ ft		COUNT 24		USED? 34 0 1 _____		NO YES		USED? NO YES	
DIAMETER 21 ____ . ____ mm		MATERIAL 25		Length (total) 35 _____ ft		44		NO 0 YES 1 58	
TEST 22 _____ lbs		COLOR 26		Type Code 36 _____		USED ON SURFACE? 0 ____ 1 ____		# OF SWIVELS/GANGION	
				Diameter 37 ____ / ____ in		Number (total) 45 _____		59	
						Type Code 46 _____		RADIO BEACONS **	
						USED ON STRING? 0 ____ 1 ____		COUNT 60	
						Number (total) 48 _____		RADAR REFLECTORS	
						Type Code 49 _____		COUNT 61	
								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	

COMMENTS

- 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

LONGLINE GEAR CHARACTERISTICS LOG
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GEAR CODE 0 1 0	GEAR NUMBER(S) 1, 2, 3	NUMBER OF HOOKS 900	SECTION LENGTH 0.9 nm	NUMBER OF SECTIONS 1
---------------------------	----------------------------------	-------------------------------	---------------------------------	--------------------------------

MAINLINE # OF STRANDS _____ DIAMETER 5.0 mm TEST 900 lbs MATERIAL 04 COLOR 06	LEADERS USED? NO 0 <input checked="" type="checkbox"/> YES 1 _____ LENGTH _____ ft TEST _____ lbs MATERIAL _____	BUOYLINE # of Buoylines 2 Length (avg) 200 ft Type Code 8 Percent of Type (sinking/floating) 75% / 25%	SURFACE SYSTEM # of High Flyers 2 # of Buoys 2 Surface Line Length (avg) 20 ft Type Code 1	FLOATS ** USED? NO YES NUMBER AVG HOOKS BETWEEN Unknown 0 _____ 1 _____ Polyball 0 _____ 1 _____ Bullet/Daub 0 _____ 1 _____ Other 0 _____ 1 _____
---	---	---	---	--

HOOKS BRAND MODEL/PATTERN SIZE Mustad 39977 12/0	ANCHOR USED? NO 0 YES <input checked="" type="checkbox"/> WEIGHT Actual 1 _____ Estimated 2 <input checked="" type="checkbox"/> 25 lbs	Diameter 5 / 8 in Mark? NO 0 YES 1 <input checked="" type="checkbox"/>	Diameter 5 / 8 in Mark? NO 0 YES 1 <input checked="" type="checkbox"/>	LIGHT STICKS USED? ** NO 0 YES 1 _____	DROPLINE ** LENGTH _____ ft DISTANCE BETWEEN _____ ft
--	--	--	--	--	--

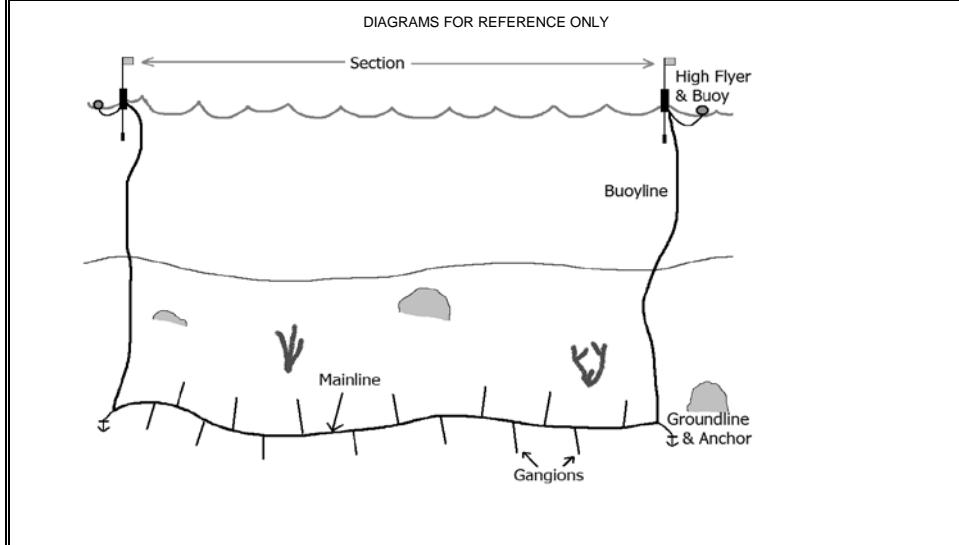
GANGIONS LENGTH COUNT DISTANCE BETWEEN 6 ft 1 ft 900 DIAMETER 2.0 mm TEST 400 lbs MATERIAL 01 COLOR 06	GROUNDLINE NO YES USED? 0 _____ 1 <input checked="" type="checkbox"/> Length (total) 20 ft Type Code 1 Diameter 3 / 8 in	WEAK LINKS NO YES USED ON SURFACE? 0 <input checked="" type="checkbox"/> 1 _____ Number (total) _____ Type Code _____ USED ON STRING? 0 <input checked="" type="checkbox"/> 1 _____ Number (total) _____ Type Code _____	SWIVELS USED? NO 0 <input checked="" type="checkbox"/> YES 1 _____ # OF SWIVELS/GANGION _____ 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	RADIO BEACONS ** _____ RADAR REFLECTORS 2 MATERIAL Unknown 0 Mono-filament Nylon 1 Cotton 2 Steel Wire 3 Multi-strand Nylon 4 Other 9
--	--	---	---	--

COMMENTS
Mainline is braided nylon - number of strands unknown.

** only record for Pelagic Longline

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



FOR OFFICE USE ONLY

LONGLINE GEAR CHARACTERISTICS LOG (FRONT)
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GEAR CODE [][][] D	GEAR # [][] 1	# OF HOOKS 2	COMMENTS
HOOKS	BRAND	MODEL/PATTERN	SIZE
HOOK #1	14	15	16
HOOK #2			

GEAR CODE [][][]	GEAR # [][]	# OF HOOKS	COMMENTS
HOOKS	BRAND	MODEL/PATTERN	SIZE
HOOK #1			
HOOK #2			

GEAR CODE [][][]	GEAR # [][]	# OF HOOKS	COMMENTS
HOOKS	BRAND	MODEL/PATTERN	SIZE
HOOK #1			
HOOK #2			

GEAR CODE [][][]	GEAR # [][]	# OF HOOKS	COMMENTS
HOOKS	BRAND	MODEL/PATTERN	SIZE
HOOK #1			
HOOK #2			

ADDITIONAL COMMENTS

LONGLINE GEAR CHARACTERISTICS LOG (FRONT)
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GEAR CODE	GEAR #	# OF HOOKS	COMMENTS
<input type="text" value="0"/> <input type="text" value="1"/> <input type="text" value="0"/>	<input type="text" value="0"/> <input type="text" value="1"/>	900	
HOOKS	BRAND	MODEL/PATTERN	SIZE
HOOK #1	Eagle Claw	L9014	12/0
HOOK #2			

GEAR CODE	GEAR #	# OF HOOKS	COMMENTS
<input type="text" value="0"/> <input type="text" value="1"/> <input type="text" value="0"/>	<input type="text" value="0"/> <input type="text" value="2"/>	1200	
HOOKS	BRAND	MODEL/PATTERN	SIZE
HOOK #1	Mustad	39960	11/0
HOOK #2			

GEAR CODE	GEAR #	# OF HOOKS	COMMENTS
<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>		
HOOKS	BRAND	MODEL/PATTERN	SIZE
HOOK #1			
HOOK #2			

GEAR CODE	GEAR #	# OF HOOKS	COMMENTS
<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>		
HOOKS	BRAND	MODEL/PATTERN	SIZE
HOOK #1			
HOOK #2			

ADDITIONAL COMMENTS

LONGLINE GEAR CHARACTERISTICS LOG (BACK)
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GEAR CODE □□□	GEAR # □□	# OF HOOKS	COMMENTS
HOOKS	BRAND	MODEL/PATTERN	SIZE
HOOK #1			
HOOK #2			

GEAR CODE □□□	GEAR # □□	# OF HOOKS	COMMENTS
HOOKS	BRAND	MODEL/PATTERN	SIZE
HOOK #1			
HOOK #2			

GEAR CODE □□□	GEAR # □□	# OF HOOKS	COMMENTS
HOOKS	BRAND	MODEL/PATTERN	SIZE
HOOK #1			
HOOK #2			

GEAR CODE □□□	GEAR # □□	# OF HOOKS	COMMENTS
HOOKS	BRAND	MODEL/PATTERN	SIZE
HOOK #1			
HOOK #2			

ADDITIONAL COMMENTS	FOR OFFICE USE ONLY

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 (#6), ITEMS USED: RATTLERS and SURFACE LIGHTS (#9), NUMBER OF ITEMS USED: RATTLERS and SURFACE LIGHTS (#10), 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.
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 "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.	Whole number	Dash.
14	Hooks Lost	Obtain from captain. Total for string. If different than number lost minus number set, explain in COMMENTS.	Whole number	Dash.
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.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
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. When gear was set. Up to three major baits.	Whole pounds	Dash. Dash if artificial bait.
18	Kinds of Bait	Obtain from captain. When gear was set. See Appendix P1 – Bait Kind Codes	2-digit code	"00".
19	Type of Bait	Obtain from captain. When gear was set. See Appendix P2 – Bait Type Codes	1-digit code	"0".
20	Condition of Bait	Obtain from captain. When gear was set. 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.

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GEAR CODE D	GEAR # E	HAUL # F	HAUL OBS? NO 0 G YES 1 _____	ON-EFFORT? NO 0 H YES 1 _____	CATCH? NO 0 I YES 1 _____	INC TAKE? NO 0 J YES 1 _____	WEATHER CODE K	WIND SPEED L kn DIRECTION M °		WAVE HEIGHT N ft	DEPTH, HAUL BEGIN O fm	GEAR COND CODE P	
SET/HAUL INFO	DATE mm/dd/yy	AND 24 hours	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)				Station 1	Latitude / Bearing	Station 2	Longitude / Bearing	WATER TEMP T ° F	TARGET SPECIES CODE(S) U V	
S BEGIN	Q / /	R :	9960 -	S		9960 -				o F	U		
E	/ /	:	9960 -			9960 -				o F	MAINLINE LENGTH **		
T END **	/ /	:	9960 -			9960 -				o F	2		
H BEGIN **	/ /	:	9960 -			9960 -				o F	SET METHOD 4		
A	/ /	:	9960 -			9960 -				o F	Unknown 00 ___ Temperature 01 ___ Bottom Contours 02 ___ Compass/Loran 03 ___		
U END	/ /	:	9960 -			9960 -				o F	Tide/Current 04 ___ Visual 05 ___ Eddy 06 ___ Mixed 98 ___ Other 99 ___		
ITEMS USED?			NUMBER OF HOOKS		BAIT				SET SPEED 3 kn		HOOK DEPTH RANGE 21 fm		
TYPE	NO	YES	NUMBER	SET	LBS	KIND	TYPE	COND			Tide/Current 04 ___ Visual 05 ___ Eddy 06 ___ Mixed 98 ___ Other 99 ___		
Rattlers	0	5	1	6	12	17	18	19	20			4A	
Surface Lights	0	7	1	8	HAULED								
Additional Line Wts	0	9	1	10	LOST								
WEIGHT OF ADDITIONAL LINE WEIGHTS 11 lbs			TENDEd 15		REBAITED 16		SAMPLE WEIGHT MULTIPLIER W		COMMENTS ** only record for Demersal and Pelagic Longline.				
SPECIES		WEIGHT											
NAME	CODE	SAMP. WEIGHT	POUNDS	DISP CODE	D/R	ESTIMATION METHOD CODE							
A'	B'	C'	D'	E'	F'	G'							
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													

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GEAR CODE 0 1 0	GEAR # 0 1	HAUL # 0 0 1	HAUL OBS? NO 0 YES 1 X	ON-EFFORT? NO 0 YES 1 X	CATCH? NO 0 YES 1 X	INC TAKE? NO 0 X YES 1	WEATHER CODE 01	WIND SPEED 20 kn DIRECTION 0 °	WAVE HEIGHT 3 ft	DEPTH, HAUL BEGIN 36 fm	GEAR COND CODE 610
---------------------------	----------------------	------------------------	-------------------------------------	--------------------------------------	----------------------------------	-------------------------------------	---------------------------	--	----------------------------	--------------------------------------	---------------------------------

SET/HAUL INFO	DATE AND TIME mm/dd/yy 24 hours	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)				WATER TEMP	TARGET SPECIES	CODE(S)
S BEGIN	07 / 15 / 16 05 : 30	Station 1	Latitude / Bearing	Station 2	Longitude / Bearing	54 . 3 ° F	Haddock	
E END **	07 / 15 / 16 05 : 42	9960 -	42 ° 00.2	9960 -	67 ° 38.7	54 . 3 ° F		
T BEGIN **	07 / 15 / 16 07 : 38	9960 -	41 ° 59.4	9960 -	67 ° 38.2	54 . 3 ° F	MAINLINE LENGTH **	SET METHOD
A END	07 / 15 / 16 08 : 16	9960 -	41 ° 59.6	9960 -	67 ° 39.0	54 . 8 ° F	6 . 9 nm	Unknown 00 ___ Temperature 01 ___ Bottom Contours 02 X Compass/Loran 03 ___ Tide/Current 04 ___ Visual 05 ___ Eddy 06 ___ Mixed 98 ___ Other 99 ___
L		9960 -	42 ° 00.4	9960 -	67 ° 38.4	55 . 0 ° F		

ITEMS USED?		NUMBER OF HOOKS		BAIT				SET SPEED	COMMENTS	
TYPE	NO YES NUMBER	SET	LBS	KIND	TYPE	COND	5 . 2 kn	** only record for Demersal and Pelagic Longline.		
Rattlers	0 X 1 ___	900		#1	30	10	4	6	Was not able to obtain actual weights or length frequencies due to time constraints	
Surface Lights	0 X 1 ___	895		#2					Spiny dogfish estimated weight was based on 5 lbs per dogfish (60 dogfish)	
Additional Line Wts	0 ___ 1 X 2	5		#3					Only one haddock fell off the hook before coming onboard	
WEIGHT OF ADDITIONAL LINE WEIGHTS	10 lbs	TENDED		SAMPLE WEIGHT MULTIPLIER						
		REBAITED	0							

SPECIES		SAMP. WEIGHT	POUNDS	DISP CODE	WEIGHT	
NAME	CODE				D/R	ESTIMATION METHOD CODE
Haddock			50	100	D	05
Winter Skate			250	001	R	05
Spiny Dogfish			300	001	R	05
Monkfish			10	100	R	05
Haddock			3	012	R	05
Atlantic Cod			12	100	R	05

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GEAR CODE D	GEAR NUMBER E	HAUL NUMBER F	HAUL OBSERVED? YES <input type="checkbox"/> NO <input type="checkbox"/> G	INC TAKE? YES <input type="checkbox"/> NO <input type="checkbox"/> J	
WEATHER CODE K	WAVE HEIGHT N ft	GEAR COND CODE P	TARGET SPECIES 1 U	TARGET SPECIES 2 U2	
HAUL INFO	DATE mm/dd/yy	TIME 24 hours	LATITUDE/LONGITUDE (DD MM.M)		
BEGIN HAUL	Q / /	R :	LATITUDE S	LONGITUDE	or (STAT AREA)* S2
END HAUL	/ /	:			

COMMENTS _____ * Enter only if latitude/longitude coordinates are not available

SOAK DURATION 1 _____. ____ hrs
MAINLINE LENGTH 2 _____. ____ nm
SAMPLE WEIGHT MULTIPLIER W _____.

SPECIES NAME	SAMP. WEIGHT	POUNDS	DISP CODE	D/R	EST. METH.	SPECIES NAME	SAMP. WEIGHT	POUNDS	DISP CODE	D/R	EST. METH.
A'	C'	D'	E'	F'	G'						
1	_____.					11	_____.				
2	_____.					12	_____.				
3	_____.					13	_____.				
4	_____.					14	_____.				
5	_____.					15	_____.				
6	_____.					16	_____.				
7	_____.					17	_____.				
8	_____.					18	_____.				
9	_____.					19	_____.				
10	_____.					20	_____.				

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GEAR CODE 0 1 0	GEAR NUMBER 0 4	HAUL NUMBER 0 0 4	HAUL OBSERVED? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	INC TAKE? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	
WEATHER CODE 01	WAVE HEIGHT 2 ft	GEAR COND CODE 610	TARGET SPECIES 1 Haddock	TARGET SPECIES 2 Atlantic Cod	
HAUL INFO	DATE mm/dd/yy	TIME 24 hours	LATITUDE/LONGITUDE (DD MM.M)		
BEGIN HAUL	10 / 04 / 16	13 : 52	LATITUDE 41° 25.5	LONGITUDE 71° 26.4	or (STAT AREA)*
END HAUL	10 / 04 / 16	15 : 34	41° 27.3	71° 26.9	

COMMENTS

* Enter only if latitude/longitude coordinates are not available

	SOAK DURATION 24 . 0 hrs
	MAINLINE LENGTH 1 . 6 nm
	SAMPLE WEIGHT MULTIPLIER _____

SPECIES NAME	SAMP. WEIGHT	POUNDS	DISP CODE	D/R	EST. METH.	SPECIES NAME	SAMP. WEIGHT	POUNDS	DISP CODE	D/R	EST. METH.
¹ Haddock	_____	46	100	D	01	¹¹	_____				
² Winter Skate	_____	250	001	R	05	¹²	_____				
³ Spiny Dogfish	_____	300	001	R	05	¹³	_____				
⁴ Monkfish	_____	10.2	100	R	01	¹⁴	_____				
⁵ Haddock	_____	3.4	012	R	01	¹⁵	_____				
⁶ Atlantic Cod	_____	12.7	100	R	01	¹⁶	_____				
⁷ Sponge, NK	_____	3	001	R	06	¹⁷	_____				
⁸	_____					¹⁸	_____				
⁹	_____					¹⁹	_____				
¹⁰	_____					²⁰	_____				

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).

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Gear Number	Unique identifier for each string 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.	Whole number	Cannot be unknown.
3	Pot Shape	Visually confirm.	2-digit code	"00".
4	Pot Side Construction	Visually confirm.	1-digit code	"0".
5	Pot Top Length	Measure.	Whole inches	Dash.
6	Pot Top Width	Measure.	Whole inches	Dash.
7	Pot Bottom Length	Measure.	Whole inches	Dash.
8	Pot Bottom Width	Measure.	Whole inches	Dash.
9	Height	Measure.	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	Dash.
15	Escape Vent Shape	Visually confirm.	2-digit code	"00".
16	Escape Vent Length	Measure with calipers.	Inches, to the nearest tenth	Dash.
17	Escape Vent Height	Measure with calipers.	Inches, to the nearest tenth	Dash.
18	Escape Vent Location	Visually confirm.	Check one	"0".
19	Entrance Number	Visually confirm.	Whole number, weighted average	Dash.
20	Entrance Ring Size	Measure with calipers.	Inches, to the nearest tenth	Dash.
21	Entrance Location	Visually confirm.	Check one	"0".
22	Biodegradable Panel Used?	Yes/No.	Check one	"9".
23	Biodegradable Panel Attachment Type	Visually confirm.	Check one	"0".
24	Bait Method	Visually confirm. Describe "other" or "combination" on line 24A.	Check one	"0".
25	Number of High Flyers	Count. Total (sum both sides).	Whole number	Dash.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
26	Number of Buoys	Count. Total connected to the buoyline (sum both sides).	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". Leave blank if no surface line used.
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).	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.
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". Leave blank if Number of Buoylines = 0.
41	Buoyline Percent Sinking/Neutrally Buoyant	Obtain from captain. Average.	Whole percent	Dash. Leave blank if Number of Buoylines = 0 or Buoyline Type Code ≠ "8".
42	Buoyline Percent Floating	Obtain from captain. Average.	Whole percent	
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".

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
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 Weight – Actual or Estimated?	Actual (stamped) or Estimated (captain).	Check one	"0". Leave blank if Anchors Used = "No".
49	Anchor Type	Visually confirm. Describe "other" or "combination" on line 49A.	Check one	"0". Leave blank if Anchors Used = "No".
50	Length of Line Between Anchor and Gangion	Obtain from captain.	Whole feet, average	Dash.
51	Anchor Line Type Code	Obtain from captain.	1-digit code	"0".
52	Anchor Line Diameter	Obtain from captain.	Fraction of an inch, average	Dash.

LOBSTER, CRAB, & FISH POT GEAR CHARACTERISTICS LOG
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OBS/TRIP ID	A
DATE LANDED mm/yy	B /
PAGE #	C <input type="checkbox"/> OF <input type="checkbox"/>

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

RECTANGULAR LOBSTER TRAP WIRE CONSTRUCTION

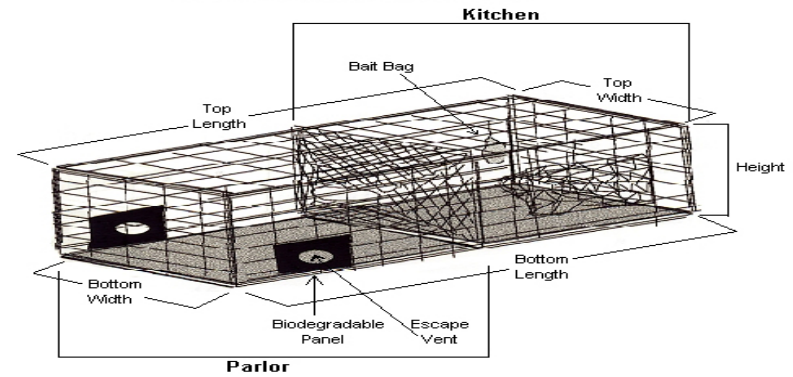


DIAGRAM FOR REFERENCE ONLY

⊗ = Weak Link

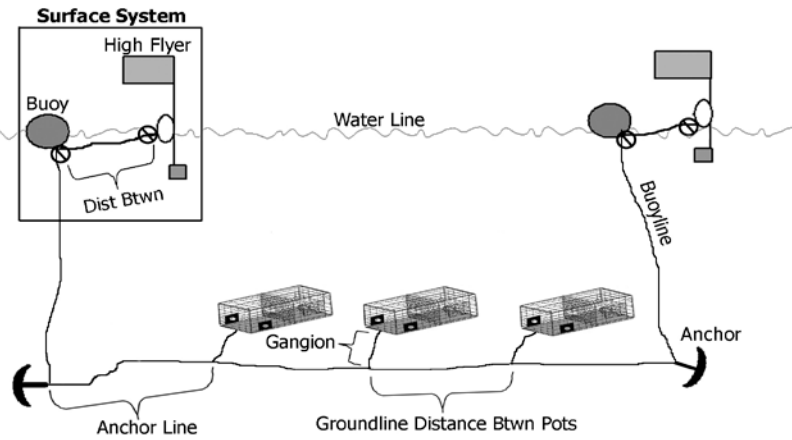


Photo Credit: NOAA Fisheries Service Northeast Regional Office (Original image modified to include additional information).

ADDITIONAL COMMENTS

SHAPE CODES:

- 00 = Unknown
- 01 = Rectangular
- 02 = Round / Oval
- 03 = 1/2 Round
- 04 = Cone
- 05 = Trapezoid
- 99 = Other

SIDE CONSTRUCTION CODES:

- 0 = Unknown
- 1 = Wood Lathe
- 2 = Plastic Coated Wire
- 3 = Twine Mesh
- 4 = Plastic Mesh
- 8 = Combination
- 9 = Other

LINE / GANGION TYPE CODES:

- 0 = Unknown
- 1 = Sinking / Neutrally Buoyant
- 2 = Floating
- 8 = Combination
- 9 = Other

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

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. Record for the two most used bait types by weight. Comment on any additional baits used.	Whole pounds	Dash.
6	Kind of Bait	Obtain from captain. Record for the two most used bait types by weight. Comment on any additional baits used. See Appendix P1 – Bait Kind Codes	2-digit code	“00”.
7	Type of Bait	Obtain from captain. Record for the two most used bait types by weight. Comment on any additional baits used. See Appendix P2 – Bait Type Codes	1-digit code	“0”.
8	Condition of Bait	Obtain from captain. Record for the two most used bait types by weight. Comment on any additional baits used. See Appendix P3 – Bait Condition Codes	1-digit code	“0”.
9	Set Method	Obtain from captain. Describe “Other” on line 9A.	Check one	“00”.

LOBSTER, CRAB, & FISH POT HAUL LOG
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GEAR CODE 2 0 0	GEAR # 1 3	HAUL # 0 1 3	HAUL OBS? NO 0 _____ YES 1 X	ON-EFFORT? NO 0 _____ YES 1 X	CATCH? NO 0 _____ YES 1 X	INC TAKE? NO 0 X _____ YES 1 _____	WEATHER CODE 02	WIND SPEED 5 kn DIRECTION 225 °	WAVE HEIGHT 2 ft	DEPTH, HAUL BEGIN 122 fm	GEAR COND CODE 410	
SET INFO	DATE AND TIME mm/dd/yy 24 hours	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)				ESTIMATED SOAK DURATION	TARGET SPECIES CODE(S)					
S BEGIN	/ / :	Station 1	Latitude / Bearing	Station 2	Longitude / Bearing	168.0 hrs	American Lobster					
T END	/ / :	9960 -		9960 -			NUMBER OF POTS	BAIT				
HAUL INFO		WATER TEMP				SET 40	LBS	KIND	TYPE	COND		
H BEGIN	06 / 19 / 16 21 : 52	9960 -	41 ° 32.3	9960 -	69 ° 35.8	58.0 F	HAULED 40	#1 150	05	2	3	
U END	06 / 19 / 16 23 : 21	9960 -	41 ° 32.7	9960 -	69 ° 35.5		LOST 0	#2 150	03	1	1	

COMMENTS	SET METHOD
	Unknown 00 _____ Visual 05 _____
	Temperature 01 _____ Mixed 98 _____
	Bottom Contours 02 _____ Other 99 _____
	Compass/Loran 03 X _____
	Tide/Current 04 _____
	SAMPLE WEIGHT MULTIPLIER _____

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 American Lobster			75	100	R	01	11						
2 American Lobster			1	022	R	01	12						
3 American Lobster			3	012	R	01	13						
4 Jonah Crab			80	100	R	01	14						
5 Black Whiting			22	170	R	01	15						
6 Jonah Crab			9	001	R	01	16						
7							17						
8							18						
9							19						
10							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.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1*	Gear Number	Unique identifier for each trawl net.	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. See Appendix O2 – Net Type.	N/A	Record “Unknown”.
4	Net Builder	Obtain from captain. See Appendix O3 – Net Builder .	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. ⁷ 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 is Kites Used? = “No”.
13	Kite Width	Obtain from captain.	Whole inches	Dash. Leave blank is Kites Used? = “No”.
14	Kite Length	Obtain from captain.	Whole inches	Dash. Leave blank is Kites Used? = “No”.
15	Fishing Circle Number of Meshes	Obtain from captain.	Whole number	Dash.
16	Fishing Circle Mesh Size	Obtain from captain.	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.
20	Bridle Length	Obtain from captain.	Whole fathoms	Dash.
21	Strengthened Used?	Yes/No.	Check one	“9”.

⁷ Dyneema® should be marked as Spectra® (04).

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
22	Chafing Gear Used?	Yes/No.	Check one	"9".
23	Ground Cable Ground Gear	Visually confirm ⁸ . 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.	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.	Check one	"0".
31*	Liner Hung	Visually confirm.	Check one	"0". Leave blank if no liner used.
32*	Codend Twine Type	Visually confirm.	Check one	"0".
33*	Liner Twine Type	Visually confirm.	Check one	"0". Leave blank if no liner used.
34*	Codend Mesh Size	Measure with calipers.	Whole millimeters	Dash.
35*	Liner Mesh Size	Measure with calipers.	Whole millimeters	Dash. Leave blank if no liner used.
36	Gear Mounted Electronics Used?	Yes/No.	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".
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.	2-digit code	"00".

⁸ 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
43	T.E.D. Extension Mesh Size	Measure with calipers or obtain from captain.	Inches, to the nearest tenth	Dash.
44	T.E.D. Extension A/E	Actual (measured) or Estimated (captain provided).	Check one	"0".
45*	Escape Outlet Used	Yes/No.	Check one	"9".
46	Escape Outlet Type	Visually confirm. Describe "Other" on line 46A.	Check one	"0".
47	Escape Outlet Mesh Size	Obtain from captain.	Whole inches	Dash.
48	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.
49	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.
50	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.
51	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.
52	Escape Outlet Shape Type Code	Visually confirm.	2-digit code	"00".
53	Escape Outlet Location Type Code	Visually confirm.	2-digit code	"0".

**BOTTOM TRAWL GEAR CHARACTERISTICS LOG
NMFS FISHERIES OBSERVER PROGRAM**

OBOTG 05/01/16

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

GEAR CODE D <input type="text"/>	GEAR NUMBER 1	NET NAME 2	NET TYPE 3	NET BUILDER 4	CODEND/LINER HUNG CODEND LINER 30 31 Unknown 0 ___ Diamond 1 ___ Square 2 ___ Square, wrapped 3 ___ Combination 8 ___	GEAR MOUNTED ELECTRONICS USED? 36 NO 0 ___ YES 1 ___ NUMBER OF TRANSDUCERS 37 TYPE 38 Unknown 0 ___ Wired 1 ___ Wireless 2 ___ Both 3 ___	EXCLUDER/SEPARATOR DEVICE 41 USED? NO 0 ___ YES 1 ___ Type Code 42 T.E.D. EXTENSION 43 Mesh Size ___ . ___ in (circle one) A / E 44						
LINER USED? NO 0 5 YES 1 ___	CONSTRUCTION MATERIAL 8 TYPE NET BODY CODEND LINER Unknown 00 8 9 10 Nylon 01 ___ Poly 02 ___ Kevlar® 03 ___ Spectra® 04 ___ Tenex® 05 ___ Nomex® 06 ___ Combination 98 ___ Other 99 ___		LENGTH MEASUREMENTS Headrope 17 ___ft Footrope/Sweep 18 ___ft Ground Cable 19 ___fm Bridle 20 ___fm		TWINE TYPE CODEND LINER 32 33 Unknown 0 ___ Single 1 ___ Double 2 ___ Single on Top/ 3 ___ Double on Bottom 3 ___ Other 9 ___	STRENGTHENER USED? 21 NO 0 ___ YES 1 ___	WEIGHT OF ONE DOOR 7 ___kg	DOORS USED? NO 0 6 YES 1 ___	CHAFING GEAR USED? 22 NO 0 ___ YES 1 ___	CODEND MESH SIZE 34 ___ mm ___ mm ___ mm ___ mm ___ mm ___ mm ___ mm ___ mm	BRAND 39 Unknown 0 ___ Furuno® 1 ___ Simrad® 2 ___ Northstar Tech 3 ___ Notus 4 ___ Marport 5 ___ Scanmar 6 ___ Combination 8 ___ Other 9 ___	ESCAPE OUTLET 45 USED? NO 0 ___ YES 1 ___ TYPE 46 Unknown 0 ___ Panel 1 ___ Opening 2 ___ Single Flap 3 ___ Double Flap 4 ___ Other 9 ___	
KITE PANEL KITE USED? 11 NO 0 ___ YES 1 ___	FISHING CIRCLE # MESHES 15 MESH SIZE 16 in		KITE USED? 11 Number 12 ___ Width 13 ___in Length 14 ___in		COMMENTS		GROUND GEAR 23 24 25 TYPE GROUND CABLE BRIDLE/ LEG SWEEP Unknown 00 ___ Chain 01 ___ Cable / Wire 02 ___ Wrapped Cable 03 ___ Rock Hopper 04 ___ Roller 05 ___ Rubber Cookie 06 ___ Bobbin 07 ___ Plate Gear 08 ___ None 98 ___ Other 99 ___ 23A 24A 25A	LINER MESH SIZE 35 ___ mm ___ mm ___ mm ___ mm ___ mm ___ mm ___ mm ___ mm	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 <input type="checkbox"/> Codend 6 <input type="checkbox"/> Other 9 <input type="checkbox"/>	MESH SIZE 47 in 46A LENGTH # MESHES 48 OR 49 in WIDTH # MESHES 50 OR 51 in SHAPE Type Code 52 LOCATION Type Code 53			
COMMENTS		SWEEP GEAR Number 26 ___ Diameter 27 in		FLOATS Number 28 ___ Diameter 29 in		COMMENTS		COMMENTS		COMMENTS		COMMENTS	

40A

**BOTTOM TRAWL GEAR CHARACTERISTICS LOG
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GEAR CODE 0 5 0		GEAR NUMBER 1	NET NAME Bottom Trawl	NET TYPE 2 Seam Flounder Net	NET BUILDER Northeastern Trawl Systems, Inc	CODEND/LINER HUNG CODEND LINER	GEAR MOUNTED ELECTRONICS	EXCLUDER/SEPARATOR DEVICE	
LINER USED? NO 0 <input checked="" type="checkbox"/> YES 1 <input type="checkbox"/>		CONSTRUCTION MATERIAL TYPE NET BODY CODEND LINER		LENGTH MEASUREMENTS		Unknown 0 ___ Diamond 1 ___ Square 2 <input checked="" type="checkbox"/> Square, wrapped 3 ___ Combination 8 ___	USED? NO 0 ___ YES 1 <input checked="" type="checkbox"/>	USED? NO 0 ___ YES 1 <input checked="" type="checkbox"/> Type Code 08	
DOORS USED? NO 0 ___ YES 1 <input checked="" type="checkbox"/>		Poly 02 <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Kevlar® 03 ___ Spectra® 04 ___ Tenex® 05 ___ Nomex® 06 ___ Combination 98 ___ Other 99 ___		Footrope/Sweep 72 ft Ground Cable 30 fm Bridle 8 fm		TWINE TYPE CODEND LINER Unknown 0 ___ Single 1 ___ Double 2 <input checked="" type="checkbox"/> Single on Top/ ___ Double on Bottom 3 ___ Other 9 ___	NUMBER OF TRANSDUCERS 2	T.E.D. EXTENSION Mesh Size ___ . ___ in (circle one) A / E	
WEIGHT OF ONE DOOR 900 kg		STRENGTHENER USED? NO 0 <input checked="" type="checkbox"/> YES 1 ___		CHAFING GEAR USED? NO 0 ___ YES 1 <input checked="" type="checkbox"/>		CODEND MESH SIZE 161 mm 160 mm 162 mm 163 mm 158 mm 162 mm 157 mm 164 mm 163 mm 157 mm	TYPE Unknown 0 ___ Wired 1 ___ Wireless 2 <input checked="" type="checkbox"/> Both 3 ___	ESCAPE OUTLET USED? NO 0 ___ YES 1 <input checked="" type="checkbox"/>	
KITE PANEL KITE USED? Number 3 NO 0 ___ Width 39 in YES 1 <input checked="" type="checkbox"/> Length 39 in		FISHING CIRCLE # MESHES 480 MESH SIZE 5.0 in		BRAND Unknown 0 ___ Furuno® 1 ___ Simrad® 2 <input checked="" type="checkbox"/> Northstar Tech 3 ___ Notus 4 ___ Marport 5 ___ Scanmar 6 ___ Combination 8 ___ Other 9 ___		TYPE Unknown 0 ___ Panel 1 <input checked="" type="checkbox"/> Opening 2 ___ Single Flap 3 ___ Double Flap 4 ___ Other 9 ___			
COMMENTS Doors are 1980 lbs each.		GROUND GEAR TYPE GROUND CABLE BRIDLE/ LEG SWEEP Unknown 00 ___ Chain 01 ___ Cable / Wire 02 <input checked="" type="checkbox"/> Wrapped Cable 03 ___ Rock Hopper 04 ___ Roller 05 ___ Rubber Cookie 06 ___ <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Bobbin 07 ___ Plate Gear 08 ___ None 98 ___ Other 99 ___		SWEEP GEAR Number 30 Diameter 16 in		FLOATS Number 15 Diameter 8 in		LOCATION (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 <input checked="" type="checkbox"/> Codend 6 <input type="checkbox"/> Other 9 <input type="checkbox"/>	MESH SIZE 12 in LENGTH # MESHES 10 OR ___ in WIDTH # MESHES 60 OR ___ in SHAPE Type Code 05 LOCATION Type Code 1

ADDITIONAL COMMENTS	EXCLUDER/SEPARATOR DEVICE TYPE CODES: 00 = Unknown 24 = Bent Rod T.E.D. 01 = Nordmore Grate 25 = Conch T.E.D. 03 = Separator Panel 26 = Flat Bottom T.E.D. 04 = Guiding Device 27 = Whelk T.E.D. 05 = Raised Footrope 28 = Flexible T.E.D. 06 = Compound Nordmore Grate 29 = Parker Soft T.E.D. 07 = Double Nordmore Grate 30 = Experimental T.E.D. 08 = Large Mesh 31 = Northeast Modified T.E.D. 20 = T.E.D., Unknown 32 = Large Flat Bar T.E.D. 21 = Standard T.E.D. 98 = Combination (Comment) 22 = Weedless T.E.D. 99 = Other (Comment) 23 = Flounder T.E.D.	ESCAPE OUTLET SHAPE CODES: 00 = Unknown 01 = Rectangular 05 = Trapezoid 06 = Square 07 = Diamond 08 = Triangular 09 = Semi-Circle 11 = Horizontal Cut 99 = Other (Comment)	ESCAPE OUTLET LOCATION CODES: 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 GEAR LOG (FRONT)
NMFS FISHERIES AT-SEA MONITORING PROGRAM
ASMOTG 05/01/16

OBS/TRIPID	A
DATE LANDED mm/yy	B /
PAGE #	C of ____

GEAR CODE <input type="text"/> <input type="text"/> <input type="text"/>	GEAR # <input type="text"/> <input type="text"/>	NET NAME	NET TYPE
D	1	2	3

CODEND LINER ? Y <input type="checkbox"/> N <input type="checkbox"/>	5	EXCLUDER/ SEPARATOR? Y <input type="checkbox"/> N <input type="checkbox"/>	41	ESCAPE OUTLET? Y <input type="checkbox"/> N <input type="checkbox"/>	45
---	----------	---	-----------	---	-----------

CODEND		LINER			
CODEND HUNG UNKNOWN <input type="checkbox"/> DIAMOND <input type="checkbox"/> SQUARE <input type="checkbox"/> SQUARE WRAPPED <input type="checkbox"/> COMBINATION <input type="checkbox"/>	30	CODEND MESH MEASUREMENTS ____mm ____mm ____mm ____mm	LINER HUNG UNKNOWN <input type="checkbox"/> DIAMOND <input type="checkbox"/> SQUARE <input type="checkbox"/> SQUARE WRAPPED <input type="checkbox"/> COMBINATION <input type="checkbox"/>	31	LINER MESH MEASUREMENTS ____mm ____mm ____mm ____mm
CODEND TWINE UNKNOWN <input type="checkbox"/> SINGLE <input type="checkbox"/> DOUBLE <input type="checkbox"/> TOP SINGLE/ BOTTOM DOUBLE <input type="checkbox"/> OTHER <input type="checkbox"/>	32	____mm ____mm ____mm ____mm 34	LINER TWINE UNKNOWN <input type="checkbox"/> SINGLE <input type="checkbox"/> DOUBLE <input type="checkbox"/> TOP SINGLE/ BOTTOM DOUBLE <input type="checkbox"/> OTHER <input type="checkbox"/>	33	____mm ____mm ____mm ____mm 35

COMMENTS

GEAR CODE <input type="text"/> <input type="text"/> <input type="text"/>	GEAR # <input type="text"/> <input type="text"/>	NET NAME	NET TYPE
---	---	----------	----------

CODEND LINER ? Y <input type="checkbox"/> N <input type="checkbox"/>	5	EXCLUDER/ SEPARATOR? Y <input type="checkbox"/> N <input type="checkbox"/>	41	ESCAPE OUTLET? Y <input type="checkbox"/> N <input type="checkbox"/>	45
---	----------	---	-----------	---	-----------

CODEND		LINER			
CODEND HUNG UNKNOWN <input type="checkbox"/> DIAMOND <input type="checkbox"/> SQUARE <input type="checkbox"/> SQUARE WRAPPED <input type="checkbox"/> COMBINATION <input type="checkbox"/>	30	CODEND MESH MEASUREMENTS ____mm ____mm ____mm ____mm	LINER HUNG UNKNOWN <input type="checkbox"/> DIAMOND <input type="checkbox"/> SQUARE <input type="checkbox"/> SQUARE WRAPPED <input type="checkbox"/> COMBINATION <input type="checkbox"/>	31	LINER MESH MEASUREMENTS ____mm ____mm ____mm ____mm
CODEND TWINE UNKNOWN <input type="checkbox"/> SINGLE <input type="checkbox"/> DOUBLE <input type="checkbox"/> TOP SINGLE/ BOTTOM DOUBLE <input type="checkbox"/> OTHER <input type="checkbox"/>	32	____mm ____mm ____mm ____mm 34	LINER TWINE UNKNOWN <input type="checkbox"/> SINGLE <input type="checkbox"/> DOUBLE <input type="checkbox"/> TOP SINGLE/ BOTTOM DOUBLE <input type="checkbox"/> OTHER <input type="checkbox"/>	33	____mm ____mm ____mm ____mm 35

COMMENTS

BOTTOM TRAWL GEAR LOG (FRONT)
NMFS FISHERIES AT-SEA MONITORING PROGRAM
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OBS/TRIPID	A99006-
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GEAR CODE 050	GEAR # 01	NET NAME Bottom Trawl	NET TYPE 2-Seam Flatfish Net
-------------------------	---------------------	---------------------------------	--

CODEND LINER ? Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	EXCLUDER/ SEPARATOR? Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	ESCAPE OUTLET? Y <input type="checkbox"/> N <input checked="" type="checkbox"/>
--	--	--

CODEND		LINER	
CODEND HUNG	CODEND MESH MEASUREMENTS	LINER HUNG	LINER MESH MEASUREMENTS
UNKNOWN <input type="checkbox"/>	158 mm	UNKNOWN <input type="checkbox"/>	_____mm
DIAMOND <input type="checkbox"/>	163 mm	DIAMOND <input type="checkbox"/>	_____mm
SQUARE <input checked="" type="checkbox"/>	160 mm	SQUARE <input type="checkbox"/>	_____mm
SQUARE WRAPPED <input type="checkbox"/>	158 mm	SQUARE WRAPPED <input type="checkbox"/>	_____mm
COMBINATION <input type="checkbox"/>	160 mm	COMBINATION <input type="checkbox"/>	_____mm
CODEND TWINE		LINER TWINE	
UNKNOWN <input type="checkbox"/>	158 mm	UNKNOWN <input type="checkbox"/>	_____mm
SINGLE <input checked="" type="checkbox"/>	157 mm	SINGLE <input type="checkbox"/>	_____mm
DOUBLE <input type="checkbox"/>	163 mm	DOUBLE <input type="checkbox"/>	_____mm
TOP SINGLE/	164 mm	TOP SINGLE/	_____mm
BOTTOM DOUBLE <input type="checkbox"/>	163 mm	BOTTOM DOUBLE <input type="checkbox"/>	_____mm
OTHER <input type="checkbox"/>		OTHER <input type="checkbox"/>	

COMMENTS

GEAR CODE <input type="text"/>	GEAR # <input type="text"/>	NET NAME	NET TYPE
-----------------------------------	--------------------------------	----------	----------

CODEND LINER ? Y <input type="checkbox"/> N <input type="checkbox"/>	EXCLUDER/ SEPARATOR? Y <input type="checkbox"/> N <input type="checkbox"/>	ESCAPE OUTLET? Y <input type="checkbox"/> N <input type="checkbox"/>
---	---	---

CODEND		LINER	
CODEND HUNG	CODEND MESH MEASUREMENTS	LINER HUNG	LINER MESH MEASUREMENTS
UNKNOWN <input type="checkbox"/>	_____mm	UNKNOWN <input type="checkbox"/>	_____mm
DIAMOND <input type="checkbox"/>	_____mm	DIAMOND <input type="checkbox"/>	_____mm
SQUARE <input type="checkbox"/>	_____mm	SQUARE <input type="checkbox"/>	_____mm
SQUARE WRAPPED <input type="checkbox"/>	_____mm	SQUARE WRAPPED <input type="checkbox"/>	_____mm
COMBINATION <input type="checkbox"/>	_____mm	COMBINATION <input type="checkbox"/>	_____mm
CODEND TWINE		LINER TWINE	
UNKNOWN <input type="checkbox"/>	_____mm	UNKNOWN <input type="checkbox"/>	_____mm
SINGLE <input type="checkbox"/>	_____mm	SINGLE <input type="checkbox"/>	_____mm
DOUBLE <input type="checkbox"/>	_____mm	DOUBLE <input type="checkbox"/>	_____mm
TOP SINGLE/	_____mm	TOP SINGLE/	_____mm
BOTTOM DOUBLE <input type="checkbox"/>	_____mm	BOTTOM DOUBLE <input type="checkbox"/>	_____mm
OTHER <input type="checkbox"/>		OTHER <input type="checkbox"/>	

COMMENTS

BOTTOM TRAWL GEAR LOG (BACK)
NMFS FISHERIES AT-SEA MONITORING PROGRAM
ASMOTG 05/01/16

OBS/TRIPID	
DATE LANDED mm/yy	/
PAGE #	___ of ___

GEAR CODE □□□	GEAR # □□	NET NAME	NET TYPE
------------------	--------------	----------	----------

CODEND LINER ? Y <input type="checkbox"/> N <input type="checkbox"/>	EXCLUDER/ SEPARATOR? Y <input type="checkbox"/> N <input type="checkbox"/>	ESCAPE OUTLET? Y <input type="checkbox"/> N <input type="checkbox"/>
---	---	---

CODEND		LINER	
CODEND HUNG	CODEND MESH MEASUREMENTS	LINER HUNG	LINER MESH MEASUREMENTS
UNKNOWN <input type="checkbox"/>	_____mm	UNKNOWN <input type="checkbox"/>	_____mm
DIAMOND <input type="checkbox"/>	_____mm	DIAMOND <input type="checkbox"/>	_____mm
SQUARE <input type="checkbox"/>	_____mm	SQUARE <input type="checkbox"/>	_____mm
SQUARE WRAPPED <input type="checkbox"/>	_____mm	SQUARE WRAPPED <input type="checkbox"/>	_____mm
COMBINATION <input type="checkbox"/>	_____mm	COMBINATION <input type="checkbox"/>	_____mm
CODEND TWINE		LINER TWINE	
UNKNOWN <input type="checkbox"/>	_____mm	UNKNOWN <input type="checkbox"/>	_____mm
SINGLE <input type="checkbox"/>	_____mm	SINGLE <input type="checkbox"/>	_____mm
DOUBLE <input type="checkbox"/>	_____mm	DOUBLE <input type="checkbox"/>	_____mm
TOP SINGLE/ BOTTOM DOUBLE <input type="checkbox"/>	_____mm	TOP SINGLE/ BOTTOM DOUBLE <input type="checkbox"/>	_____mm
OTHER <input type="checkbox"/>		OTHER <input type="checkbox"/>	

GEAR CODE □□□	GEAR # □□	NET NAME	NET TYPE
------------------	--------------	----------	----------

CODEND LINER ? Y <input type="checkbox"/> N <input type="checkbox"/>	EXCLUDER/ SEPARATOR? Y <input type="checkbox"/> N <input type="checkbox"/>	ESCAPE OUTLET? Y <input type="checkbox"/> N <input type="checkbox"/>
---	---	---

CODEND		LINER	
CODEND HUNG	CODEND MESH MEASUREMENTS	LINER HUNG	LINER MESH MEASUREMENTS
UNKNOWN <input type="checkbox"/>	_____mm	UNKNOWN <input type="checkbox"/>	_____mm
DIAMOND <input type="checkbox"/>	_____mm	DIAMOND <input type="checkbox"/>	_____mm
SQUARE <input type="checkbox"/>	_____mm	SQUARE <input type="checkbox"/>	_____mm
SQUARE WRAPPED <input type="checkbox"/>	_____mm	SQUARE WRAPPED <input type="checkbox"/>	_____mm
COMBINATION <input type="checkbox"/>	_____mm	COMBINATION <input type="checkbox"/>	_____mm
CODEND TWINE		LINER TWINE	
UNKNOWN <input type="checkbox"/>	_____mm	UNKNOWN <input type="checkbox"/>	_____mm
SINGLE <input type="checkbox"/>	_____mm	SINGLE <input type="checkbox"/>	_____mm
DOUBLE <input type="checkbox"/>	_____mm	DOUBLE <input type="checkbox"/>	_____mm
TOP SINGLE/ BOTTOM DOUBLE <input type="checkbox"/>	_____mm	TOP SINGLE/ BOTTOM DOUBLE <input type="checkbox"/>	_____mm
OTHER <input type="checkbox"/>		OTHER <input type="checkbox"/>	

COMMENTS	FOR OFFICE USE ONLY

Bottom 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.

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.	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.	Whole fathoms	Dash.
4	Pumping Begin/End Date	Only pumping to your vessel. Comment on pumping to other vessel(s).	MM/DD/YY	If pumping occurs, cannot be unknown Leave blank if not pumping.
5	Pumping Begin/End Time	Only pumping to your vessel. Comment on pumping to other vessel(s).	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.

BOTTOM TRAWL HAUL LOG
NMFS FISHERIES OBSERVER PROGRAM
OBOU OBHAU OBSPP 05/01/16

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 kn DIRECTION M °	WAVE HEIGHT N ft	DEPTH, HAUL BEGIN O fm	GEAR COND CODE P
--------------------	-----------------	-----------------	---	--	--	---	--------------------------	---	----------------------------	-------------------------------------	----------------------------

HAUL/FISHING INFO	DATE mm/dd/yy	TIME 24 hours	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)				NUMBER OF TURNS	TOW SPEED	WIRE OUT
BEGIN HAUL	/ Q /	R :	Station 1 9960 -	Latitude / Bearing S	Station 2 9960 -	Longitude / Bearing	1	2 kn	3 fm
BEGIN FISHING	/ /	:	COMMENTS				WATER TEMP T ° F	TARGET SPECIES U	CODE V
END HAUL	/ /	:					9960 -		9960 -

GEAR ONBOARD	/ /	:	COMMENTS	VERTICAL OPENING ** 6 ft
FISH PUMPING				HORIZONTAL OPENING ** 7 ft
BEGIN	4 / /	5 :		DOOR SPREAD ** 8 ft
END	/ /	:		SAMPLE WEIGHT MULTIPLIER W

** 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		
A'	B'	C'	D'	E'	F'	G'									
1							11								
2							12								
3							13								
4							14								
5							15								
6							16								
7							17								
8							18								
9							19								
10							20								

BOTTOM TRAWL HAUL LOG
NMFS FISHERIES OBSERVER PROGRAM
OBOTH OBHAU OBSPP 05/01/16

OBS/ TRIP ID	A99006-
DATE LAND (mm/yy)	10 / 16
PAGE #	1 OF 2

GEAR CODE 0 5 0	GEAR # 0 1	HAUL # 0 2 3	HAUL OBS? NO 0 YES 1 X	ON-EFFORT? NO 0 YES 1 X	CATCH? NO 0 YES 1 X	INC TAKE? NO 0 X YES 1	WEATHER CODE 01	WIND SPEED 5 kn DIRECTION 320 °	WAVE HEIGHT 3 ft	DEPTH, HAUL BEGIN 20 fm	GEAR COND CODE 010
---------------------------	----------------------	------------------------	-------------------------------------	--------------------------------------	----------------------------------	-------------------------------------	---------------------------	---	----------------------------	--------------------------------------	------------------------------

HAUL/FISHING INFO	DATE mm/dd/yy	TIME 24 hours	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)				NUMBER OF TURNS	TOW SPEED	WIRE OUT
BEGIN HAUL	10 / 16 / 16	13:07	Station 1 9960 -	Latitude / Bearing 35 ° 38.3	Station 2 9960 -	Longitude / Bearing 75 ° 17.3	1	2.7 kn	75 fm
BEGIN FISHING	10 / 16 / 16	13:14					WATER TEMP 54.0 ° F	TARGET SPECIES Summer Flounder CODE	
END HAUL	10 / 16 / 16	15:07	9960 -	35 ° 34.2	9960 -	75 ° 19.9			

GEAR ONBOARD	10 / 16 / 16	15:14	COMMENTS Catch was dumped, therefore no pumping information						VERTICAL OPENING ** 7 ft
FISH PUMPING									HORIZONTAL OPENING ** 38 ft
BEGIN	— / — / —	— : —							DOOR SPREAD ** _____ ft
END	— / — / —	— : —							SAMPLE WEIGHT MULTIPLIER 6.21

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		44.0	273	100	R	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								

TRAWL HAUL LOG
NMFS FISHERIES AT-SEA MONITORING PROGRAM
ASMOTH ASMHAU ASMSPP 05/01/16

OBS/TRIPID	A
DATE LANDED mm/yy	B /
PAGE #	C of

GEAR CODE <input type="text"/> <input type="text"/> <input type="text"/> D	GEAR NUMBER <input type="text"/> <input type="text"/> E	HAUL NUMBER <input type="text"/> <input type="text"/> <input type="text"/> F	HAUL OBSERVED? YES <input type="checkbox"/> NO <input type="checkbox"/> G	INC TAKE? YES <input type="checkbox"/> NO <input type="checkbox"/> J
WEATHER CODE K	WAVE HEIGHT N ft	GEAR COND CODE P	TARGET SPECIES 1 U	TARGET SPECIES 2 U2
HAUL INFO	DATE mm/dd/yy	TIME 24 hours	LATITUDE/LONGITUDE (DD MM.M)	
BEGIN HAUL	/ Q /	R :	S	or (STAT AREA)* S2
END HAUL	/ /	:		

COMMENTS _____ * Enter only if latitude/longitude coordinates are not available

SAMPLE WEIGHT MULTIPLIER
W

SPECIES NAME	SAMP. WEIGHT	POUNDS	DISP CODE	D/R	EST. METH.	SPECIES NAME	SAMP. WEIGHT	POUNDS	DISP CODE	D/R	EST. METH.
A'	C'	D'	E'	F'	G'						
1	_____					11	_____				
2	_____					12	_____				
3	_____					13	_____				
4	_____					14	_____				
5	_____					15	_____				
6	_____					16	_____				
7	_____					17	_____				
8	_____					18	_____				
9	_____					19	_____				
10	_____					20	_____				

TRAWL HAUL LOG
NMFS FISHERIES AT-SEA MONITORING PROGRAM
ASMOTH ASMHAU ASMSPP 05/01/16

OBS/TRIPID	A99006-
DATE LANDED mm/yy	10 / 16
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GEAR CODE 050	GEAR NUMBER 01	HAUL NUMBER 023	HAUL OBSERVED? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	INC TAKE? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
WEATHER CODE 01	WAVE HEIGHT 3 ft	GEAR COND CODE 01	TARGET SPECIES 1 Summer Flounder	TARGET SPECIES 2
HAUL INFO	DATE mm/dd/yy	TIME 24 hours	LATITUDE/LONGITUDE (DD MM.M)	
BEGIN HAUL	10 / 16 / 16	13 : 14	41° 03.8	71° 27.2
END HAUL	10 / 16 / 16	15 : 07	41° 00.7	71° 21.3

COMMENTS

* Enter only if latitude/longitude coordinates are not available

SAMPLE WEIGHT MULTIPLIER
4.78

SPECIES NAME	SAMP. WEIGHT	POUNDS	DISP CODE	D/R	EST. METH.	SPECIES NAME	SAMP. WEIGHT	POUNDS	DISP CODE	D/R	EST. METH.
1 Summer Flounder	<u>55.0</u>	263	100	R	02	11	_____				
2 Summer Flounder	_____	3.4	012	R	01	12	_____				
3 Spiny Dogfish	<u>13.5</u>	65	015	R	02	13	_____				
4 Smooth Dogfish	<u>7.8</u>	37	001	R	02	14	_____				
5 Clearnose Skate	<u>43.0</u>	206	001	R	02	15	_____				
6 Witch Flounder	_____	1.5	100	R	01	16	_____				
7 Shells, NK	<u>0.9</u>	4	054	R	02	17	_____				
8 Debris, Fishing Gear	_____	15	053	R	06	18	_____				
9	_____					19	_____				
10	_____					20	_____				

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.	Check one.	Cannot be unknown.
71*	Nets Connected?	Yes/No.	Check one.	"9".

TWIN TRAWL GEAR CHARACTERISTICS LOG
NMFS FISHERIES OBSERVER PROGRAM
OBTTG 05/01/16

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

GEAR CODE <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> D		GEAR NUMBER 1	NET NAME 2	NET TYPE 3	NET BUILDER 4	CODEND/LINER HUNG CODEND LINER 30 31		GEAR MOUNTED ELECTRONICS	EXCLUDER/SEPARATOR DEVICE 41
NET LOCATION 70		CONSTRUCTION MATERIAL			LENGTH MEASUREMENTS			Unknown 0 _____	USED? 36
Port 1 _____	TYPE	NET BODY	CODEND	LINER	Headrope 17 _____ ft	Diamond 1 _____		NO 0 _____	USED? 36
Starboard 2 _____	Unknown 00 8 9 10	_____	_____	_____	Footrope/Sweep 18 _____ ft	Square 2 _____		YES 1 _____	Type Code 42
Other 9 _____	Nylon 01 _____	_____	_____	_____	Ground Cable 19 _____ fm	Square, wrapped 3 _____		NUMBER OF	T.E.D. EXTENSION
DOORS USED? 6	Poly 02 _____	_____	_____	_____	Bridle 20 _____ fm	Combination 8 _____		TRANSDUCERS	43
NO 0 _____	Kevlar® 03 _____	_____	_____	_____	STRENGTHENER USED? 21	TWINE TYPE CODEND LINER		37	Mesh Size _____ . _____ in
YES 1 _____	Spectra® 04 _____	_____	_____	_____	NO 0 _____ YES 1 _____	Unknown 0 _____		TYPE 38	(circle one) A / E 44
WEIGHT OF ONE DOOR 7	Tenex® 05 _____	_____	_____	_____	CHAFING GEAR USED? 22	Single 1 _____		Unknown 0 _____	ESCAPE OUTLET
_____ kg	Nomex® 06 _____	_____	_____	_____	NO 0 _____ YES 1 _____	Double 2 _____		Wired 1 _____	USED? NO 0 _____ YES 1 _____
	Combination 98 _____	_____	_____	_____	NO 0 _____ YES 1 _____	Double on Bottom 3 _____		Wireless 2 _____	
	Other 99 _____	_____	_____	_____		Other 9 _____		Both 3 _____	
LINER USED? 5	NETS CONNECTED? 71	KITE PANEL 11		FISHING CIRCLE		CODEND MESH SIZE		BRAND 39	TYPE 46
NO 0 _____	NO 0 _____	KITE USED?		# MESHES 15		_____ mm _____ mm		Unknown 0 _____	Unknown 0 _____
YES 1 _____	YES 1 _____	Number 12		MESH SIZE 16 in		_____ mm _____ mm		Furuno® 1 _____	Panel 1 _____
		Width 13 in				_____ mm _____ mm		Simrad® 2 _____	Opening 2 _____
		Length 14 in				_____ mm _____ mm		Northstar Tech 3 _____	Single Flap 3 _____
COMMENTS		GROUND GEAR 23		24	25	LINER MESH SIZE		Notus 4 _____	Double Flap 4 _____
		TYPE		BRIDLE/LEG	SWEEP	_____ mm _____ mm		Marport 5 _____	Other 9 _____
		Unknown 00 _____		_____	_____	_____ mm _____ mm		Scanmar 6 _____	
		Chain 01 _____		_____	_____	_____ mm _____ mm		Combination 8 _____	46A
		Cable / Wire 02 _____		_____	_____	_____ mm _____ mm		Other 9 _____	
		Wrapped Cable 03 _____		_____	_____	_____ mm _____ mm		39A	MESH SIZE 47 in
		Rock Hopper 04 _____		_____	_____	_____ mm _____ mm		LOCATION 40	LENGTH
		Roller 05 _____		_____	_____	_____ mm _____ mm		(check all that apply)	# MESHES 48 OR 49 in
		Rubber Cookie 06 _____		_____	_____	_____ mm _____ mm		Unknown 0 <input type="checkbox"/>	WIDTH
		Bobbin 07 _____		_____	_____	_____ mm _____ mm		Headrope 1 <input type="checkbox"/>	# MESHES 50 OR 51 in
		Plate Gear 08 _____		_____	_____	_____ mm _____ mm		Wings 2 <input type="checkbox"/>	
		None 98 _____		_____	_____	_____ mm _____ mm		Footrope 3 <input type="checkbox"/>	SHAPE Type Code 52
		Other 99 _____		_____	_____	_____ mm _____ mm		Door 5 <input type="checkbox"/>	LOCATION Type Code 53
		23A		24A	25A	_____ mm _____ mm		Codend 6 <input type="checkbox"/>	
		SWEEP GEAR		FLOATS		_____ mm _____ mm		Other 9 <input type="checkbox"/>	
		Number 26		Number 28		_____ mm _____ mm		40A	
		Diameter 27 in		Diameter 29 in		_____ mm _____ mm			

TWIN TRAWL GEAR CHARACTERISTICS LOG
NMFS FISHERIES OBSERVER PROGRAM
OBTTG 05/01/16

OBS/TRIP ID	A99052-	
DATE LANDED mm/yy	11 / 16	
PAGE #	1	OF 1

GEAR CODE 0 5 3		GEAR NUMBER 01	NET NAME Twin Trawl	NET TYPE 2-Seam Groundfish Trawl	NET BUILDER Custom Built	CODEND/LINER HUNG CODEND LINER		GEAR MOUNTED ELECTRONICS	EXCLUDER/SEPARATOR DEVICE	
NET LOCATION Port 1 X Starboard 2 Other 9		CONSTRUCTION MATERIAL TYPE NET BODY CODEND LINER			LENGTH MEASUREMENTS		Unknown 0 Diamond 1 X Square 2 Square, wrapped 3 Combination 8		USED? NO 0 X YES 1	
DOORS USED? NO 0 YES 1 X		Poly 02 X X Kevlar® 03 Spectra® 04 Tenex® 05 Nomex® 06 Combination 98 Other 99			Headrope 100 ft Footrope/Sweep 170 ft Ground Cable 55 fm Bridle 50 fm		TWINE TYPE CODEND LINER Unknown 0 Single 1 Double 2 X Single on Top/ Double on Bottom 3 Other 9		NUMBER OF TRANSDUCERS 2	Type Code T.E.D. EXTENSION Mesh Size _____ in (circle one) A / E
WEIGHT OF ONE DOOR 270 kg		STRENGTHENER USED? NO 0 X YES 1 CHAFING GEAR USED? NO 0 YES 1 X			CODEND MESH SIZE 154 mm 160 mm 162 mm 161 mm 158 mm 160 mm 157 mm 157 mm 159 mm 162 mm		BRAND Unknown 0 Furuno® 1 Simrad® 2 X Northstar Tech 3 Notus 4 Marport 5 Scanmar 6 Combination 8 Other 9		ESCAPE OUTLET USED? NO 0 X YES 1	
LINER USED? NO 0 X YES 1		NETS CONNECTED? NO 0 YES 1 X		KITE PANEL KITE USED? Number 3 Width 39 in Length 39 in		FISHING CIRCLE # MESHES 600 MESH SIZE 6.0 in		TYPE Unknown 0 Panel 1 Opening 2 Single Flap 3 Double Flap 4 Other 9		
COMMENTS		GROUND GEAR TYPE GROUND CABLE BRIDLE/LEG SWEEP				LINER MESH SIZE ____ mm ____ mm ____ mm ____ mm ____ mm ____ mm		LOCATION (check all that apply)		MESH SIZE _____ in
		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				SWEEP GEAR Number 120 Diameter 18 in		FLOATS Number 70 Diameter 8 in		LENGTH # MESHES _____ OR _____ in
								Unknown 0 <input type="checkbox"/> Headrope 1 <input type="checkbox"/> Wings 2 <input type="checkbox"/> Footrope 3 <input type="checkbox"/> Door 5 <input checked="" type="checkbox"/> Codend 6 <input type="checkbox"/> Other 9 <input type="checkbox"/>		WIDTH # MESHES _____ OR _____ in SHAPE Type Code _____ LOCATION Type Code _____

ADDITIONAL COMMENTS

EXCLUDER/SEPARATOR DEVICE TYPE CODES:

- | | |
|------------------------------|--------------------------------|
| 00 = Unknown | 24 = Bent Rod T.E.D. |
| 01 = Nordmore Grate | 25 = Conch T.E.D. |
| 03 = Separator Panel | 26 = Flat Bottom T.E.D. |
| 04 = Guiding Device | 27 = Whelk T.E.D. |
| 05 = Raised Footrope | 28 = Flexible T.E.D. |
| 06 = Compound Nordmore Grate | 29 = Parker Soft T.E.D. |
| 07 = Double Nordmore Grate | 30 = Experimental T.E.D. |
| 08 = Large Mesh | 31 = Northeast Modified T.E.D. |
| 20 = T.E.D., Unknown | 32 = Large Flat Bar T.E.D. |
| 21 = Standard T.E.D. | 98 = Combination (Comment) |
| 22 = Weedless T.E.D. | 99 = Other (Comment) |
| 23 = Flounder T.E.D. | |

ESCAPE OUTLET SHAPE CODES:

- 00 = Unknown
- 01 = Rectangular
- 05 = Trapezoid
- 06 = Square
- 07 = Diamond
- 08 = Triangular
- 09 = Semi-Circle
- 11 = Horizontal Cut
- 99 = Other (Comment)

ESCAPE OUTLET LOCATION CODES:

- 0 = Unknown
- 1 = Net Top
- 2 = Net Bottom
- 3 = Net Side
- 4 = Codend Top
- 5 = Codend Bottom
- 8 = Combination (Comment)
- 9 = Other (Comment)

TWIN TRAWL GEAR LOG (FRONT)
NMFS FISHERIES AT-SEA MONITORING PROGRAM
ASMTTG 05/01/16

OBS/TRIPID	A
DATE LANDED mm/yy	B /
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GEAR CODE <input type="text"/>	GEAR # D <input type="text"/>	NETS CONNECTED? Y <input type="checkbox"/> 71 N <input type="checkbox"/>
-----------------------------------	---	---

PORT NET (P)

NET NAME 2	NET TYPE 3	CODEND LINER? Y <input type="checkbox"/> N <input type="checkbox"/>	EXCLUDER/ SEPARATOR? Y <input type="checkbox"/> 41 N <input type="checkbox"/>	ESCAPE OUTLET? Y <input type="checkbox"/> 45 N <input type="checkbox"/>
----------------------	----------------------	---	--	--

CODEND		LINER	
CODEND HUNG 30	CODEND MESH	LINER HUNG 31	LINER MESH
UNKNOWN <input type="checkbox"/>	MEASUREMENTS	UNKNOWN <input type="checkbox"/>	MEASUREMENTS
DIAMOND <input type="checkbox"/>	_____mm	DIAMOND <input type="checkbox"/>	_____mm
SQUARE <input type="checkbox"/>	_____mm	SQUARE <input type="checkbox"/>	_____mm
SQUARE WRAPPED <input type="checkbox"/>	_____mm	SQUARE WRAPPED <input type="checkbox"/>	_____mm
COMBINATION <input type="checkbox"/>	_____mm	COMBINATION <input type="checkbox"/>	_____mm
CODEND TWINE 32	_____mm	LINER TWINE 33	_____mm
UNKNOWN <input type="checkbox"/>	_____mm	UNKNOWN <input type="checkbox"/>	_____mm
SINGLE <input type="checkbox"/>	_____mm	SINGLE <input type="checkbox"/>	_____mm
DOUBLE <input type="checkbox"/>	_____mm	DOUBLE <input type="checkbox"/>	_____mm
TOP SINGLE/ BOTTOM DOUBLE <input type="checkbox"/>	_____mm	TOP SINGLE/ BOTTOM DOUBLE <input type="checkbox"/>	_____mm
OTHER <input type="checkbox"/>	34	OTHER <input type="checkbox"/>	35

COMMENTS

STARBOARD NET (S)

NET NAME	NET TYPE	CODEND LINER? Y <input type="checkbox"/> N <input type="checkbox"/>	EXCLUDER/ SEPARATOR? Y <input type="checkbox"/> N <input type="checkbox"/>	ESCAPE OUTLET? Y <input type="checkbox"/> N <input type="checkbox"/>
----------	----------	---	--	--

CODEND		LINER	
CODEND HUNG	CODEND MESH	LINER HUNG	LINER MESH
UNKNOWN <input type="checkbox"/>	MEASUREMENTS	UNKNOWN <input type="checkbox"/>	MEASUREMENTS
DIAMOND <input type="checkbox"/>	_____mm	DIAMOND <input type="checkbox"/>	_____mm
SQUARE <input type="checkbox"/>	_____mm	SQUARE <input type="checkbox"/>	_____mm
SQUARE WRAPPED <input type="checkbox"/>	_____mm	SQUARE WRAPPED <input type="checkbox"/>	_____mm
COMBINATION <input type="checkbox"/>	_____mm	COMBINATION <input type="checkbox"/>	_____mm
CODEND TWINE	_____mm	LINER TWINE	_____mm
UNKNOWN <input type="checkbox"/>	_____mm	UNKNOWN <input type="checkbox"/>	_____mm
SINGLE <input type="checkbox"/>	_____mm	SINGLE <input type="checkbox"/>	_____mm
DOUBLE <input type="checkbox"/>	_____mm	DOUBLE <input type="checkbox"/>	_____mm
TOP SINGLE/ BOTTOM DOUBLE <input type="checkbox"/>	_____mm	TOP SINGLE/ BOTTOM DOUBLE <input type="checkbox"/>	_____mm
OTHER <input type="checkbox"/>		OTHER <input type="checkbox"/>	

COMMENTS

TWIN TRAWL GEAR LOG (FRONT)
NMFS FISHERIES AT-SEA MONITORING PROGRAM
ASMTTG 05/01/16

OBS/TRIPID	A99006-
DATE LANDED mm/yy	10 /16
PAGE #	1 of 1

GEAR CODE 050	GEAR # 01	NETS CONNECTED? Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
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PORT NET (P)

NET NAME Twin Trawl	NET TYPE 2-Seam Flatfish Net	CODEND LINER? Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	EXCLUDER/ SEPARATOR? Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	ESCAPE OUTLET? Y <input type="checkbox"/> N <input checked="" type="checkbox"/>
-------------------------------	--	--	---	---

CODEND		LINER	
CODEND HUNG		LINER HUNG	
UNKNOWN <input type="checkbox"/>	CODEND MESH MEASUREMENTS	UNKNOWN <input type="checkbox"/>	LINER MESH MEASUREMENTS
DIAMOND <input type="checkbox"/>	<u>158</u> mm	DIAMOND <input type="checkbox"/>	_____mm
SQUARE <input checked="" type="checkbox"/>	<u>163</u> mm	SQUARE <input type="checkbox"/>	_____mm
SQUARE WRAPPED <input type="checkbox"/>	<u>160</u> mm	SQUARE WRAPPED <input type="checkbox"/>	_____mm
COMBINATION <input type="checkbox"/>	<u>158</u> mm	COMBINATION <input type="checkbox"/>	_____mm
CODEND TWINE		LINER TWINE	
UNKNOWN <input type="checkbox"/>	<u>160</u> mm	UNKNOWN <input type="checkbox"/>	_____mm
SINGLE <input checked="" type="checkbox"/>	<u>158</u> mm	SINGLE <input type="checkbox"/>	_____mm
DOUBLE <input type="checkbox"/>	<u>157</u> mm	DOUBLE <input type="checkbox"/>	_____mm
TOP SINGLE/	<u>163</u> mm	TOP SINGLE/	_____mm
BOTTOM DOUBLE <input type="checkbox"/>	<u>164</u> mm	BOTTOM DOUBLE <input type="checkbox"/>	_____mm
OTHER <input type="checkbox"/>	<u>163</u> mm	OTHER <input type="checkbox"/>	_____mm

COMMENTS

STARBOARD NET (S)

NET NAME Twin Trawl	NET TYPE 2-Seam Flatfish Net	CODEND LINER? Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	EXCLUDER/ SEPARATOR? Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	ESCAPE OUTLET? Y <input type="checkbox"/> N <input checked="" type="checkbox"/>
-------------------------------	--	--	---	---

CODEND		LINER	
CODEND HUNG		LINER HUNG	
UNKNOWN <input type="checkbox"/>	CODEND MESH MEASUREMENTS	UNKNOWN <input type="checkbox"/>	LINER MESH MEASUREMENTS
DIAMOND <input type="checkbox"/>	<u>162</u> mm	DIAMOND <input type="checkbox"/>	_____mm
SQUARE <input checked="" type="checkbox"/>	<u>159</u> mm	SQUARE <input type="checkbox"/>	_____mm
SQUARE WRAPPED <input type="checkbox"/>	<u>161</u> mm	SQUARE WRAPPED <input type="checkbox"/>	_____mm
COMBINATION <input type="checkbox"/>	<u>164</u> mm	COMBINATION <input type="checkbox"/>	_____mm
CODEND TWINE		LINER TWINE	
UNKNOWN <input type="checkbox"/>	<u>157</u> mm	UNKNOWN <input type="checkbox"/>	_____mm
SINGLE <input checked="" type="checkbox"/>	<u>159</u> mm	SINGLE <input type="checkbox"/>	_____mm
DOUBLE <input type="checkbox"/>	<u>160</u> mm	DOUBLE <input type="checkbox"/>	_____mm
TOP SINGLE/	<u>158</u> mm	TOP SINGLE/	_____mm
BOTTOM DOUBLE <input type="checkbox"/>	<u>161</u> mm	BOTTOM DOUBLE <input type="checkbox"/>	_____mm
OTHER <input type="checkbox"/>	<u>162</u> mm	OTHER <input type="checkbox"/>	_____mm

COMMENTS

TWIN TRAWL GEAR LOG (BACK)
NMFS FISHERIES AT-SEA MONITORING PROGRAM
ASMTTG 05/01/16

OBS/TRIPID	
DATE LANDED mm/yy	/
PAGE #	___ of ___

GEAR CODE □□□□	GEAR # □□	NETS CONNECTED? Y <input type="checkbox"/> N <input type="checkbox"/>
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PORT NET (P)

NET NAME	NET TYPE	CODEND LINER? Y <input type="checkbox"/> N <input type="checkbox"/>	EXCLUDER/ SEPARATOR? Y <input type="checkbox"/> N <input type="checkbox"/>	ESCAPE OUTLET? Y <input type="checkbox"/> N <input type="checkbox"/>
----------	----------	---	--	--

CODEND		LINER	
CODEND HUNG	CODEND MESH MEASUREMENTS	LINER HUNG	LINER MESH MEASUREMENTS
UNKNOWN <input type="checkbox"/>	_____mm	UNKNOWN <input type="checkbox"/>	_____mm
DIAMOND <input type="checkbox"/>	_____mm	DIAMOND <input type="checkbox"/>	_____mm
SQUARE <input type="checkbox"/>	_____mm	SQUARE <input type="checkbox"/>	_____mm
SQUARE WRAPPED <input type="checkbox"/>	_____mm	SQUARE WRAPPED <input type="checkbox"/>	_____mm
COMBINATION <input type="checkbox"/>	_____mm	COMBINATION <input type="checkbox"/>	_____mm
CODEND TWINE		LINER TWINE	
UNKNOWN <input type="checkbox"/>	_____mm	UNKNOWN <input type="checkbox"/>	_____mm
SINGLE <input type="checkbox"/>	_____mm	SINGLE <input type="checkbox"/>	_____mm
DOUBLE <input type="checkbox"/>	_____mm	DOUBLE <input type="checkbox"/>	_____mm
TOP SINGLE/ BOTTOM DOUBLE <input type="checkbox"/>	_____mm	TOP SINGLE/ BOTTOM DOUBLE <input type="checkbox"/>	_____mm
OTHER <input type="checkbox"/>	_____mm	OTHER <input type="checkbox"/>	_____mm

STARBOARD NET (S)

NET NAME	NET TYPE	CODEND LINER? Y <input type="checkbox"/> N <input type="checkbox"/>	EXCLUDER/ SEPARATOR? Y <input type="checkbox"/> N <input type="checkbox"/>	ESCAPE OUTLET? Y <input type="checkbox"/> N <input type="checkbox"/>
----------	----------	---	--	--

CODEND		LINER	
CODEND HUNG	CODEND MESH MEASUREMENTS	LINER HUNG	LINER MESH MEASUREMENTS
UNKNOWN <input type="checkbox"/>	_____mm	UNKNOWN <input type="checkbox"/>	_____mm
DIAMOND <input type="checkbox"/>	_____mm	DIAMOND <input type="checkbox"/>	_____mm
SQUARE <input type="checkbox"/>	_____mm	SQUARE <input type="checkbox"/>	_____mm
SQUARE WRAPPED <input type="checkbox"/>	_____mm	SQUARE WRAPPED <input type="checkbox"/>	_____mm
COMBINATION <input type="checkbox"/>	_____mm	COMBINATION <input type="checkbox"/>	_____mm
CODEND TWINE		LINER TWINE	
UNKNOWN <input type="checkbox"/>	_____mm	UNKNOWN <input type="checkbox"/>	_____mm
SINGLE <input type="checkbox"/>	_____mm	SINGLE <input type="checkbox"/>	_____mm
DOUBLE <input type="checkbox"/>	_____mm	DOUBLE <input type="checkbox"/>	_____mm
TOP SINGLE/ BOTTOM DOUBLE <input type="checkbox"/>	_____mm	TOP SINGLE/ BOTTOM DOUBLE <input type="checkbox"/>	_____mm
OTHER <input type="checkbox"/>	_____mm	OTHER <input type="checkbox"/>	_____mm

PORT COMMENTS	STARBOARD COMMENTS	FOR OFFICE USE ONLY
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Twin 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.

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".

TWIN TRAWL HAUL LOG
NMFS FISHERIES OBSERVER PROGRAM
OBTH OBHAU OBSPP 05/01/16

OBS/ TRIP ID	A
DATE LAND (mm/yy)	B / /
PAGE #	C OF D

GEAR CODE D	GEAR # E	HAUL # F	HAUL OBS? NO 0 G YES 1 _____	ON-EFFORT? NO 0 H YES 1 _____	CATCH? NO 0 I YES 1 _____	INC TAKE? NO 0 J YES 1 _____	WEATHER CODE K	WIND SPEED L DIRECTION M ° kn	WAVE HEIGHT N ft	DEPTH, HAUL BEGIN O fm	GEAR COND CODE P
--------------------	-----------------	-----------------	---	--	--	---	--------------------------	--	-------------------------------	--	----------------------------

HAUL INFO	DATE mm/dd/yy	TIME 24 hours	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)				NUMBER OF TURNS	TOW SPEED	WIRE OUT	WATER TEMP °
BEGIN HAUL	Q / /	R :	Station 1 9960 -	Latitude / Bearing S	Station 2 9960 -	Longitude / Bearing	1	2 kn	3 fm	T ° F
BEGIN FISHING	/ /	:					TARGET SPECIES	CODE	NET OBSERVED 9	
END HAUL	/ /	:					Station 1 9960 -		Station 2 9960 -	U

GEAR ONBOARD	/ /	:	**Only fill in if gear mounted electronics are used						VERTICAL OPENING	**
COMMENTS									6 ft	
									HORIZONTAL OPENING	**
									7 ft	
									DOOR SPREAD	**
									8 ft	
									SAMPLE WEIGHT MULTIPLIER	w _____

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		
A'	B'	C'	D'	E'	F'	G'									
1							11								
2							12								
3							13								
4							14								
5							15								
6							16								
7							17								
8							18								
9							19								
10							20								

TWIN TRAWL HAUL LOG
NMFS FISHERIES OBSERVER PROGRAM
OBTH OBHAU OBSPP 05/01/16

OBS/ TRIP ID	A99006-
DATE LAND (mm/yy)	06 / 16
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GEAR CODE 0 5 3	GEAR # 0 1	HAUL # 0 0 7	HAUL OBS? NO 0 YES 1 <u>X</u>	ON-EFFORT? NO 0 YES 1 <u>X</u>	CATCH? NO 0 YES 1 <u>X</u>	INC TAKE? NO 0 <u>X</u> YES 1	WEATHER CODE 02	WIND SPEED 15 kn DIRECTION 320 °	WAVE HEIGHT 4 ft	DEPTH, HAUL BEGIN 35 fm	GEAR COND CODE 010
HAUL INFO	DATE mm/dd/yy	TIME 24 hours	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)				NUMBER OF TURNS	TOW SPEED	WIRE OUT	WATER TEMP	
BEGIN HAUL	06 / 08 / 16	21:52	Station 1 9960 -	Latitude / Bearing 40 ° 00.3	Station 2 9960 -	Longitude / Bearing 71 ° 18.2	0	2.7 kn	120 fm	43.0 F	
BEGIN FISHING	06 / 08 / 16	22:01					TARGET SPECIES	CODE	NET OBSERVED		
END HAUL	06 / 09 / 16	01:16					9960 -	40 ° 12.1	9960 -	71 ° 16.5	Atlantic Longfin Squid
GEAR ONBOARD	06 / 09 / 16	01:32					**Only fill in if gear mounted electronics are used		VERTICAL OPENING		
COMMENTS Barndoor Skate and Monkfish taken out of pile before volume obtained, therefore actual weights obtained.								8 ft			
								HORIZONTAL OPENING			
								40 ft			
								DOOR SPREAD			
								85 ft			
								SAMPLE WEIGHT MULTIPLIER			
								5.37			

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 Atlantic Longfin Squid		134.0	720	100	R	02							
2 Silver Hake		84.7	455	100	R	02							
3 Monkfish			82	100	R	01							
4 Spiny Dogfish		10.5	56	001	R	02							
5 Barndoor Skate			22	001	R	01							
6 Redfish, nk			2	001	R	06							
7 Jonah Crab			5	001	R	06							
8 Rock Crab			5	001	R	06							
9 Seastar, Starfish, nk			2	001	R	06							
10 Conch, nk			5	001	R	06							

TWIN TRAWL HAUL LOG
NMFS FISHERIES AT-SEA MONITORING PROGRAM
ASMTTH ASMHAU ASMSP 01/01/16

OBS/TRIPID	A
DATE LANDED mm/yy	B /
PAGE #	C of

GEAR CODE <input type="text"/> <input type="text"/> <input type="text"/> D	GEAR NUMBER <input type="text"/> <input type="text"/> E	HAUL NUMBER <input type="text"/> <input type="text"/> <input type="text"/> F	HAUL OBSERVED? YES <input type="checkbox"/> NO <input type="checkbox"/> G	INC TAKE? YES <input type="checkbox"/> NO <input type="checkbox"/> J
WEATHER CODE K	WAVE HEIGHT N ft	GEAR COND CODE P	TARGET SPECIES 1 U	TARGET SPECIES 2 U2
HAUL INFO	DATE mm/dd/yy	TIME 24 hours	LATITUDE/LONGITUDE (DD MM.M)	
BEGIN HAUL	/ Q /	R :	S	or (STAT AREA)* S2
END HAUL	/ /	:		

COMMENTS * Enter only if latitude/longitude coordinates are not available

NET OBSERVED	
Port	<input type="checkbox"/> 9
Starboard	<input type="checkbox"/>
Both	<input type="checkbox"/>
SAMPLE WEIGHT MULTIPLIER	
W _____	

SPECIES NAME	SAMP. WEIGHT	POUNDS	DISP CODE	D/R	EST. METH.	SPECIES NAME	SAMP. WEIGHT	POUNDS	DISP CODE	D/R	EST. METH.
A'	C'	D'	E'	F'	G'						
1	_____					11	_____				
2	_____					12	_____				
3	_____					13	_____				
4	_____					14	_____				
5	_____					15	_____				
6	_____					16	_____				
7	_____					17	_____				
8	_____					18	_____				
9	_____					19	_____				
10	_____					20	_____				

TWIN TRAWL HAUL LOG
NMFS FISHERIES AT-SEA MONITORING PROGRAM
ASMTTH ASMHAU ASMSP 01/01/16

OBS/TRIPID	A99006-
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GEAR CODE 050	GEAR NUMBER 01	HAUL NUMBER 023	HAUL OBSERVED? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	INC TAKE? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	
WEATHER CODE 01	WAVE HEIGHT 3 ft	GEAR COND CODE 01	TARGET SPECIES 1 Summer Flounder		TARGET SPECIES 2
HAUL INFO	DATE mm/dd/yy	TIME 24 hours	LATITUDE/LONGITUDE (DD MM.M)		
BEGIN HAUL	10 / 16 / 16	13 : 14	LATITUDE 41° 03.8	LONGITUDE 71° 27.2	or (STAT AREA)*
END HAUL	10 / 16 / 16	15 : 07	41° 00.7	71° 21.3	

COMMENTS * Enter only if latitude/longitude coordinates are not available

NET OBSERVED
Port <input type="checkbox"/>
Starboard <input type="checkbox"/>
Both <input checked="" type="checkbox"/>
SAMPLE WEIGHT MULTIPLIER
4 . 7 8

SPECIES NAME	SAMP. WEIGHT	POUNDS	DISP CODE	D/R	EST. METH.	SPECIES NAME	SAMP. WEIGHT	POUNDS	DISP CODE	D/R	EST. METH.
1 Summer Flounder	<u>55.0</u>	263	100	R	02	11	---				
2 Summer Flounder	---	3.4	012	R	01	12	---				
3 Spiny Dogfish	<u>13.5</u>	65	015	R	02	13	---				
4 Smooth Dogfish	<u>7.8</u>	37	001	R	02	14	---				
5 Clearnose Skate	<u>43.0</u>	206	001	R	02	15	---				
6 Witch Flounder	---	1.5	100	R	01	16	---				
7 Shells, NK	<u>0.9</u>	4	054	R	02	17	---				
8 Debris, Fishing Gear	---	15	053	R	06	18	---				
9	---					19	---				
10	---					20	---				

Pair and Single Mid-water Trawl Gear Characteristics Log

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.

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").

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 ⁹ . 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. Describe "Other" on line 57A.	Check one	"0".
58	Minimum Mesh Size	Obtain from captain.	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	Weights A/E	Actual (weighed or weight visually confirmed from stamped weight) or Estimated (obtained from captain).	Check one	"0".
63	Floats Used?	Yes/No.	Check one	"9".
64	Blowout Section Used?	Yes/No.	Check one	"9".
65	Top Bridle Length	Obtain from captain. Record for only one side .	Whole fathoms	Dash. Dash if not used.
66	Wing Bridle Length	Obtain from captain. Record for only one side .	Whole fathoms	Dash. Dash if not used.
67	Bottom Bridle Length	Obtain from captain. Record for only one side .	Whole fathoms	Dash. Dash if not used.
68	Bridles per Warp	Obtain from captain or net plans.	Whole number	Dash.
69	Bridles per Side	Obtain from captain or net plans. Record for only one side .	Whole number	Dash.
70	Warps per Boat	Obtain from captain or net plans.	Whole number	Dash. Dash if not pair trawl.

⁹ Gear intended to be fished in continual contact with the bottom should be recorded as Bottom Trawl.

PAIR and SINGLE MID-WATER TRAWL GEAR CHARACTERISTICS LOG
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OBS/TRIP ID	A
DATE LANDED mm/yy	B /
PAGE #	C <input type="checkbox"/> OF <input type="checkbox"/>

GEAR CODE	D	GEAR NUMBER	NET NAME	NET TYPE	NET BUILDER	YEAR NET MADE	CODEND/LINER	GEAR MOUNTED	EXCLUDER/SEPARATOR DEVICE				
<input type="checkbox"/>		1	2	3	4	54	HUNG Unknown Diamond Square Square, wrapped Combination	ELECTRONICS USED ? NO YES	41 NO 0 YES 1				
GEAR FISHED	55	CONSTRUCTION MATERIAL			LENGTH MEASUREMENTS		CODEND 30	LINER 31	NUMBER OF TRANSDUCERS** 37	Type Code 42			
Unknown	0	TYPE	NET BODY	CODEND	LINER	Headrope	0	0	0				
Pelagic	1	Unknown	00	8	9	10	1	0	0				
Semi-Pelagic	2	Nylon	01				2	1	1				
Bottom	3	Poly	02				3						
Other	9	Kevlar®	03				8						
55A		Spectra®	04										
		Tenex®	05										
		Nomex®	06										
NET CONSTRUCTION	56	Combination	98										
Unknown	0	Other	99										
Rope/Large Mesh	1			8A	9A	10A							
Parallel Rope Trawl	2												
Other	9												
56A		BUOYANCY/RELEASE DEVICES			BRIDLES		CODEND 32	LINER 33	TYPE 38	T.E.D. EXTENSION 43			
DESIGN	57	USED?	NO	YES	BRIDLES/WARP	68	Unknown	0	(circle one) A / E	44			
Unknown	0	FLOATS	63	0	1		Single	1	Unknown	0			
2 Seam	1	BLOWOUT	64	0	1		Double	2	Wired	1			
4 Seam, Equal Panels	2	KITE	11	0	1		Single on Top/		Wireless	2			
4 Seam, Unequal Panels	3						Double on Bottom	3	Both	3			
Other	9						Other	9					
57A		BRIDLES/WARP			BRIDLES/SIDE		CODEND MESH SIZE 34		BRAND 39	TYPE 46			
NET BODY MESH SIZE		BRIDLES/SIDE	69					Unknown	0	Unknown	0		
Minimum	58	WARPS/BOAT*	70					Unknown	0	Panel	1		
Maximum	59	FISHING CIRCLE						Furuno®	1	Opening	2		
		# MESHES	15					Simrad®	2	Single Flap	3		
		MESH SIZE	16					Northstar Tech	3	Double Flap	4		
		STRENGTHENER USED?	21					Notus	4	Other	9		
		NO	0	YES	1			Marport	5				
		CHAFING GEAR USED?	22					Scanmar	6				
		NO	0	YES	1			Combination	8				
								Other	9				
LINER USED?	5	COMMENTS			STRENGTHENER USED?		LINER MESH SIZE 35		Other	9			
NO	0				NO				39A	MESH SIZE 47			
YES	1				NO		0	YES	1		LOCATION 40	LENGTH 48 OR 49	
DOORS	6				CHAFING GEAR USED?		22				(check all that apply)	Unknown	49
USED? NO	0				NO		0	YES	1			Headrope	1
WEIGHT	7				NO				Wings	2			
WEIGHTS (TOTAL)	60				YES				Footrope	3			
USED? NO	0				YES				Door	5			
WEIGHT	61				YES				Codend	6			
Actual	1				YES				Other	9			
Estimated	2				YES				40A	SHAPE Type Code 52			
					YES					LOCATION Type Code 53			

PAIR and SINGLE MID-WATER TRAWL GEAR CHARACTERISTICS LOG
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OBS/TRIP ID	A99052-
DATE LANDED mm/yy	10 / 16
PAGE #	1 OF 2

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	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 193 mm 191 mm LINER MESH SIZE 57 mm 58 mm 61 mm 59 mm 62 mm	GEAR MOUNTED ELECTRONICS USED ? NO 0 YES 1 X NUMBER OF TRANSDUCERS** 1 TYPE Unknown 0 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 LOCATION (check all that apply) Unknown 0 <input type="checkbox"/> Headrope 1 <input checked="" type="checkbox"/> Wings 2 <input type="checkbox"/> Footrope 3 <input type="checkbox"/> Door 5 <input type="checkbox"/> Codend 6 <input type="checkbox"/> Other 9 <input type="checkbox"/>	EXCLUDER/SEPARATOR DEVICE USED? NO 0 X YES 1 Type Code T.E.D. EXTENSION Mesh Size (circle one) A / E ESCAPE OUTLET USED? NO 0 X YES 1 TYPE Unknown 0 Panel 1 Opening 2 Single Flap 3 Double Flap 4 Other 9 MESH SIZE in LENGTH # MESHES OR in WIDTH # MESHES OR in SHAPE Type Code LOCATION Type Code
GEAR FISHED Unknown 0 Pelagic 1 X Semi-Pelagic 2 Bottom 3 Other 9	CONSTRUCTION MATERIAL TYPE NET BODY CODEND LINER Unknown 00 Nylon 01 X Poly 02 Kevlar® 03 Spectra® 04 X X Tenex® 05 Nomex® 06 Combination 98 Other 99	LENGTH MEASUREMENTS Headrope 400 ft Footrope/Sweep 400 ft Top Bridle 15 fm Wing Bridle 15 fm Bottom Bridle 15 fm		BRIDLES NUMBER BRIDLES/WARP 2 BRIDLES/SIDE 2 WARPS/BOAT* 1 FISHING CIRCLE # MESHES 90 MESH SIZE 457 in STRENGTHENER USED? NO 0 YES 1 X CHAFING GEAR USED? NO 0 YES 1 X		BUOYANCY/RELEASE DEVICES USED? NO YES FLOATS 0 X 1 BLOWOUT 0 X 1 KITE 0 X 1 KITE PANEL Number Length in Width in FLOATS Number Diameter in		
NET CONSTRUCTION Unknown 0 Rope/Large Mesh 1 X Parallel Rope Trawl 2 Other 9 DESIGN Unknown 0 2 Seam 1 4 Seam, Equal Panels 2 X 4 Seam, Unequal Panels 3 Other 9 NET BODY MESH SIZE Minimum 1.5 in Maximum 120.1 in	COMMENTS Gear onboard F/V Western Venture Codend = "Coversheet" Liner = "Brailer" * Fill in only on pair trawl trips.					** Include all sensors on the gear		
LINER USED? NO 0 YES 1 X								
DOORS USED? NO 0 X YES 1 WEIGHT kg WEIGHTS (TOTAL) USED? NO 0 YES 1 X WEIGHT 4000 lb Actual 1 Estimated 2 X								

ADDITIONAL COMMENTS	EXCLUDER/SEPARATOR DEVICE TYPE 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.	ESCAPE OUTLET SHAPE CODES: 00 = Unknown 01 = Rectangular 05 = Trapezoid 06 = Square 07 = Diamond 08 = Triangular 09 = Semi-Circle 11 = Horizontal Cut 99 = Other (Comment)	ESCAPE OUTLET LOCATION CODES: 0 = Unknown 1 = Net Top 2 = Net Bottom 3 = Net Side 4 = Codend Top 5 = Codend Bottom 8 = Combination (Comment) 9 = Other (Comment)
	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)		

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.

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
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OBPRH OBHAU OBSPP 05/01/16

OBS/ TRIP ID	A99012-
DATE LAND (mm/yy)	10 / 16
PAGE #	1 OF 3

GEAR CODE 1 7 0	GEAR # 0 1	HAUL # 0 0 1	HAUL OBS? NO 0 YES 1 <input checked="" type="checkbox"/>	ON-EFFORT? NO 0 YES 1 <input checked="" type="checkbox"/>	CATCH? NO 0 YES 1 <input checked="" type="checkbox"/>	INC TAKE? NO 0 <input checked="" type="checkbox"/> YES 1	WEATHER CODE 02	WIND SPEED 10 kn DIRECTION 225 °	WAVE HEIGHT 2 ft	DEPTH, HAUL BEGIN 48 fm	GEAR COND CODE 010
HAUL/FISHING INFO	DATE mm/dd/yy	TIME 24 hours	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)				NUMBER OF TURNS	TOW SPEED	WIRE OUT	WATER TEMP	
BEGIN HAUL	10 / 11 / 16	23 : 28	Station 1 9960 -	Latitude / Bearing 43° 37.4	Station 2 9960 -	Longitude / Bearing 69° 42.7	5	3.2 kn	210 fm	55.2 ° F	
BEGIN FISHING	10 / 11 / 16	23 : 32					TARGET SPECIES		CODE		
END HAUL	10 / 12 / 16	05 : 04					Atlantic Herring				
GEAR ONBOARD	10 / 12 / 16		Station 1 9960 -	Latitude / Bearing 43° 34.6	Station 2 9960 -	Longitude / Bearing 69° 43.2	DEPTH RANGE, HEADROPE				
FISH PUMPING			VERTICAL **	HORIZONTAL **	DOOR SPREAD **						
BEGIN	10 / 12 / 16	07 : 45	OPENING	OPENING			22		28 fm		
END	10 / 12 / 16	09 : 14	ft	ft	ft		DISTANCE BETWEEN BOATS *		200 300 ft		

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

*Only fill in for pair trawl trips
 **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
Atlantic Herring		.	295,000	100	R	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. Can be a list of gear numbers if all have identical characteristics.	2-digit code	Cannot be unknown.
2	Net Length	Obtain from captain.	Whole fathoms	Dash.
3	Bunt Length	Obtain from captain.	Whole fathoms	Dash.
4	Net Depth	Obtain from captain.	Whole fathoms	Dash.
5	Bunt Depth	Obtain from captain.	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.	Whole millimeters	Dash.
9	Twine Size of Bunt	Obtain from captain.	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.	Whole pounds	Dash.
19	Additional Weights Used?	Yes/No.	Check one	"9".

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
20	Additional Weights Weight	Obtain from captain.	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 "Combo" on line 22A.	Check one	"0".
23	Purse Ring Material	Obtain from captain. Describe "Other" on line 23A.	Check one	"0".

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

GEAR CODE	D	GEAR NUMBER(S)
<input type="text"/>		1

SEINE CHARACTERISTICS:

	NET	BUNT
LENGTH	2 fm	3 fm
DEPTH	4 fm	5 fm
MESH SIZE	6 in	7 in
TWINE SIZE	8 mm	9 mm

CONSTRUCTION MATERIAL

	10	11
Unknown	00	
Nylon	01	
Poly	02	
Kevlar®	03	
Spectra®	04	
Combination	98	
Other	99	
	10A	11A

GEAR CHARACTERISTICS:

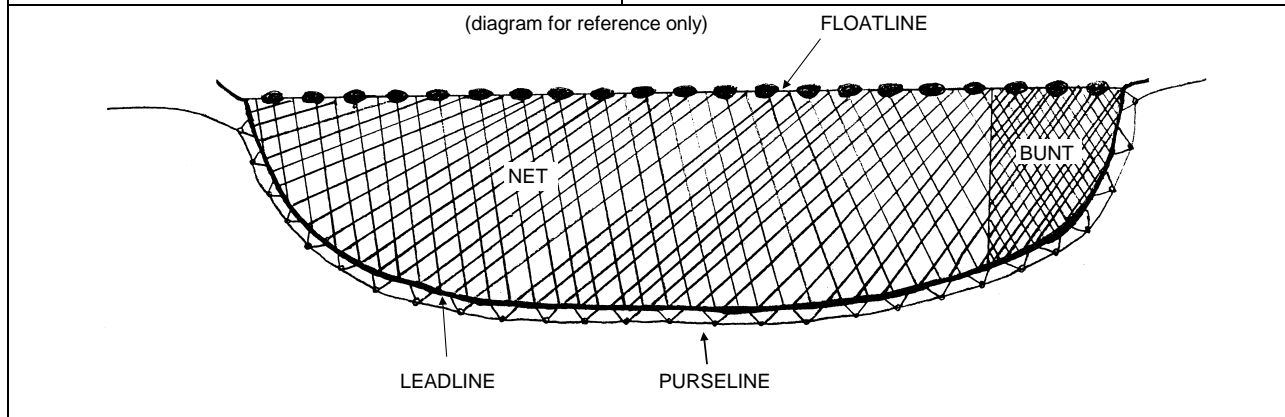
	LENGTH	DIAMETER
FLOATLINE	12 fm	13 in
LEADLINE	14 fm	15 in
PURSE LINE	16 fm	17 in
LEADLINE WEIGHT		18 lbs
ADDITIONAL WEIGHTS	19 No 0	Yes 1
		20 lbs

HAULING DEVICE 21

Unknown	0	Drum	3
Power Block	1	Other	9
Triplex	2		
21A			

PURSE RINGS:

TYPE	22	MATERIAL	23
Unknown	0	Unknown	0
Round	1	Steel	1
Snap	2	Iron	2
Roller	3	Alloy	3
Combo	8	Other	9
Other	9		
22A		23A	



COMMENTS

PURSE SEINE GEAR CHARACTERISTICS LOG
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OBS/TRIP ID	A99035-	
DATE LANDED mm/yy	09	/ 16
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GEAR CODE	GEAR NUMBER(S)
1 2 1	1

SEINE CHARACTERISTICS:

	NET	BUNT
LENGTH	380 fm	20 fm
DEPTH	50 fm	30 fm
MESH SIZE	1.13 in	1.13 in
TWINE SIZE	1 mm	2 mm

CONSTRUCTION MATERIAL

Unknown	00		
Nylon	01	X	X
Poly	02		
Kevlar®	03		
Spectra®	04		
Combination	98		
Other	99		

GEAR CHARACTERISTICS:

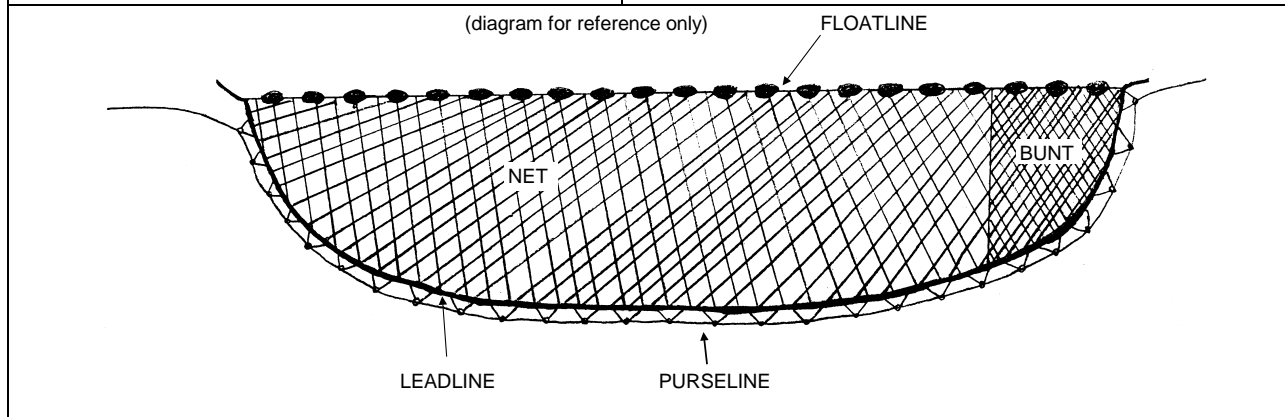
	LENGTH	DIAMETER
FLOATLINE	400 fm	1.25 in
LEADLINE	450 fm	0.75 in
PURSE LINE	500 fm	0.63 in
LEADLINE WEIGHT		3000 lbs
ADDITIONAL WEIGHTS	No 0 X	Yes 1

HAULING DEVICE

Unknown	0	Drum	3
Power Block	1 X	Other	9
Triplex	2		

PURSE RINGS:

TYPE		MATERIAL	
Unknown	0	Unknown	0
Round	1	Steel	1 X
Snap	2 X	Iron	2
Roller	3	Alloy	3
Combo	8	Other	9
Other	9		



COMMENTS

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 Haul 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 situation in COMMENTS but **do not** record those fish weights in the species section. 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.	Knots, to the nearest tenths	Dash.
2	Pumping Begin/End Date	Only pumping to your vessel. Comment on pumping to other vessel(s).	MM/DD/YY	If pumping occurs, cannot be unknown. Leave blank if not pumping.
3	Pumping Begin/End Time	Only pumping to your vessel. Comment on pumping to other vessel(s).	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
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OBPSH OBHAU OBSPP 05/01/16

OBS/ TRIP ID	A99024-
DATE LAND (mm/yy)	09 / 16
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GEAR CODE 1 2 1	GEAR # 0 1	HAUL # 0 0 1	HAUL OBS? NO 0 <input checked="" type="checkbox"/> YES 1 <input type="checkbox"/>	ON-EFFORT? NO 0 <input type="checkbox"/> YES 1 <input checked="" type="checkbox"/>	CATCH? NO 0 <input type="checkbox"/> YES 1 <input checked="" type="checkbox"/>	INC TAKE? NO 0 <input checked="" type="checkbox"/> YES 1 <input type="checkbox"/>	WEATHER CODE 03	WIND SPEED 10 kn DIRECTION 225 °		WAVE HEIGHT 2 ft	DEPTH, HAUL BEGIN 69 fm	GEAR COND CODE 510
SET INFO	DATE mm/dd/yy	TIME 24 hours	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)				SET SPEED	TARGET SPECIES CODE(S)				
BEGIN	09 / 14 / 16	20 : 42	Station 1 9960 -	Latitude / Bearing 45 ° 51.3	Station 2 9960 -	Longitude / Bearing 70 ° 28.7	6.0 kn	Atlantic Herring				
END	09 / 14 / 16	20 : 58	PLANE USED? NO 0 <input checked="" type="checkbox"/> YES 1 <input type="checkbox"/>	TIME UP :	WATER TEMP (Fahrenheit) 57 . 8 F	NO 0 YES 1 SET BY PLANE? <input checked="" type="checkbox"/> _____	NO 0 YES 1 SUCCESSFUL SET? _____ <input checked="" type="checkbox"/>					
FISH PUMPING				TIME DOWN :		SET ON DEBRIS? <input checked="" type="checkbox"/> _____	FISH LOST? <input checked="" type="checkbox"/> _____					
BEGIN	09 / 14 / 16	21 : 15										
END	09 / 14 / 16	21 : 56										

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		SPECIES		POUNDS	DISP CODE	WEIGHT	
NAME	CODE			D/R	ESTIMATION METHOD CODE	NAME	CODE			D/R	ESTIMATION METHOD CODE
1	Fish, nk	1,000	048	R	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 trawl nets (port and starboard) 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 05/01/16

OBS/TRIP ID	A99062-	
DATE LANDED mm/yy	06	/ 16
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GEAR CODE 0 5 2		GEAR NUMBER 01	NET NAME Twin Trawl	NET TYPE 4-Seam Scallop Trawl	NET BUILDER Superior Trawl	CODEND/LINER HUNG CODEND LINER		GEAR MOUNTED ELECTRONICS	EXCLUDER/SEPARATOR DEVICE	
NET LOCATION Port 1 X Starboard 2 Other 9		CONSTRUCTION MATERIAL TYPE NET BODY CODEND LINER			LENGTH MEASUREMENTS		Unknown 0 Diamond 1 X Square 2 Square, wrapped 3 Combination 8		USED? NO 0 YES 1 X	
DOORS USED? NO 0 YES 1 X		Poly 02 X X Kevlar® 03 Spectra® 04 Tenex® 05 Nomex® 06 Combination 98 Other 99			Headrope 70 ft Footrope/Sweep 70 ft Ground Cable 25 fm Bridle 25 fm		TWINE TYPE CODEND LINER Unknown 0 Single 1 Double 2 X Single on Top/ Double on Bottom 3 Other 9		NUMBER OF TRANSDUCERS TYPE Unknown 0 Wired 1 Wireless 2 Both 3	Type Code T.E.D. EXTENSION Mesh Size . in (circle one) A / E
WEIGHT OF ONE DOOR 270 kg		STRENGTHENER USED? NO 0 X YES 1 CHAFING GEAR USED? NO 0 X YES 1			CODEND MESH SIZE 141 mm 143 mm 145 mm 147 mm 145 mm 142 mm 143 mm 150 mm 146 mm 149 mm		BRAND Unknown 0 Furuno® 1 Simrad® 2 Northstar Tech 3 Notus 4 Marport 5 Scanmar 6 Combination 8 Other 9		ESCAPE OUTLET USED? NO 0 YES 1 X	
LINER USED? NO 0 X YES 1		NETS CONNECTED? NO 0 YES 1 X		KITE PANEL KITE USED? Number 3 Width 39 in Length 39 in		FISHING CIRCLE # MESHES 60 MESH SIZE 5.5 in		TYPE Unknown 0 Panel 1 Opening 2 Single Flap 3 Double Flap 4 Other 9		
COMMENTS		GROUND GEAR TYPE GROUND CABLE BRIDLE/LEG SWEEP				LINER MESH SIZE mm mm mm mm mm mm		LOCATION (check all that apply)		MESH SIZE in
		Unknown 00 Chain 01 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				Unknown 0 Headrope 1 Wings 2 Footrope 3 Door 5 Codend 6 Other 9		LENGTH # MESHES OR in		WIDTH # MESHES OR in
		SWEEP GEAR Number Diameter in		FLOATS Number 30 Diameter 10 in				SHAPE Type Code		LOCATION Type Code

ADDITIONAL COMMENTS

EXCLUDER/SEPARATOR DEVICE TYPE CODES:

- | | |
|------------------------------|--------------------------------|
| 00 = Unknown | 24 = Bent Rod T.E.D. |
| 01 = Nordmore Grate | 25 = Conch T.E.D. |
| 03 = Separator Panel | 26 = Flat Bottom T.E.D. |
| 04 = Guiding Device | 27 = Whelk T.E.D. |
| 05 = Raised Footrope | 28 = Flexible T.E.D. |
| 06 = Compound Nordmore Grate | 29 = Parker Soft T.E.D. |
| 07 = Double Nordmore Grate | 30 = Experimental T.E.D. |
| 08 = Large Mesh | 31 = Northeast Modified T.E.D. |
| 20 = T.E.D., Unknown | 32 = Large Flat Bar T.E.D. |
| 21 = Standard T.E.D. | 98 = Combination (Comment) |
| 22 = Weedless T.E.D. | 99 = Other (Comment) |
| 23 = Flounder T.E.D. | |

ESCAPE OUTLET SHAPE CODES:

- 00 = Unknown
- 01 = Rectangular
- 05 = Trapezoid
- 06 = Square
- 07 = Diamond
- 08 = Triangular
- 09 = Semi-Circle
- 11 = Horizontal Cut
- 99 = Other (Comment)

ESCAPE OUTLET LOCATION CODES:

- 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, and only partially hauled back, include the time spent hauling and resetting the net in this 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 05/01/16

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 G YES 1 _____	ON-EFFORT? NO 0 H YES 1 _____	CATCH? NO 0 I YES 1 _____	INC TAKE? NO 0 J YES 1 _____	WEATHER CODE K	WIND SPEED L kn DIRECTION M °		WAVE HEIGHT N ft	DEPTH, HAUL BEGIN O fm	GEAR COND CODE P
--------------------	-----------------	-----------------	---	--	--	---	--------------------------	--	--	----------------------------	-------------------------------------	----------------------------

HAUL INFO	DATE mm/dd/yy	TIME 24 hours	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)				NET OBSERVED 9	TOW SPEED 2 kn	WIRE OUT 3 fm
BEGIN HAUL	Q / /	R :	Station 1 9960 -	Latitude / Bearing S	Station 2 9960 -	Longitude / Bearing	Port 1 _____ Starboard 2 _____ Both 3 _____ Aft 4 _____	TARGET SPECIES U CODE V	
BEGIN FISHING	/ /	:							
END HAUL	/ /	:	9960 -		9960 -				

GEAR ONBOARD	/ /	:					SEA SCALLOP CLAPPERS OBS? 12 NO 0 _____ YES 1 _____	NUMBER OF TURNS 1
COMMENTS								WATER TEMP T ° F

SAMPLE WEIGHT MULTIPLIER W	VERTICAL OPENING 6 ft	HORIZONTAL OPENING 7 ft	DOOR SPREAD 8 ft
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** 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		
A'	B'	C'	D'	E'	F'	G'									
1							11								
2							12								
3							13								
4							14								
5							15								
6							16								
7							17								
8							18								
9							19								
10							20								

SCALLOP TRAWL HAUL LOG
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OBS/ TRIP ID	A99013-
DATE LAND (mm/yy)	06 / 16
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GEAR CODE 0 5 2	GEAR # 0 1	HAUL # 0 2 1	HAUL OBS? NO 0 YES 1 X	ON-EFFORT? NO 0 YES 1 X	CATCH? NO 0 YES 1 X	INC TAKE? NO 0 X YES 1	WEATHER CODE 01	WIND SPEED 10 kn DIRECTION 90 °	WAVE HEIGHT 2 ft	DEPTH, HAUL BEGIN 35 fm	GEAR COND CODE 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 / 16	12 : 25	Station 1 9960 -	Latitude / Bearing 35 ° 38.3	Station 2 9960 -	Longitude / Bearing 75 ° 17.3	Port 1 Starboard 2 Both 3 X Aft 4	3.1 kn	75 fm
BEGIN FISHING	06 / 12 / 16	22:01					TARGET SPECIES Sea Scallops	CODE 8009	
END HAUL	06 / 13 / 16	01:16	9960 -	35 ° 34.2	9960 -	75 ° 19.9	SEA SCALLOP CLAPPERS OBS? NO 0 YES 1 X	NUMBER OF TURNS 1	
GEAR ONBOARD	06 / 13 / 16	01:32						WATER TEMP 60 . 0 F	

COMMENTS

SAMPLE WEIGHT MULTIPLIER	VERTICAL OPENING ** 6 ft	HORIZONTAL OPENING ** 12 ft	DOOR SPREAD ** 15 ft
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** 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	Sea Scallops	8009	49	100	D	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 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.	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. See Appendix D – Conversion Tables.	Latitude/Longitude, to the nearest tenth of a minute OR LORAN station bearings	3-digit statistical area See Appendix A – Northeast Statistical Areas.
9	Last Haul End Position	See Appendix C – Set/Haul Time Definitions. See Appendix D – Conversion Tables.	Latitude/Longitude, to the nearest tenth of a minute OR LORAN station bearings	3-digit statistical area See Appendix A – Northeast Statistical Areas.
10	Average Number of Basket Kept	Obtain from captain.	Whole baskets	Dash.

SCALLOP TRAWL OFF-WATCH HAUL LOG
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OBS/TRIP ID	A
DATE LANDED mm/yy	B /
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WATCH #	WATCH INFO	DATE mm/dd/yy	TIME 24 hours	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)				SEA SCALLOPS # OF BASKETS KEPT (AVERAGE)
				Station 1	Latitude / Bearing	Station 2	Longitude / Bearing	
1								10
FIRST HAUL	BEGIN	4 / /	: 6	9960-	8	9960-		
LAST HAUL	END	5 / /	: 7	9960-	9	9960-		
2								
FIRST HAUL	BEGIN	/ /	:	9960-		9960-		
LAST HAUL	END	/ /	:	9960-		9960-		
3								
FIRST HAUL	BEGIN	/ /	:	9960-		9960-		
LAST HAUL	END	/ /	:	9960-		9960-		
4								
FIRST HAUL	BEGIN	/ /	:	9960-		9960-		
LAST HAUL	END	/ /	:	9960-		9960-		
5								
FIRST HAUL	BEGIN	/ /	:	9960-		9960-		
LAST HAUL	END	/ /	:	9960-		9960-		
6								
FIRST HAUL	BEGIN	/ /	:	9960-		9960-		
LAST HAUL	END	/ /	:	9960-		9960-		
7								
FIRST HAUL	BEGIN	/ /	:	9960-		9960-		
LAST HAUL	END	/ /	:	9960-		9960-		
8								
FIRST HAUL	BEGIN	/ /	:	9960-		9960-		
LAST HAUL	END	/ /	:	9960-		9960-		
9								
FIRST HAUL	BEGIN	/ /	:	9960-		9960-		
LAST HAUL	END	/ /	:	9960-		9960-		
10								
FIRST HAUL	BEGIN	/ /	:	9960-		9960-		
LAST HAUL	END	/ /	:	9960-		9960-		

**SCALLOP TRAWL OFF-WATCH HAUL LOG
NMFS FISHERIES OBSERVER PROGRAM
OBSTO OBHAU 05/01/16**

OBS/TRIP ID	A99012-
DATE LANDED mm/yy	05 / 16
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WATCH #	WATCH INFO	DATE mm/dd/yy	TIME 24 hours	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)			SEA SCALLOPS # OF BASKETS KEPT (AVERAGE)		
				Station 1	Latitude / Bearing	Station 2		Longitude / Bearing	
01	9	BEGIN	05 / 06 / 16	00:00	9960-	41° 07.2	9960-	69° 22.8	30
FIRST HAUL	15	END	05 / 07 / 16	06:00	9960-	41° 08.3	9960-	69° 25.6	
02	21	BEGIN	05 / 07 / 16	12:00	9960-	41° 08.3	9960-	69° 25.6	40
FIRST HAUL	27	END	05 / 07 / 16	18:00	9960-	41° 07.4	9960-	69° 22.3	
03	33	BEGIN	05 / 08 / 16	00:00	9960-	41° 07.4	9960-	69° 22.3	35
FIRST HAUL	39	END	05 / 08 / 16	06:00	9960-	41° 07.9	9960-	69° 24.9	
04	45	BEGIN	05 / 08 / 16	12:00	9960-	41° 07.9	9960-	69° 24.9	35
FIRST HAUL	51	END	05 / 08 / 16	18:00	9960-	41° 06.9	9960-	69° 21.5	
05	57	BEGIN	05 / 09 / 16	00:00	9960-	41° 06.9	9960-	69° 21.5	50
FIRST HAUL	63	END	05 / 09 / 16	06:00	9960-	41° 07.6	9960-	69° 23.4	
06	69	BEGIN	05 / 09 / 16	12:00	9960-	41° 07.6	9960-	69° 23.4	45
FIRST HAUL	75	END	05 / 09 / 16	18:00	9960-	41° 07.2	9960-	69° 22.8	
07	81	BEGIN	05 / 10 / 16	00:00	9960-	41° 06.9	9960-	69° 21.5	55
FIRST HAUL	87	END	05 / 10 / 16	06:00	9960-	41° 07.2	9960-	69° 22.8	
08	93	BEGIN	05 / 10 / 16	12:00	9960-	41° 07.9	9960-	69° 24.9	55
FIRST HAUL	99	END	05 / 10 / 16	18:00	9960-	41° 07.2	9960-	69° 22.8	
09	105	BEGIN	05 / 11 / 16	06:00	9960-	41° 06.9	9960-	69° 21.5	50
FIRST HAUL	111	END	05 / 11 / 16	12:00	9960-	41° 07.9	9960-	69° 24.9	
10	117	BEGIN	05 / 11 / 16	18:00	9960-	41° 08.3	9960-	69° 25.6	45
FIRST HAUL	123	END	05 / 11 / 16	00:00	9960-	41° 06.9	9960-	69° 21.5	

Scallop Dredge Gear Characteristics Log

A scallop gear is defined as a distinct combination of scallop 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 Scallop Dredge Gear Characteristics Log.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Gear Number	Unique identifier for each 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.	Check box	Cannot be unknown. Leave blank if not fished aft.
3	Frame Type	Visually confirm and verify with captain.	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 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.	Whole number	Dash.
10	Chain Configuration	Visually confirm and verify with captain.	Check one	"0".
11	Twine Top Mesh Size	Measure with calipers.	Whole millimeters	Dash.
12	# Meshes Wide	Count.	Whole number	Dash.
13	# Meshes Long	Count.	Whole number	Dash.
14	Twine Top Hung	Visually confirm.	Check one	"0".
15	# Rings on Which Twine Top Hangs	Count.	Whole number	Dash.
16	Chafing Gear Used?	Yes/No.	Check one	"9".
17	# Rows of rings in Apron	Count.	Whole number	Dash.
18	Inside ring size, Top of Bag	Measure with calipers.	Whole millimeters	Dash.
19	Inside ring size, Bottom of Bag	Measure with calipers.	Whole millimeters	Dash.
20	Turtle Chain Mat Verification	If turtle chain mat, 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 D	GEAR NUMBER(S) 1	If the dredge is fished off the stern, check box here AFT (A) <input type="checkbox"/> ²
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PORT DREDGE (P)			PORT DREDGE COMMENTS
DREDGE FRAME	CHAINS	TWINE TOP	
FRAME TYPE 3 Unknown 0 <input type="checkbox"/> FRAME HEIGHT 4 in Standard 1 <input type="checkbox"/> TDD 2 <input type="checkbox"/> FRAME WIDTH 5 ft Other 9 <input type="checkbox"/>	USED? NO YES NUMBER ROCK 6 0 <input type="checkbox"/> 1 <input type="checkbox"/> 7 TICKLER 8 0 <input type="checkbox"/> 1 <input type="checkbox"/> 9 CONFIGURATION 10 STANDARD 1 <input type="checkbox"/> TURTLE CHAIN MAT 2 <input type="checkbox"/>	MESH SIZE 11 _____ mm _____ mm _____ mm _____ mm _____ mm _____ mm _____ mm _____ mm # RINGS ON WHICH TWINE TOP HANGS 15	
CHAIN BAG			
CHAFING GEAR USED? 16 NO 0 <input type="checkbox"/> YES 1 <input type="checkbox"/>	INSIDE RING SIZE (mm) (5 random measurements) TOP OF BAG 18 BOTTOM OF BAG 19	# MESHES WIDE 12 LONG 13 HUNG 14 Unknown 0 <input type="checkbox"/> Diamond 1 <input type="checkbox"/> Square 2 <input type="checkbox"/> Combination 8 <input type="checkbox"/>	TURTLE CHAIN MAT VERIFICATION NO YES Captain confirmed turtle chain mat _____ Intersections connected with links _____ All openings 14" or less _____
# ROWS IN APRON 17			

STARBOARD DREDGE (S)			STARBOARD DREDGE COMMENTS
DREDGE FRAME	CHAINS	TWINE TOP	
FRAME TYPE Unknown 0 <input type="checkbox"/> FRAME HEIGHT _____ in Standard 1 <input type="checkbox"/> TDD 2 <input type="checkbox"/> FRAME WIDTH _____ ft Other 9 <input type="checkbox"/>	USED? NO YES NUMBER ROCK 0 <input type="checkbox"/> 1 <input type="checkbox"/> TICKLER 0 <input type="checkbox"/> 1 <input type="checkbox"/> CONFIGURATION STANDARD 1 <input type="checkbox"/> TURTLE CHAIN MAT 2 <input type="checkbox"/>	MESH SIZE _____ mm _____ mm _____ mm _____ mm _____ mm _____ mm _____ mm _____ mm # RINGS ON WHICH TWINE TOP HANGS _____	
CHAIN BAG			
CHAFING GEAR USED? NO 0 <input type="checkbox"/> YES 1 <input type="checkbox"/>	INSIDE RING SIZE (mm) (5 random measurements) TOP OF BAG _____ BOTTOM OF BAG _____	# MESHES WIDE _____ LONG _____ HUNG Unknown 0 <input type="checkbox"/> Diamond 1 <input type="checkbox"/> Square 2 <input type="checkbox"/> Combination 8 <input type="checkbox"/>	TURTLE CHAIN MAT VERIFICATION NO YES Captain confirmed turtle chain mat _____ Intersections connected with links _____ All openings 14" or less _____
# ROWS IN APRON _____			

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>	GEAR NUMBER(s) 1	If the dredge is fished off the stern, check box here AFT (A) <input checked="" type="checkbox"/>
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PORT DREDGE (P)					
DREDGE FRAME	CHAINS	TWINE TOP	# MESHES	PORT DREDGE COMMENTS	
FRAME TYPE	USED? NO YES NUMBER	MESH SIZE			
Unknown 0 <u> </u> FRAME HEIGHT <u>19</u> in	ROCK 0 <u> </u> 1 <input checked="" type="checkbox"/> <u>9</u>	258 mm <u>254</u> mm	WIDE <u>75</u>		
Standard 1 <u> </u>	TICKLER 0 <u> </u> 1 <input checked="" type="checkbox"/> <u>6</u>	261 mm <u>256</u> mm	LONG <u>6</u>		
TDD 2 <input checked="" type="checkbox"/> FRAME WIDTH <u>13</u> ft		255 mm <u>259</u> mm	HUNG	TURTLE CHAIN MAT VERIFICATION NO YES Captain confirmed turtle chain mat <u> </u> <input checked="" type="checkbox"/> Intersections connected with links <u> </u> <input checked="" type="checkbox"/> All openings 14" or less <u> </u> <input checked="" type="checkbox"/> 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.	
Other 9 <u> </u>	CONFIGURATION	254 mm <u>259</u> mm	Unknown 0 <u> </u>		
	STANDARD 1 <u> </u>	254 mm <u>257</u> mm	Diamond 1 <input checked="" type="checkbox"/>		
	TURTLE CHAIN MAT 2 <input checked="" type="checkbox"/>		Square 2 <u> </u>		
CHAIN BAG			Combination 8 <u> </u>		
CHAFING GEAR USED?			# RINGS ON WHICH TWINE TOP HANGS <u>32</u>		
NO 0 <u> </u>	INSIDE RING SIZE (mm) (5 random measurements)				
YES 1 <input checked="" type="checkbox"/>					
# ROWS IN APRON <u>9</u>					
	TOP OF BAG	<u>102</u> <u>105</u> <u>103</u> <u>103</u> <u>105</u>			
	BOTTOM OF BAG	<u>106</u> <u>106</u> <u>104</u> <u>103</u> <u>104</u>			

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

OBS/TRIP ID	
DATE LANDED mm/yy	/
PAGE #	<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, and only partially hauled back, include the time spent hauling and resetting the net in this 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 Dredge Haul Log](#).

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Dredge Observed	Visually confirm.	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.	Whole Fathoms	Dash.
4	Sea Scallop Clappers Observed?	Yes/No. Visually confirm and obtain weight estimate.	Check one	"9".
5	Grey Meats or Parasites Observed?	Yes/No. Visually confirm and obtain weight estimate.	Check one	"9".

SCALLOP DREDGE HAUL LOG
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OBS/ TRIP ID	A
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GEAR CODE 1 3 2			GEAR # E			HAUL # F			HAUL OBS? NO 0 G YES 1 _____		ON-EFFORT? NO 0 H YES 1 _____		CATCH? NO 0 I YES 1 _____		INC TAKE? NO 0 J YES 1 _____		WEATHER CODE K		WIND SPEED L kn DIRECTION M °		WAVE HEIGHT N ft		DEPTH, HAUL BEGIN O fm		GEAR CONDITION CODE P	
HAUL/FISHING INFO		DATE mm/dd/yy		TIME 24 hours		LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)										DREDGE OBSERVED 1		TOW SPEED 2 kn		WIRE OUT 3 fm		WATER TEMP T ° F				
BEGIN HAUL		Q / /		R :		9960 - S		9960 -		Port 1 _____		Starboard 2 _____		Both 3 _____		Aft 4 _____		TARGET SPECIES U		CODE V						
BEGIN FISHING		/ /		:																						
END HAUL		/ /		:		9960 -		9960 -																		
GEAR ONBOARD		/ /		:																						
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'									
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															

SCALLOP DREDGE HAUL LOG
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GEAR CODE 1 3 2	GEAR # 0 1	HAUL # 1 4 5	HAUL OBS? NO 0 YES 1 <input checked="" type="checkbox"/>	ON-EFFORT? NO 0 YES 1 <input checked="" type="checkbox"/>	CATCH? NO 0 YES 1 <input checked="" type="checkbox"/>	INC TAKE? NO 0 <input checked="" type="checkbox"/> YES 1	WEATHER CODE 01	WIND SPEED 5 kn DIRECTION 0°	WAVE HEIGHT 3 ft	DEPTH, HAUL BEGIN 35 fm	GEAR CONDITION CODE 710
HAUL INFO	DATE mm/dd/yy	TIME 24 hours	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)				DREDGE OBSERVED	TOW SPEED	WIRE OUT	WATER TEMP	
BEGIN HAUL	05 / 12 / 16	05 : 00	Station 1 9960 -	Latitude / Bearing 41 ° 07.2	Station 2 9960 -	Longitude / Bearing 69 ° 22.8	Port 1	3 . 5 kn	100 fm	58 . 0 F	
BEGIN FISHING	05 / 12 / 16	05 : 06					Starboard 2	TARGET SPECIES		CODE	
END HAUL	05 / 12 / 16	05 : 55					Station 1 9960 -	Latitude / Bearing 41 ° 07.3	Station 2 9960 -	Longitude / Bearing 69 ° 23.0	Both 3 <input checked="" type="checkbox"/>
GEAR ONBOARD	05 / 12 / 16	06 : 08					Aft 4	SEA SCALLOP CLAPPERS OBS? NO 0 YES 1 <input checked="" type="checkbox"/>	GREY MEATS OR PARASITES OBS? NO 0 <input checked="" type="checkbox"/> YES 1		
COMMENTS											SAMPLE WEIGHT MULTIPLIER 5 . 4 2

SPECIES	NAME	CODE	SUB-SAMPLE WEIGHT	POUNDS	DISP CODE	WEIGHT		SPECIES	NAME	CODE	SUB-SAMPLE WEIGHT	POUNDS	DISP CODE	WEIGHT	
						D/R	EST METHOD CODE							D/R	EST METHOD CODE
1	Sea Scallops	8009	.	169	100	D	03	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.	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. See Appendix D – Conversion Tables.	Latitude/Longitude, to the nearest tenth of a minute OR LORAN station bearings	3-digit statistical area See Appendix A – Northeast Statistical Areas.
9	Last Haul End Position	See Appendix C – Set/Haul Time Definitions. See Appendix D – Conversion Tables.	Latitude/Longitude, to the nearest tenth of a minute OR LORAN station bearings	3-digit statistical area See Appendix A – Northeast Statistical Areas.
10	Average Number of Basket Kept	Obtain from captain.	Nearest whole basket	Dash.

SCALLOP DREDGE OFF-WATCH HAUL LOG
NMFS FISHERIES OBSERVER PROGRAM
OBSDO OBHAU 05/01/16

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

WATCH #	WATCH INFO	DATE mm/dd/yy	TIME 24 hours	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)				SEA SCALLOPS # OF BASKETS KEPT (AVERAGE)	
				Station 1	Latitude / Bearing	Station 2	Longitude / Bearing		
1									
FIRST HAUL	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	BEGIN	4	:	6	9960-	8	9960-	10
LAST HAUL	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	END	5	:	7	9960-	9	9960-	
2									
FIRST HAUL	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	BEGIN	/ /	:		9960-		9960-	
LAST HAUL	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	END	/ /	:		9960-		9960-	
3									
FIRST HAUL	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	BEGIN	/ /	:		9960-		9960-	
LAST HAUL	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	END	/ /	:		9960-		9960-	
4									
FIRST HAUL	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	BEGIN	/ /	:		9960-		9960-	
LAST HAUL	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	END	/ /	:		9960-		9960-	
5									
FIRST HAUL	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	BEGIN	/ /	:		9960-		9960-	
LAST HAUL	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	END	/ /	:		9960-		9960-	
6									
FIRST HAUL	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	BEGIN	/ /	:		9960-		9960-	
LAST HAUL	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	END	/ /	:		9960-		9960-	
7									
FIRST HAUL	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	BEGIN	/ /	:		9960-		9960-	
LAST HAUL	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	END	/ /	:		9960-		9960-	
8									
FIRST HAUL	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	BEGIN	/ /	:		9960-		9960-	
LAST HAUL	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	END	/ /	:		9960-		9960-	
9									
FIRST HAUL	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	BEGIN	/ /	:		9960-		9960-	
LAST HAUL	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	END	/ /	:		9960-		9960-	
10									
FIRST HAUL	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	BEGIN	/ /	:		9960-		9960-	
LAST HAUL	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	END	/ /	:		9960-		9960-	

**SCALLOP DREDGE OFF-WATCH HAUL LOG
NMFS FISHERIES OBSERVER PROGRAM
OBSDO OBHAU 05/01/16**

OBS/TRIP ID	A99012-
DATE LANDED mm/yy	05 / 16
PAGE #	1 of 2

WATCH #	WATCH INFO	DATE mm/dd/yy	TIME 24 hours	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)			SEA SCALLOPS # OF BASKETS KEPT (AVERAGE)
				Station 1	Latitude / Bearing	Station 2	
01	BEGIN	05 / 06 / 16	00:00	9960-	41° 07.2	9960-	30
FIRST HAUL						69° 22.8	
	END	05 / 07 / 16	06:00	9960-	41° 08.3	9960-	
LAST HAUL						69° 25.6	
02	BEGIN	05 / 07 / 16	12:00	9960-	41° 08.3	9960-	40
FIRST HAUL						69° 25.6	
	END	05 / 07 / 16	18:00	9960-	41° 07.4	9960-	
LAST HAUL						69° 22.3	
03	BEGIN	05 / 08 / 16	00:00	9960-	41° 07.4	9960-	35
FIRST HAUL						69° 22.3	
	END	05 / 08 / 16	06:00	9960-	41° 07.9	9960-	
LAST HAUL						69° 24.9	
04	BEGIN	05 / 08 / 16	12:00	9960-	41° 07.9	9960-	35
FIRST HAUL						69° 24.9	
	END	05 / 08 / 16	18:00	9960-	41° 06.9	9960-	
LAST HAUL						69° 21.5	
05	BEGIN	05 / 09 / 16	00:00	9960-	41° 06.9	9960-	50
FIRST HAUL						69° 21.5	
	END	05 / 09 / 16	06:00	9960-	41° 07.6	9960-	
LAST HAUL						69° 23.4	
06	BEGIN	05 / 09 / 16	12:00	9960-	41° 07.6	9960-	45
FIRST HAUL						69° 23.4	
	END	05 / 09 / 16	18:00	9960-	41° 07.2	9960-	
LAST HAUL						69° 22.8	
07	BEGIN	05 / 10 / 16	00:00	9960-	41° 06.9	9960-	55
FIRST HAUL						69° 21.5	
	END	05 / 10 / 16	06:00	9960-	41° 07.2	9960-	
LAST HAUL						69° 22.8	
08	BEGIN	05 / 10 / 16	12:00	9960-	41° 07.9	9960-	55
FIRST HAUL						69° 24.9	
	END	05 / 10 / 16	18:00	9960-	41° 07.2	9960-	
LAST HAUL						69° 22.8	
09	BEGIN	05 / 11 / 16	06:00	9960-	41° 06.9	9960-	50
FIRST HAUL						69° 21.5	
	END	05 / 11 / 16	12:00	9960-	41° 07.9	9960-	
LAST HAUL						69° 24.9	
10	BEGIN	05 / 11 / 16	18:00	9960-	41° 08.3	9960-	45
FIRST HAUL						69° 25.6	
	END	05 / 11 / 16	00:00	9960-	41° 06.9	9960-	
LAST HAUL						69° 21.5	

Clam/Quahog Dredge Gear Characteristics Log

A clam/quahog 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.

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 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.	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.	Whole number	Dash. Leave blank if chain bag not used.
12	Link Stock Size	Obtain from captain.	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.
14	Inside Ring Size (Bottom of Bag)	Measure with calipers.	Whole millimeters	Dash. Leave blank if chain bag not used.
15	Outside Ring Size	Measure with calipers.	Whole millimeters	Dash. Leave blank if chain bag not used.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
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
NMFS FISHERIES OBSERVER PROGRAM
OBCDG 05/01/16

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

GEAR CODE D		GEAR NUMBER(S)		If the dredge is fished off the stern, check box here		PORT DREDGE COMMENTS	
<input type="checkbox"/>		1		2 AFT (A) <input type="checkbox"/>			
PORT DREDGE (P)				STARBOARD DREDGE (S)			
DREDGE CAGE		SORTER USED? 8		DREDGE CAGE		SORTER USED?	
HEIGHT	WIDTH	LENGTH	NO 0__	HEIGHT	WIDTH	LENGTH	NO 0__
3 in	4 in	5 in	YES 1__	_____ in	_____ in	_____ in	YES 1__
CAGE BOTTOM		NUMBER OF		CAGE BOTTOM		NUMBER OF	
BAR DIAMETER	BAR SPACING	NOZZLES		BAR DIAMETER	BAR SPACING	NOZZLES	
6	7	9		_____ in	_____ in	_____	
_____ in	_____ in	_____		_____ in	_____ in	_____	
CHAIN BAG				CHAIN BAG			
USED? NO 0__ 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)				INSIDE RING SIZE (mm)			
(5 random measurements)				(5 random measurements)			
TOP OF BAG		13		TOP OF BAG		_____	
BOTTOM OF BAG		14		BOTTOM OF BAG		_____	
OUTSIDE RING SIZE		15		OUTSIDE RING SIZE		_____ mm	
_____ mm				_____ mm			
TOWLINE				TOWLINE			
TOWLINE TYPE: 16		TOWLINE POSITION: 17		TOWLINE TYPE:		TOWLINE POSITION:	
Unknown	0__	Unknown	0__	Unknown	0__	Unknown	0__
Single	1__	Forward	1__	Single	1__	Forward	1__
Bridle	2__	Over Top of the Knife	2__	Bridle	2__	Over Top of the Knife	2__
Other	9__	Other	9__	Other	9__	Other	9__
16A		17A		_____		_____	
_____		_____		_____		_____	
				STARBOARD DREDGE COMMENTS			

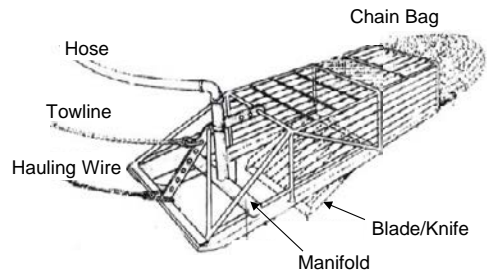
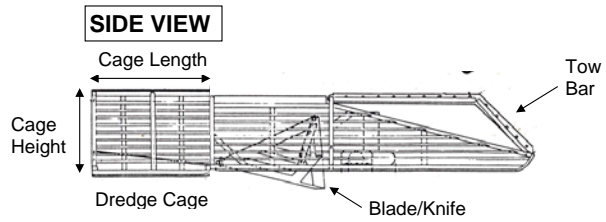
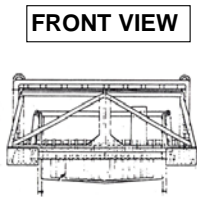
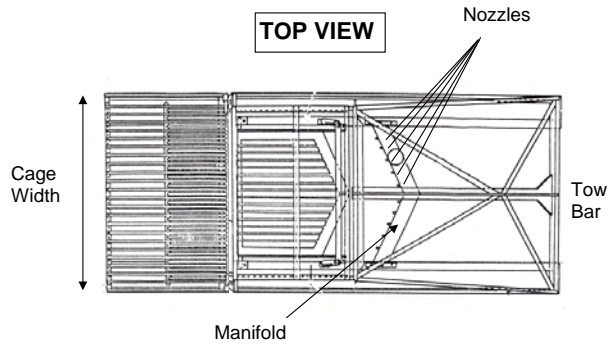
CLAM/QUAHOG DREDGE GEAR CHARACTERISTICS LOG
NMFS FISHERIES OBSERVER PROGRAM
OBCDG 05/01/16

OBS/TRIP ID	A99011-
DATE LANDED mm/yy	06 / 16
PAGE #	1 OF 2

GEAR CODE <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		GEAR NUMBER(S)		If the dredge is fished off the stern, check box here AFT (A) <input checked="" type="checkbox"/>		PORT DREDGE COMMENTS Vessel is stern rigged	
PORT DREDGE (P)				STARBOARD DREDGE (S)			
DREDGE CAGE		SORTER USED?		DREDGE CAGE		SORTER USED?	
HEIGHT	WIDTH	LENGTH	NO 0	HEIGHT	WIDTH	LENGTH	NO 0
20 in	90 in	120 in	YES 1 <input checked="" type="checkbox"/>				YES 1
CAGE BOTTOM	BAR		NUMBER OF	CAGE BOTTOM	BAR		NUMBER OF
BAR DIAMETER	SPACING		NOZZLES	BAR DIAMETER	SPACING		NOZZLES
1 . 0 in	1 . 2 in		30				
CHAIN BAG				CHAIN BAG			
USED? NO 0 <input checked="" type="checkbox"/>		YES 1		USED? NO 0		YES 1	
AVG # OF LINKS BTW 2 RINGS				AVG # OF LINKS BTW 2 RINGS			
LINK STOCK SIZE		/		LINK STOCK SIZE		/	
INSIDE RING SIZE (mm)		(5 random measurements)		INSIDE RING SIZE (mm)		(5 random measurements)	
TOP OF BAG				TOP OF BAG			
BOTTOM OF BAG				BOTTOM OF BAG			
OUTSIDE RING SIZE		mm		OUTSIDE RING SIZE		mm	
TOWLINE				TOWLINE			
TOWLINE TYPE:		TOWLINE POSITION:		TOWLINE TYPE:		TOWLINE POSITION:	
Unknown	0	Unknown	0	Unknown	0	Unknown	0
Single	1 <input checked="" type="checkbox"/>	Forward	1 <input checked="" type="checkbox"/>	Single	1	Forward	1
Bridle	2	Over Top of the Knife	2	Bridle	2	Over Top of the Knife	2
Other	9	Other	9	Other	9	Other	9
STARBOARD DREDGE COMMENTS							

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

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, and only partially hauled back, include the time spent hauling and resetting the net in this 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 Scallop Trawl 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.	Whole Fathoms	Dash.
3	Clam/Quahog Clappers Observed?	Yes/No. Visually confirm. Corresponds to target species.	Check one	"9".

CLAM/QUAHOG DREDGE HAUL LOG
NMFS FISHERIES OBSERVER PROGRAM
OBCDH OBHAU OBSPP 05/01/16

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 °	WAVE HEIGHT N ft	DEPTH, HAUL BEGIN O fm	GEAR COND CODE P
--------------------	-----------------	-----------------	---	--	--	---	--------------------------	--	----------------------------	----------------------------------	----------------------------

HAUL/FISHING INFO	DATE AND TIME mm/dd/yy 24 hours	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)				WATER TEMP T ° F	TOW SPEED 1 kn	WIRE OUT 2 fm	
BEGIN HAUL	Q / / : R	Station 1	Latitude / Bearing S	Station 2	Longitude / Bearing	TARGET SPECIES U CODE V			
BEGIN FISHING	/ / :					CLAM/QUAHOG CLAPPERS OBS? 3			
END HAUL	/ / :					9960 -			
GEAR ONBOARD	/ / :								

COMMENTS

SAMPLE WEIGHT MULTIPLIER **W**

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
A'	B'	C'	D'	E'	F'	G'							
1							11						
2							12						
3							13						
4							14						
5							15						
6							16						
7							17						
8							18						
9							19						
10							20						

CLAM/QUAHOG DREDGE HAUL LOG
NMFS FISHERIES OBSERVER PROGRAM
OBCDH OBHAU OBSPP 05/01/16

OBS/ TRIP ID	A99011-
DATE LAND (mm/yy)	06 / 16
PAGE #	1 OF 4

GEAR CODE 3 8 1	GEAR # 0 1	HAUL # 0 0 1	HAUL OBS? NO 0 YES 1 <input checked="" type="checkbox"/>	ON-EFFORT? NO 0 YES 1 <input checked="" type="checkbox"/>	CATCH? NO 0 YES 1 <input checked="" type="checkbox"/>	INC TAKE? NO 0 <input checked="" type="checkbox"/> YES 1	WEATHER CODE 01	WIND SPEED 10 kn DIRECTION 90 °	WAVE HEIGHT 1 ft	DEPTH, HAUL BEGIN 20 fm	GEAR COND CODE 810	
HAUL/FISHING INFO	DATE AND TIME mm/dd/yy 24 hours	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)				WATER TEMP	TOW SPEED	WIRE OUT				
BEGIN HAUL	06 / 15 / 16 10 : 10	Station 1	Latitude / Bearing	Station 2	Longitude / Bearing	60 . 1 ° F	3 . 7 kn	110 fm	TARGET SPECIES CODE			
BEGIN FISHING	06 / 15 / 16 10 : 13					CLAM/QUAHOG CLAPPERS OBS?						
END HAUL	06 / 15 / 16 10 : 35	9960 -	39 ° 11.2	9960 -	74 ° 10.3	Ocean Quahog						
GEAR ONBOARD	06 / 15 / 16 10 : 42					NO <input checked="" type="checkbox"/> YES <input type="checkbox"/>						

COMMENTS

Sorter motor broke. 30 minutes lost for repair

Blade was bent during tow.

SAMPLE WEIGHT MULTIPLIER

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 Ocean Quahog		.	320	100	D	04	11		.				
2 Sea Cucumber, nk		.	2	001	R	01	12		.				
3 Sea Squirt, nk		.	1.1	001	R	01	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.	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. See Appendix D – Conversion Tables.	Latitude/Longitude, to the nearest tenth of a minute OR LORAN station bearings	3-digit statistical area See Appendix A – Northeast Statistical Areas.
9	Last Haul End Position	See Appendix C – Set/Haul Time Definitions. See Appendix D – Conversion Tables.	Latitude/Longitude, to the nearest tenth of a minute OR LORAN station bearings	3-digit statistical area See Appendix A – Northeast Statistical Areas.
10	Average Number of Basket Kept	Obtain from captain.	Nearest whole basket	Dash.

CLAM/QUAHOG DREDGE OFF-WATCH HAUL LOG
NMFS FISHERIES OBSERVER PROGRAM
OBCDO OBHAU 05/01/16

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

WATCH #	WATCH INFO	DATE mm/dd/yy	TIME 24 hours	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)				CLAM/QUAHOG # OF BASKETS KEPT (AVERAGE)	
				Station 1	Latitude / Bearing	Station 2	Longitude / Bearing		
1								10	
FIRST HAUL	2	BEGIN	4	:	6	9960-	8		9960-
LAST HAUL	3	END	5	:	7	9960-	9		9960-
2									
FIRST HAUL		BEGIN	/ /	:		9960-			9960-
LAST HAUL		END	/ /	:		9960-			9960-
3									
FIRST HAUL		BEGIN	/ /	:		9960-			9960-
LAST HAUL		END	/ /	:		9960-			9960-
4									
FIRST HAUL		BEGIN	/ /	:		9960-			9960-
LAST HAUL		END	/ /	:		9960-			9960-
5									
FIRST HAUL		BEGIN	/ /	:		9960-			9960-
LAST HAUL		END	/ /	:		9960-			9960-
6									
FIRST HAUL		BEGIN	/ /	:		9960-			9960-
LAST HAUL		END	/ /	:		9960-			9960-
7									
FIRST HAUL		BEGIN	/ /	:		9960-			9960-
LAST HAUL		END	/ /	:		9960-			9960-
8									
FIRST HAUL		BEGIN	/ /	:		9960-			9960-
LAST HAUL		END	/ /	:		9960-			9960-
9									
FIRST HAUL		BEGIN	/ /	:		9960-			9960-
LAST HAUL		END	/ /	:		9960-			9960-
10									
FIRST HAUL		BEGIN	/ /	:		9960-			9960-
LAST HAUL		END	/ /	:		9960-			9960-

CLAM/QUAHOG DREDGE OFF-WATCH HAUL LOG
NMFS FISHERIES OBSERVER PROGRAM
OBCDO OBHAU 05/01/16

OBS/TRIP ID	A99012-
DATE LANDED mm/yy	05 / 16
PAGE #	1 of 2

WATCH #	WATCH INFO	DATE mm/dd/yy	TIME 24 hours	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)			CLAM/QUAHOG # OF BASKETS KEPT (AVERAGE)
				Station 1	Latitude / Bearing	Station 2	
01							
FIRST HAUL	9	BEGIN		9960-	41° 07.2	9960-	69° 22.8
LAST HAUL	15	END	06:00	9960-	41° 08.3	9960-	69° 25.6
		05 / 06 / 16	00:00				30
02							
FIRST HAUL	21	BEGIN		9960-	41° 08.3	9960-	69° 25.6
LAST HAUL	27	END	18:00	9960-	41° 07.4	9960-	69° 22.3
		05 / 07 / 16	12:00				40
03							
FIRST HAUL	33	BEGIN		9960-	41° 07.4	9960-	69° 22.3
LAST HAUL	39	END	06:00	9960-	41° 07.9	9960-	69° 24.9
		05 / 08 / 16	00:00				35
04							
FIRST HAUL	45	BEGIN		9960-	41° 07.9	9960-	69° 24.9
LAST HAUL	51	END	18:00	9960-	41° 06.9	9960-	69° 21.5
		05 / 08 / 16	12:00				35
05							
FIRST HAUL	57	BEGIN		9960-	41° 06.9	9960-	69° 21.5
LAST HAUL	63	END	06:00	9960-	41° 07.6	9960-	69° 23.4
		05 / 09 / 16	00:00				50
06							
FIRST HAUL	69	BEGIN		9960-	41° 07.6	9960-	69° 23.4
LAST HAUL	75	END	18:00	9960-	41° 07.2	9960-	69° 22.8
		05 / 09 / 16	12:00				45
07							
FIRST HAUL	81	BEGIN		9960-	41° 06.9	9960-	69° 21.5
LAST HAUL	87	END	06:00	9960-	41° 07.2	9960-	69° 22.8
		05 / 10 / 16	00:00				55
08							
FIRST HAUL	93	BEGIN		9960-	41° 07.9	9960-	69° 24.9
LAST HAUL	99	END	18:00	9960-	41° 07.2	9960-	69° 22.8
		05 / 10 / 16	12:00				55
09							
FIRST HAUL	105	BEGIN		9960-	41° 06.9	9960-	69° 21.5
LAST HAUL	111	END	12:00	9960-	41° 07.9	9960-	69° 24.9
		05 / 11 / 16	06:00				50
10							
FIRST HAUL	117	BEGIN		9960-	41° 08.3	9960-	69° 25.6
LAST HAUL	123	END	00:00	9960-	41° 06.9	9960-	69° 21.5
		05 / 11 / 16	18:00				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 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 <u>Haul Log</u> .	3-digit code	Cannot be unknown.
3*	Gear Number	Must match the corresponding <u>Gear Characteristics Log</u> .	2-digit code	Cannot be unknown.
4	Net Number/Net Position	Gillnet: net number that the animal was taken in within the string, starting with "1", for the first net hauled back. Scallop Dredge, Scallop Trawl and Twin Trawl Gear: dredge/net the animal was taken in.	Whole 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.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
6	Active Deterrent Device Condition	Determine audibly or with tester.	1-digit code	"0".
7*	Species Name	See Appendix T – Species Codes.	N/A	Cannot be unknown.
8	Species Code	Filled in by FSB 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.	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 Code.	2-digit code	"00" and describe first observation in comments.
12*	Animal Condition	Condition of the animal when released. See Appendix R – Animal Condition Code.	2-digit code	"00".
13	Onboard?	Yes/No.	1-digit code	"9".
14*	Photo(s) Taken?	Yes/No. Comments required if animal not photographed.	1-digit code	Cannot be unknown.
15	Sampled?	No / Yes / Yes, feathers only.	1-digit code	Cannot be unknown.
16	Estimated Length	Estimated by observer. Sea turtles: Notch to Tip (curvilinear). Marine mammals: Total Length (straight).	Whole centimeters	Dash. Leave blank for birds. Dash if actual measurements taken on <u>Sample Log</u> .

MARINE MAMMAL, SEA TURTLE, AND SEA BIRD INCIDENTAL TAKE LOG
NMFS FISHERIES OBSERVER PROGRAM
OBINC 05/01/16

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

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) <small>(record most recent first)</small>	CODE(S)						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
___ 1				:											
___ 2				:											
___ 3				:											
___ 4				:											
___ 5				:											
___ 6				:											
___ 7				:											
___ 8				:											
___ 9				:											
___ 0				:											

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.

MARINE MAMMAL, SEA TURTLE, AND SEA BIRD INCIDENTAL TAKE LOG
NMFS FISHERIES OBSERVER PROGRAM
OBINC 05/01/16

OBS/TRIP ID	A99010+(trip ext)	
DATE LANDED mm/yy	01	16
PAGE #	1	2

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) <small>(record most recent first)</small>	CODE(S)						

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 PPD117	1 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.

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	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).	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).
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		

ADDITIONAL COMMENTS

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.

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.

INCIDENTAL TAKE LOG (FRONT)
NMFS FISHERIES AT-SEA MONITORING PROGRAM
ASMINC 05/01/16

OBS/TRIP ID	A
DATE LANDED mm/yy	B /
PAGE #	C ___ of ___

PSID #	HAUL #	SPECIES NAME	TAG		ENTANG SITU	ANIMAL COND	PHOTO TAKEN?
			NUMBER	CODE			
___ 1	___ 2	___ 7	___ 9	___ 10	___ 11	___ 12	___ 14
___ 2							
___ 3							
___ 4							
___ 5							
___ 6							
___ 7							
___ 8							
___ 9							
___ 0							

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.

INCIDENTAL TAKE LOG (FRONT)
NMFS FISHERIES AT-SEA MONITORING PROGRAM
ASMNC 05/01/16

OBS/TRIP ID	A99002C
DATE LANDED mm/yy	10 / 16
PAGE #	1 of 1

PSID #	HAUL #	SPECIES NAME	TAG		ENTANG SITU	ANIMAL COND	PHOTO TAKEN?
			NUMBER	CODE			
<u>0</u> 1	011	Harbor Seal	D07982	1	06	11	Y
___ 2							
___ 3							
___ 4							
___ 5							
___ 6							
___ 7							
___ 8							
___ 9							
___ 0							

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 brought onboard near begin haul, entangled in gillnet meshes. Several meshes encompassed the head and neck; entanglement did not extend down past the fore flippers (meshes around only front of body). Seal was motionless & its eyes were open and clear. On first viewing, seal was completely intact with no blood, abrasions, cuts, or anything of that nature. Crew disentangled seal from net - they did not have to cut either the net or the seal, just pulled the meshes down the body. Seal was motionless throughout this process. Overall condition of the seal was intact and fresh. There were no cuts or bleeding, no evidence of rotting flesh or scavenger damage. There was an indent in the flesh around the head which did not break the skin - resembled an impression. It was about 1mm wide & 1mm deep. Opened mouth to examine gums/teeth for ID. Gums were pink & firm. The seal's skin & fur were intact; fur was smooth & stayed attached to body during handling. Did not smell any foul odors from seal. Seal was cold to the touch. Eyes were black and glossy with no fluids leaking from them.

ID characteristics:

- multi-cusped teeth, overlapping each other
- v-shaped nostrils
- rounded head w/ dog-like snout
- dorsal: dark grey coat w/ circular patterns "halos"
- ventral: light grey

Tag # D07982 Applied to rear right flipper

12 photos taken

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.

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 <u>Incidental Take Log</u> .	2-digit code	Cannot be unknown.
2	Species Name	See Appendix T – Species Codes.	N/A	Cannot be unknown.
3	Species Code	Filled in by FSB staff for data entry. Observers: leave blank.	4-digit code	Cannot be unknown.
4	Sex	See <u>On Deck Reference Guide</u> .	1-digit code	“0”.
5	Body Temperature	Take in lateral dorsal musculature temperature. Take as soon as possible after animal is brought onboard, before cutting into the animal.	Degrees Fahrenheit to the nearest tenth	Dash.
6	Blubber Thickness	Measure where the blubber meets the muscle, up to and including the skin.	Centimeters, to the nearest tenth	Dash.
7	Total Length	See <u>On Deck Reference Guide</u> .	Whole centimeters	Dash.
8	Axillary Girth	See <u>On Deck Reference Guide</u> .	Whole centimeters	Dash.
9	Hind Flipper or Pectoral Flipper Length	See <u>On Deck Reference Guide</u> .	Whole centimeters	Dash.
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.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
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.	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 Flipper	Measure for all Bottlenose Dolphins.	Whole centimeters	Dash. Leave blank for other species.
25	Flipper to Anterior Insertion	Measure for all Bottlenose Dolphins.	Whole centimeters	Dash. Leave blank for other species.

MARINE MAMMAL BIOLOGICAL SAMPLE LOG
NMFS FISHERIES OBSERVER PROGRAM
OBBMM 05/01/16

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

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	Finclip/ Flipper/ Skin	Jaw	Stom	Blub	Musc	Repro Tract	Head/ Skull	Other list in comments
1	2	3	4	5	6	7	8	8	10	11	12	13	14	15	16	17	18	19	20	21

General Comments:

BOTTLENOSE DOLPHIN
 PSID # _____
 A. Snout-eye (cm) 22
 B. Snout-ear (cm) 23
 C. Snout-blow (cm) 24
 D. Snout-flip (cm) 25

BOTTLENOSE DOLPHIN
 PSID # _____
 A. Snout-eye (cm) _____
 B. Snout-ear (cm) _____
 C. Snout-blow (cm) _____
 D. Snout-flip (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# _____



Circle one: Left / Right



Circle one: Dorsal / Ventral

MARINE MAMMAL BIOLOGICAL SAMPLE LOG
NMFS FISHERIES OBSERVER PROGRAM
OBMM 05/01/16

OBS/TRIP ID	A99025C		
DATE LANDED mm/yy	05	/	16
PAGE #	1	OF	2

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	Finclip/ Flipper/ Skin	Jaw	Stom	Blub	Musc	Repro Tract	Head/ Skull	Other list in comments
01	Harbor Porpoise		2	87.6	3.5	123	84	19	8	10	30	1	1	0	0	0	0	0	0	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

A. Snout-eye (cm) 30

B. Snout-ear (cm) 34

C. Snout-blow (cm) 32

D. Snout-flip (cm) 48

BOTTLENOSE DOLPHIN

PSID # _____

A. Snout-eye (cm) _____

B. Snout-ear (cm) _____

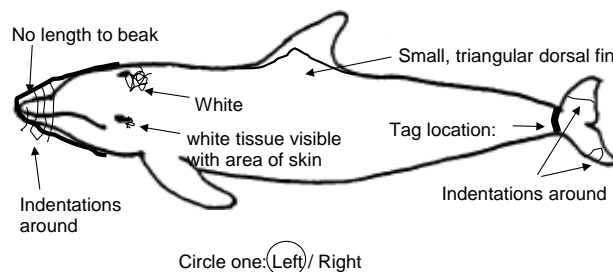
C. Snout-blow (cm) _____

D. Snout-flip (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



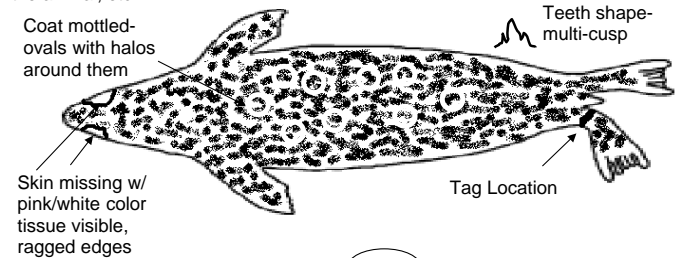
Sketch and describe ID characteristics, overall body condition, note any scavenger damage and/or decomposition, new and/or healed wounds, any gear on the animal, etc:

PSID # 04

L eye cloudy/milky white; Damaged tissue around eyes (4cm in diam) eyeballs still present; not actively bleeding anywhere on body.
Linear marks around head/ neck area and underneath chest around L pectoral flipper



Circle one: Left / Right



Circle one: Dorsal / Ventral

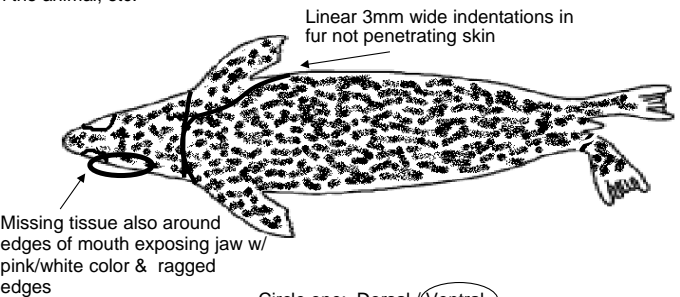
Sketch and describe ID characteristics, overall body condition, note any scavenger damage and/or decomposition, new and/or healed wounds, any gear on the animal, etc:

PSID # 04

Skin tissue around R jaw missing and exposing pink/white undertissue with ragged edges= 8cm x 4cm x 1 cm depth; bone not visible



Circle one: Left / Right



Circle one: Dorsal / Ventral

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 # 05

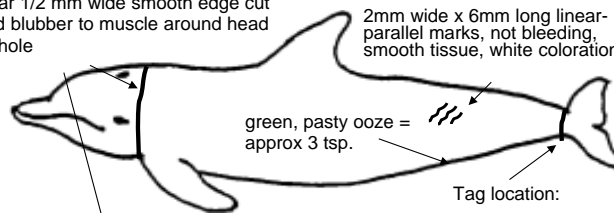
Cut around entire head behind blowhole; 3 linear marks on L peduncle; no other visible damage or wounds on L side of body; green pasty substance oozing from anal slit

Uniform linear 1/2 mm wide smooth edge cut thru skin and blubber to muscle around head behind blowhole

2mm wide x 6mm long linear-parallel marks, not bleeding, smooth tissue, white coloration

green, pasty ooze = approx 3 tsp.

Tag location:



Circle one: Left / Right



Circle one: Dorsal / Ventral

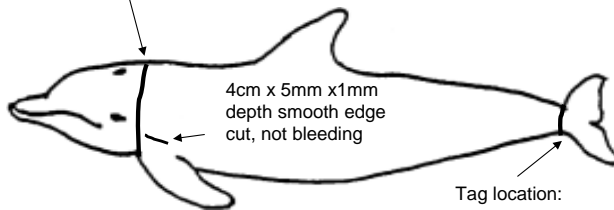
Sketch and describe ID characteristics, overall body condition, note any scavenger damage and/or decomposition, new and/or healed wounds, any gear on the animal, etc:

PSID # 05

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

4cm x 5mm x 1mm depth smooth edge cut, not bleeding

Tag location:



Circle one: Left / Right



Circle one: Dorsal / Ventral

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.

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 <u>Incidental Take Log</u> .	2-digit code	Cannot be unknown.
2	Species Name	See Appendix T – Species Codes.	N/A	Cannot be unknown.
3	Species Code	Filled in by FSB 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 <u>On Deck Reference Guide</u> .	Centimeters, to the nearest tenth	Dash.
7	Notch to Notch Length	See <u>On Deck Reference Guide</u> .	Centimeters, to the nearest tenth	Dash.
8	Width	See <u>On Deck Reference Guide</u> .	Centimeters, to the nearest tenth	Dash.
9	Vertebral Scute Count	See <u>On Deck Reference Guide</u> .	Whole number	Dash.
10	Lateral Scute Count	See <u>On Deck Reference Guide</u> .	Whole number	Dash.
11	Inframarginal Scute Count	See <u>On Deck Reference Guide</u> .	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”.
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.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
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 Condition	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 Condition	Perform actions, or explain reason not performed in comments.	Check all that apply	Leave blank if none applicable.

SEA TURTLE BIOLOGICAL SAMPLE LOG
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PSID #	SPECIES		TAGS		MEASUREMENTS (Curv)			IDENTIFICATION CRITERIA					NUMBER OF SAMPLES			
	NAME	CODE	Scan? 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? 0=N,1=Y	Overlap Scutes? 0=N,1=Y	Dorsal Color Code	Whole	Biopsy/ Skin	Other list in comments
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

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 type="checkbox"/> Shell crack with bone or tissue visible <input type="checkbox"/> Crack includes vertebral scutes <input 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 type="checkbox"/> Superficial scuffs/chips/abrasions observed <input type="checkbox"/> Barnacles present <input type="checkbox"/> Algae present <input type="checkbox"/> Not examined</p>	<p>22 Skin</p> <p><input 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 type="checkbox"/> Eyes open at release <input type="checkbox"/> Lifting head to breath <input type="checkbox"/> All flippers moving/flapping <input type="checkbox"/> Immediately dove <input 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 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 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 type="checkbox"/> No movement seen <input 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 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 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><input type="checkbox"/> Sampling completed and waiting to release <input type="checkbox"/> Protected from elements <input type="checkbox"/> Anything put over eyes, nares not covered Additional release details</p> <p><input type="checkbox"/> Boat in neutral and gear out of water <input type="checkbox"/> Released off stern of boat <input type="checkbox"/> No other boats in immediate area</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.

SEA TURTLE BIOLOGICAL SAMPLE LOG
NMFS FISHERIES OBSERVER PROGRAM
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PSID #	SPECIES		TAGS		MEASUREMENTS (Curv)			IDENTIFICATION CRITERIA					NUMBER OF SAMPLES			
	NAME	CODE	Scan? 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? 0=N,1=Y	Overlap Scutes? 0=N,1=Y	Dorsal Color Code	Whole	Biopsy/ Skin	Other list in comments
01	Green Turtle		1	-----	38.5	38.1	33.2	5	4	4	1	0	04	0	2	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.

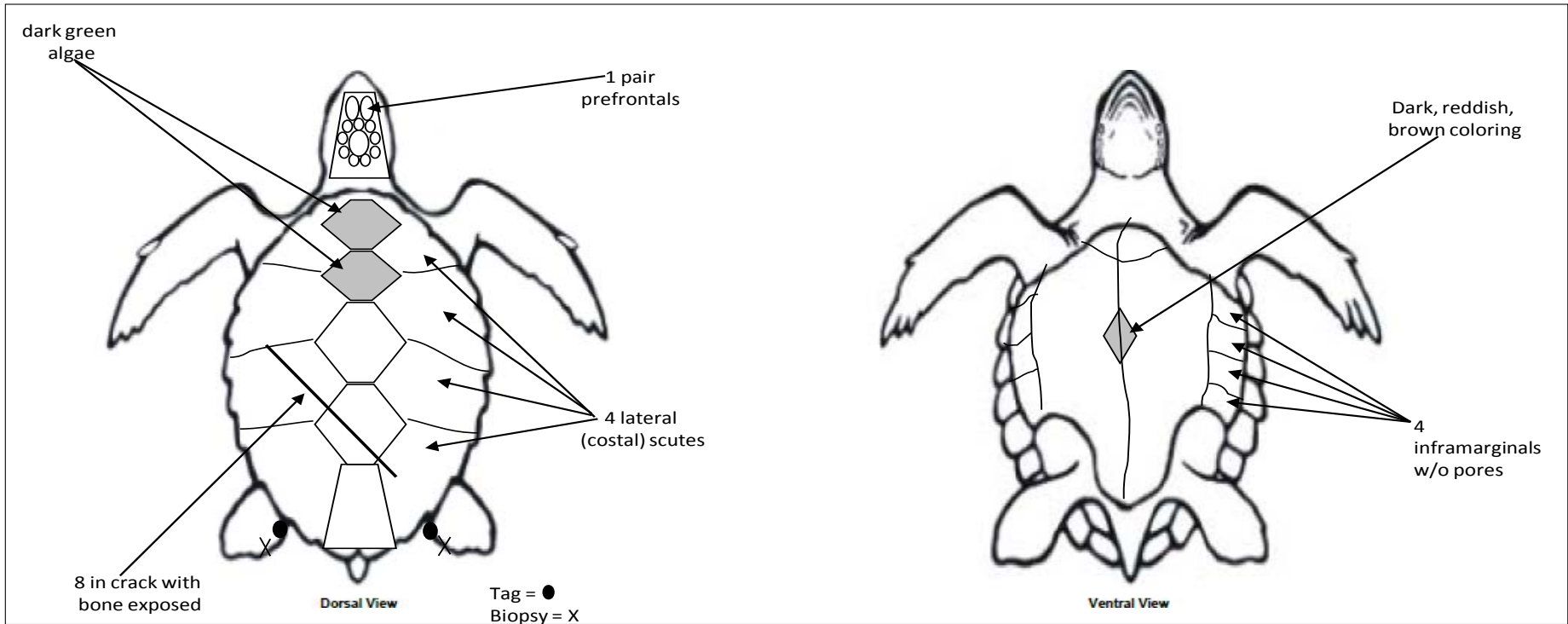
<p>DORSAL COLOR CODE (Above)</p> <p>01 = Black 02 = Gray-Green 03 = Orange/Red-Brown 04 = Brown 99 = Other 00 = Unknown</p> <p>Behavior on Deck</p> <p><input type="checkbox"/> Eyes open while on deck <input type="checkbox"/> Lifting head to breath <input type="checkbox"/> All flippers moving/flapping If yes to following, provide comments & photo/video <input type="checkbox"/> Moving sluggish/slow <input checked="" type="checkbox"/> No movement seen <input checked="" type="checkbox"/> Head or flippers hanging limply</p> <p>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>	<p>Shell (Carapace and Plastron)</p> <p><input type="checkbox"/> No cracks/chips/injuries observed If yes to following, provide comments & photo/video <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>Head</p> <p><input type="checkbox"/> No injuries/wounds/bleeding observed If yes to following, provide comments & photo/video <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>Skin</p> <p><input checked="" type="checkbox"/> No injuries/wounds/bleeding observed If yes to following, provide comments & photo/video <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>Flippers</p> <p><input checked="" type="checkbox"/> No injuries/wounds/bleeding observed If yes to following, provide comments & photo/video <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>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 <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>Additional Information</p> <p><input type="checkbox"/> Sampling completed and waiting to release <input checked="" type="checkbox"/> Protected from elements <input checked="" type="checkbox"/> Anything put over eyes, nares not covered Additional release details <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>
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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 2016 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.

Sighting Types

On-Effort Sightings: A sighting of a protected species made while conducting a dedicated protected species watch. See the Gillnet Fishery instructions in the 2016 Observer Operations Manual.

Off-Effort Sightings: An opportunistic sighting of a protected species made at a time when the observer is not conducting a protected species watch. **Example:** While observing a trawl haul back, a group of common dolphins are sighted about 50 meters from the vessel. This is considered an off-effort sighting.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Today's Date	Date event(s) occurred.	MM/DD/YY	Cannot be unknown.
2	Event Number	Sequential for each sighting event. 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).	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.	2-digit code	"00".
6	Haul Number	Haul where 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.	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.	1-digit code	Cannot be unknown.
11	Species Name	See Appendix T – Species Codes.	N/A	Cannot be unknown.
12	Species Code	Filled in by FSB staff for data entry. Observers: leave blank.	4-digit code	Cannot be unknown.
13	Number of Animals	Count.	Whole number	Dash.
14	Sight Cue Code	Describes first sighting	1-digit code	"0".

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
15	Animal Condition Code	See Appendix R – Animal Condition Code.	2-digit code	“00”.
16	Animal Behavior Code	See Appendix S – Animal Behavior Code.	2-digit code	“00”.

**PROTECTED SPECIES SIGHTING LOG
NMFS FISHERIES OBSERVER PROGRAM
OBSIG 05/01/16**

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TODAY'S DATE mm/dd/yy	1 / /

EVENT #	EVENT TIME 24 hours	EVENT TYPE CODE	POSN CODE	HAUL NUM	LATITUDE/LONGITUDE (DD MM.M) - LORAN (XXXXX)				WEATHER CODE	WAVE HGT ft	COMMENTS? 0=N, 1=Y	SPECIES		#ANIM	SIGHT CUE CODE	ANIM COND CODE	ANIM BEHVR CODE
					Station 1	Latitude/ Bearing	Station 2	Longitude/ Bearing				NAME	CODE				
<u> </u> 1	<u> </u> 3	<u> </u> 4	<u> </u> 5	<u> </u> 6	9960-	<u> </u> 7	9960-		<u> </u> 8	<u> </u> 9	<u> </u> 10	<u> </u> 11	<u> </u> 12	<u> </u> 13	<u> </u> 14	<u> </u> 15	<u> </u> 16
<u> </u> 2	:				9960-		9960-										
<u> </u> 3	:				9960-		9960-										
<u> </u> 4	:				9960-		9960-										
<u> </u> 5	:				9960-		9960-										
<u> </u> 6	:				9960-		9960-										
<u> </u> 7	:				9960-		9960-										
<u> </u> 8	:				9960-		9960-										
<u> </u> 9	:				9960-		9960-										
<u> </u> 0	:				9960-		9960-										

EVENT TYPE CODES: 08 = On-effort, during dedicated watch 10 = Off-effort, vessel activity unknown 11 = Off-effort, Vessel stop/anchor/drift 12 = Off-effort, sitting on gear 13 = Off-effort, transiting or searching 14 = Off-effort, towing gear 15 = Off-effort, hauling in gear 16 = Off-effort, setting out gear 19 = Off-effort, pumping catch GENERAL 00 = Unknown 99 = Other	POSITION CODES: 00 = Unknown 01 = Bow, facing wind 08 = Bow, facing sideways 02 = Wheelhouse, facing forward 03 = Wheelhouse, facing backward 09 = Wheelhouse, facing sideways 04 = Work deck, facing backward 05 = Work deck, facing sideways 06 = Starboard side, facing net 07 = Port side, facing net 99 = Other	SIGHT CUE CODES: 0 = Unknown 1 = Sighted with naked eye 2 = Sighted with binoculars 3 = First sighted by capt/crew then by observer 4 = Sighted by capt/crew ONLY 9 = Other	ANIMAL CONDITION CODES: 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 other body part 07 = Alive, hook/gear in/around several body parts 08 = Alive, seen by capt/crew ONLY 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 one that describes the most specific cond. of the animal	ANIMAL BEHAVIOR CODES: 00 = Unknown 01 = Near gear, physical contact 02 = Near gear, within 50 meters 03 = Near gear, 51-150 meters 04 = Feeding on catch 05 = Porpoising 06 = Bow riding 07 = Breaching 08 = Swimming at surface 09 = Milling 10 = Motionless at surface 11 = Vessel avoidance 12 = Vessel attraction 99 = Other
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PROTECTED SPECIES SIGHTING LOG
NMFS FISHERIES OBSERVER PROGRAM
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EVENT #	EVENT TIME 24 hours	EVENT TYPE CODE	POSN CODE	HAUL NUM	LATITUDE/LONGITUDE (DD MM.M) - LORAN (XXXXX)				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 Bearing				NAME	CODE				
<u>0</u> 1	10:10	08	06	3	9960-	42° 24.3	9960-	70° 41.2	03	4	1	Whitesided Dolphin		22	1	01	05
<u>0</u> 2	10:11	08	06	3	9960-	42° 24.7	9960-	70° 41.2	03	4	1	Humpback Whale		1	1	01	08
<u>0</u> 3	11:14	13	02	---	9960-	42° 25.1	9960-	70° 40.3	03	4	1	Finback Whale		3	2	01	08
<u> </u> 4	:				9960-		9960-										
<u> </u> 5	:				9960-		9960-										
<u> </u> 6	:				9960-		9960-										
<u> </u> 7	:				9960-		9960-										
<u> </u> 8	:				9960-		9960-										
<u> </u> 9	:				9960-		9960-										
<u> </u> 0	:				9960-		9960-										

<p>EVENT TYPE CODES:</p> <p>08 = On-effort, during dedicated watch 10 = Off-effort, vessel activity unknown 11 = Off-effort, Vessel stop/anchor/drift 12 = Off-effort, sitting on gear 13 = Off-effort, transiting or searching 14 = Off-effort, towing gear 15 = Off-effort, hauling in gear 16 = Off-effort, setting out gear 19 = Off-effort, pumping catch</p> <p>GENERAL</p> <p>00 = Unknown 99 = Other</p>	<p>POSITION CODES:</p> <p>00 = Unknown 01 = Bow, facing wind 08 = Bow, facing sideways 02 = Wheelhouse, facing forward 03 = Wheelhouse, facing backward 09 = Wheelhouse, facing sideways 04 = Work deck, facing backward 05 = Work deck, facing sideways 06 = Starboard side, facing net 07 = Port side, facing net 99 = Other</p>	<p>SIGHT CUE CODES:</p> <p>0 = Unknown 1 = Sighted with naked eye 2 = Sighted with binoculars 3 = First sighted by capt/crew then by observer 4 = Sighted by capt/crew ONLY 9 = Other</p>	<p>ANIMAL CONDITION CODES:</p> <p>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 other body part 07 = Alive, hook/gear in/around several body parts 08 = Alive, seen by capt/crew ONLY 10 = Dead, condition unknown 11 = Dead, fresh 12 = Dead, moderately decomposed 13 = Dead, severely decomposed 14 = Dead, seen by capt/crew ONLY</p> <p>NOTE: If more than one code applies, choose the one that describes the most specific cond. of the animal</p>	<p>ANIMAL BEHAVIOR CODES:</p> <p>00 = Unknown 01 = Near gear, physical contact 02 = Near gear, within 50 meters 03 = Near gear, 51-150 meters 04 = Feeding on catch 05 = Porpoising 06 = Bow riding 07 = Breaching 08 = Swimming at surface 09 = Milling 10 = Motionless at surface 11 = Vessel avoidance 12 = Vessel attraction 99 = Other</p>
--	---	--	---	---

OBS/TRIP ID	A99010L		
DATE LANDED mm/yy	05	/	16
PAGE #	2	OF	2
TODAY'S DATE mm/dd/yy	05	/	10 / 16

EVENT #	COMMENTS	EVENT #	COMMENTS
01	<p>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.</p>		
02	<p>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.</p>		
03	<p>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.</p>		

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, in which case the pingers on both sides of the marine mammal and the remaining pingers for that haul should 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.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Pinger Tester Number	Found at the base of the handle on the battery opening.	Whole number	Dash.
2	Haul Number	Haul on which pingers were tested.	Whole number	Dash.
3	Pinger Number	Sequential for each pinger in order of time hauled. If the number of pingers used exceeds 25, continue recording pinger positions using the following HAUL NUMBER (#2) column and renumber the PINGER NUMBER to match pinger positions.	Pre-filled field	Cannot be unknown.
4	ADD Condition Code	Determine audibly or with tester.	1 digit code	"0". Record "0" if not tested and comment.
5	ADD Brand Code	Visually confirm	2 digit code	"00". Record "00" if not tested and comment.

PINGER TESTER WORKSHEET
NMFS FISHERIES OBSERVER PROGRAM
05/01/16

OBS/TRIP ID	A
DATE LANDED mm/yy	B /
PAGE #	C of
PINGER TESTER #	1

HAUL # 2			HAUL #			HAUL #		
PINGER #	ADD COND CODE	ADD BRAND CODE	PINGER #	ADD COND CODE	ADD BRAND CODE	PINGER #	ADD COND CODE	ADD BRAND CODE
3 1	4	5	1			1		
2			2			2		
3			3			3		
4			4			4		
5			5			5		
6			6			6		
7			7			7		
8			8			8		
9			9			9		
10			10			10		
11			11			11		
12			12			12		
13			13			13		
14			14			14		
15			15			15		
16			16			16		
17			17			17		
18			18			18		
19			19			19		
20			20			20		
21			21			21		
22			22			22		
23			23			23		
24			24			24		
25			25			25		

ACTIVE DETERRENT DEVICE (ADD) CONDITION CODES:
0 = Unknown
1 = No pinger
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

ACTIVE DETERRENT DEVICE (ADD) BRAND CODES:
00 = Unknown
01 = Dukane
02 = Airmar
03 = Fumunda
04 = Future Oceans LED
99 = Other (Comment)

COMMENTS

PINGER TESTER WORKSHEET
NMFS FISHERIES OBSERVER PROGRAM
05/01/16

OBS/TRIP ID	A99002L
DATE LANDED mm/yy	06 / 16
PAGE #	1 of 3
PINGER TESTER #	15

HAUL # 1			HAUL # 2			HAUL # 3		
PINGER #	ADD COND CODE	ADD BRAND CODE	PINGER #	ADD COND CODE	ADD BRAND CODE	PINGER #	ADD COND CODE	ADD BRAND CODE
1	8	03	1	8	03	1	7	03
2	8	03	2	8	03	2	3	02
3	3	03	3	8	03	3	3	03
4	7	03	4	7	03	4	7	03
5	8	03	5	4	03	5	7	03
6	3	03	6	8	03	6	7	02
7	3	03	7	7	03	7	8	03
8			8	7	03	8	7	02
9			9	7	03	9	3	02
10			10			10	6	00
11			11			11		
12			12			12		
13			13			13		
14			14			14		
15			15			15		
16			16			16		
17			17			17		
18			18			18		
19			19			19		
20			20			20		
21			21			21		
22			22			22		
23			23			23		
24			24			24		
25			25			25		

ACTIVE DETERRENT DEVICE (ADD) CONDITION CODES:
0 = Unknown
1 = No pinger
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

ACTIVE DETERRENT DEVICE (ADD) BRAND CODES:
00 = Unknown
01 = Dukane
02 = Airmar
03 = Fumunda
04 = Future Oceans LED
99 = Other (Comment)

COMMENTS
Haul 2: Pinger # 5 not working, plastic casing broken, captain replaced
Haul 3: No pinger present at end of string after last net; captain confirmed it was lost

Individual Animal Log

This log is used to record all pelagic species, sturgeons, terrapins, and tagged fish and shellfish caught in a particular haul. See [Appendix T](#) – Species Codes for a list of all species and the log on which they are recorded. *Any animal recorded on this log should NOT also be recorded in the [Haul Log Species Summary](#) section.*

Record parts (fins, chunks) on the species section of the [Haul Log](#); record carcasses with an estimated length and dressed weight on the [Individual Animal Log](#).

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, 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.

Also, be sure to include any tag recapture information, such as tagging program, tag description and location, phone number, etc. 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. Reference each comment with its corresponding animal sequence number and field name.

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.	N/A	Cannot be unknown.
4	Species Code	Filled in by FSB staff for data entry. Observers: leave blank.	4-digit code	Cannot be unknown.
5	Initial Status	Determined by observer.	1-digit code	“0”.
6*	End Status	Determined by observer. If animal is kept, end status must be “dead”.	1-digit code	“0”.
7*	Fish Disposition	Obtain reason from captain. See Appendix M – Fish Disposition Codes.	3-digit code	“900” and comment.
8	Processing Type	Final processing.	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 of this species/disposition when it was weighed. Dressed includes carcasses or gutted animals.	D/R	Cannot be unknown.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
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.	Alphanumeric code NEFOP and IFS: up to 4 unique tag numbers per animal ASM: record secondary tag number under 12a	Dash.
13*	Tag Code	Already present or applied by observer.	1-digit code ASM: record secondary tag code under 13a	“0”. Record “2” if no tag on animal.
14	Data Storage Tag?	Yes/No.	1-digit code	“9”.
15*	Standard Length #1	See <u>On Deck Reference Guide</u> . 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 <u>On Deck Reference Guide</u> .	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 <u>On Deck Reference Guide</u> .	1-digit code	“0”.
19	Bio. Samples Taken?	Yes/No.	1-digit code	“9”.
20	Photo(s) Taken?	Yes/No.	1-digit code	“9”.

**INDIVIDUAL ANIMAL LOG
NMFS FISHERIES OBSERVER PROGRAM
OBIAL 05/01/16**

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

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																		
	2																		
	3																		
	4																		
	5																		
	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.

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

**INDIVIDUAL ANIMAL LOG
NMFS FISHERIES OBSERVER PROGRAM
OBIAL 05/01/16**

OBS/TRIP ID	A99015C
DATE LANDED mm/yy	06 / 16
PAGE #	2 OF 5
HAUL #	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	<u>0</u> 1	Swordfish		3	3	100	09	165	D	01	A2999	5	0	193	106	---	1	0	1
1	<u>0</u> 2	Blue Shark		2	2	100	06	170	D	01	A2318 M45392	5 4	0	201	240	---	2	1	1
1	<u>0</u> 3	Atlantic Sturgeon		1	1	001	01	180	R	04	BOS873	3	0	---	---	244	0	0	1
1	<u>0</u> 4	Torpedo Ray		1	2	001	01	28	R	01		2	---	82	46	---	1	0	1
1	<u>0</u> 5	Porbeagle Shark		2	2	100	08	40	R	06		2	---	114	---	---	2	0	0
	<u> </u> 6																		
	<u> </u> 7																		
	<u> </u> 8																		
	<u> </u> 9																		
	<u> </u> 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	D = Dressed	0 = Unknown	01 = Actual, spring scale
1 = Alive	01 = No Processing	R = Round	1 = Tag Applied by Observer	04 = Estimated by captain
2 = Dead	02 = Chunked		2 = No Tag(s)	05 = Tally
3 = Dead, Damaged	03 = Filleted		3 = Tag Already Present, Left On	06 = Visually Estimated by observer
4 = Dead, Head only	04 = Dressed (Gutted only)		4 = Tag Already Present, Removed	11 = Actual, electronic scale
	05 = Dressed (Finned only)		5 = Carcass Tagged (fish only)	99 = Other, describe in COMMENTS
	06 = Dressed (Headed and Gutted)			
	07 = Dressed (Headed, Gutted, Finned)			
	08 = Dressed (Headed, Gutted, Tailed)			
	09 = Dressed (Headed, Gutted, Finned, Tailed)			
	99 = Other			

INDIVIDUAL ANIMAL LOG (FRONT)
NMFS FISHERIES AT-SEA MONITORING PROGRAM

ASMIAL 05/01/16

OBS/TRIPID	A
DATE LANDED mm/yy	B /
PAGE #	C ___ of ___
HAUL #	F

SEQ # 2 □ □	SPECIES NAME 3	SEQ # □ □	SPECIES NAME	SEQ # □ □	SPECIES NAME
END STATUS 6 ALIVE <input type="checkbox"/> DEAD <input type="checkbox"/> DEAD, DAMAGED <input type="checkbox"/> DEAD, HEAD ONLY <input type="checkbox"/> UNKNOWN (COMMENT) <input type="checkbox"/>		END STATUS ALIVE <input type="checkbox"/> DEAD <input type="checkbox"/> DEAD, DAMAGED <input type="checkbox"/> DEAD, HEAD ONLY <input type="checkbox"/> UNKNOWN (COMMENT) <input type="checkbox"/>		END STATUS ALIVE <input type="checkbox"/> DEAD <input type="checkbox"/> DEAD, DAMAGED <input type="checkbox"/> DEAD, HEAD ONLY <input type="checkbox"/> UNKNOWN (COMMENT) <input type="checkbox"/>	
DISP. CODE 7	WEIGHT (POUNDS) 9	DISP. CODE	WEIGHT (POUNDS)	DISP. CODE	WEIGHT (POUNDS)
DRESSED? Y <input type="checkbox"/> N <input type="checkbox"/> 10	EST. METHOD 11	DRESSED? Y <input type="checkbox"/> N <input type="checkbox"/>	EST. METHOD	DRESSED? Y <input type="checkbox"/> N <input type="checkbox"/>	EST. METHOD
LENGTH (cm) 15		LENGTH (cm)		LENGTH (cm)	
TAGS		TAGS		TAGS	
TAG #1 12		TAG #1		TAG #1	
TAG #1 CODE 13 APPLIED BY OBSERVER <input type="checkbox"/> NO TAG(S) <input type="checkbox"/> TAG PRESENT, LEFT ON <input type="checkbox"/> TAG PRESENT, REMOVED <input type="checkbox"/> UNKNOWN (COMMENT) <input type="checkbox"/>		TAG #1 CODE APPLIED BY OBSERVER <input type="checkbox"/> NO TAG(S) <input type="checkbox"/> TAG PRESENT, LEFT ON <input type="checkbox"/> TAG PRESENT, REMOVED <input type="checkbox"/> UNKNOWN (COMMENT) <input type="checkbox"/>		TAG #1 CODE APPLIED BY OBSERVER <input type="checkbox"/> NO TAG(S) <input type="checkbox"/> TAG PRESENT, LEFT ON <input type="checkbox"/> TAG PRESENT, REMOVED <input type="checkbox"/> UNKNOWN (COMMENT) <input type="checkbox"/>	
TAG #2 12a		TAG #2		TAG #2	
TAG #2 CODE 13a APPLIED BY OBSERVER <input type="checkbox"/> NO TAG(S) <input type="checkbox"/> TAG PRESENT, LEFT ON <input type="checkbox"/> TAG PRESENT, REMOVED <input type="checkbox"/> UNKNOWN (COMMENT) <input type="checkbox"/>		TAG #2 CODE APPLIED BY OBSERVER <input type="checkbox"/> NO TAG(S) <input type="checkbox"/> TAG PRESENT, LEFT ON <input type="checkbox"/> TAG PRESENT, REMOVED <input type="checkbox"/> UNKNOWN (COMMENT) <input type="checkbox"/>		TAG #2 CODE APPLIED BY OBSERVER <input type="checkbox"/> NO TAG(S) <input type="checkbox"/> TAG PRESENT, LEFT ON <input type="checkbox"/> TAG PRESENT, REMOVED <input type="checkbox"/> UNKNOWN (COMMENT) <input type="checkbox"/>	
COMMENTS					

INDIVIDUAL ANIMAL LOG (FRONT)
NMFS FISHERIES AT-SEA MONITORING PROGRAM
ASMIAL 05/01/16

OBS/TRIPID	A99002-
DATE LANDED mm/yy	10/ 13
PAGE #	<u>2</u> of <u>2</u>
HAUL #	003

SEQ #	SPECIES NAME	SEQ #	SPECIES NAME	SEQ #	SPECIES NAME
01	Torpedo Ray	02	Porbeagle Shark	03	Spiny Dogfish
END STATUS ALIVE <input checked="" type="checkbox"/> X DEAD <input type="checkbox"/> DEAD, DAMAGED <input type="checkbox"/> DEAD, HEAD ONLY <input type="checkbox"/> UNKNOWN (COMMENT) <input type="checkbox"/>		END STATUS ALIVE <input type="checkbox"/> DEAD <input checked="" type="checkbox"/> X DEAD, DAMAGED <input type="checkbox"/> DEAD, HEAD ONLY <input type="checkbox"/> UNKNOWN (COMMENT) <input type="checkbox"/>		END STATUS ALIVE <input checked="" type="checkbox"/> X DEAD <input type="checkbox"/> DEAD, DAMAGED <input type="checkbox"/> DEAD, HEAD ONLY <input type="checkbox"/> UNKNOWN (COMMENT) <input type="checkbox"/>	
DISP. CODE	WEIGHT (POUNDS)	DISP. CODE	WEIGHT (POUNDS)	DISP. CODE	WEIGHT (POUNDS)
001	43	001	95	001	5
DRESSED?	EST. METHOD	DRESSED?	EST. METHOD	DRESSED?	EST. METHOD
Y <input type="checkbox"/> N <input checked="" type="checkbox"/> X	01	Y <input type="checkbox"/> N <input checked="" type="checkbox"/> X	06	Y <input type="checkbox"/> N <input checked="" type="checkbox"/> X	01
LENGTH (cm)		LENGTH (cm)		LENGTH (cm)	
82		176		67	
TAGS		TAGS		TAGS	
TAG #1		TAG #1		TAG #1	
----		----		RI22345	
TAG #1 CODE		TAG #1 CODE		TAG #1 CODE	
APPLIED BY OBSERVER <input type="checkbox"/>	NO TAG(S) <input checked="" type="checkbox"/> X	APPLIED BY OBSERVER <input type="checkbox"/>	NO TAG(S) <input checked="" type="checkbox"/> X	APPLIED BY OBSERVER <input type="checkbox"/>	NO TAG(S) <input type="checkbox"/>
TAG PRESENT, LEFT ON <input type="checkbox"/>	TAG PRESENT, REMOVED <input type="checkbox"/>	TAG PRESENT, LEFT ON <input type="checkbox"/>	TAG PRESENT, REMOVED <input type="checkbox"/>	TAG PRESENT, LEFT ON <input checked="" type="checkbox"/> X	TAG PRESENT, REMOVED <input type="checkbox"/>
UNKNOWN (COMMENT) <input type="checkbox"/>		UNKNOWN (COMMENT) <input type="checkbox"/>		UNKNOWN (COMMENT) <input type="checkbox"/>	
TAG #2		TAG #2		TAG #2	
----		----		----	
TAG #2 CODE		TAG #2 CODE		TAG #2 CODE	
APPLIED BY OBSERVER <input type="checkbox"/>	NO TAG(S) <input checked="" type="checkbox"/> X	APPLIED BY OBSERVER <input type="checkbox"/>	NO TAG(S) <input checked="" type="checkbox"/> X	APPLIED BY OBSERVER <input type="checkbox"/>	NO TAG(S) <input checked="" type="checkbox"/> X
TAG PRESENT, LEFT ON <input type="checkbox"/>	TAG PRESENT, REMOVED <input type="checkbox"/>	TAG PRESENT, LEFT ON <input type="checkbox"/>	TAG PRESENT, REMOVED <input type="checkbox"/>	TAG PRESENT, LEFT ON <input type="checkbox"/>	TAG PRESENT, REMOVED <input type="checkbox"/>
UNKNOWN (COMMENT) <input type="checkbox"/>		UNKNOWN (COMMENT) <input type="checkbox"/>		UNKNOWN (COMMENT) <input type="checkbox"/>	
COMMENTS					
01: ID characteristics = round disk, dark grey dorsal, white ventral, relatively small mouth					
02: ID characteristics = white patch on trailing edge of 1st dorsal, caudal fins equal in size, 2 caudal keels, thick bodied, dorsal color dark grey					
03: tag located on dorsal fin, long yellow tube, "Dogfish Group, PO Box 123, Providence, RI"					

INDIVIDUAL ANIMAL LOG (BACK)
NMFS FISHERIES AT-SEA MONITORING PROGRAM
ASMIAL 05/01/16

OBS/TRIPID	
DATE LANDED mm/yy	/
PAGE #	___ of ___
HAUL #	

SEQ #	SPECIES NAME	SEQ #	SPECIES NAME	SEQ #	SPECIES NAME
<input type="text"/>		<input type="text"/>		<input type="text"/>	
END STATUS ALIVE <input type="checkbox"/> DEAD <input type="checkbox"/> DEAD, DAMAGED <input type="checkbox"/> DEAD, HEAD ONLY <input type="checkbox"/> UNKNOWN (COMMENT) <input type="checkbox"/>		END STATUS ALIVE <input type="checkbox"/> DEAD <input type="checkbox"/> DEAD, DAMAGED <input type="checkbox"/> DEAD, HEAD ONLY <input type="checkbox"/> UNKNOWN (COMMENT) <input type="checkbox"/>		END STATUS ALIVE <input type="checkbox"/> DEAD <input type="checkbox"/> DEAD, DAMAGED <input type="checkbox"/> DEAD, HEAD ONLY <input type="checkbox"/> UNKNOWN (COMMENT) <input type="checkbox"/>	
DISP. CODE	WEIGHT (POUNDS)	DISP. CODE	WEIGHT (POUNDS)	DISP. CODE	WEIGHT (POUNDS)
DRESSED?	EST. METHOD	DRESSED?	EST. METHOD	DRESSED?	EST. METHOD
Y <input type="checkbox"/> N <input type="checkbox"/>		Y <input type="checkbox"/> N <input type="checkbox"/>		Y <input type="checkbox"/> N <input type="checkbox"/>	
LENGTH (cm)		LENGTH (cm)		LENGTH (cm)	
TAGS		TAGS		TAGS	
TAG #1		TAG #1		TAG #1	
TAG #1 CODE APPLIED BY OBSERVER <input type="checkbox"/> NO TAG(S) <input type="checkbox"/> TAG PRESENT, LEFT ON <input type="checkbox"/> TAG PRESENT, REMOVED <input type="checkbox"/> UNKNOWN (COMMENT) <input type="checkbox"/>		TAG #1 CODE APPLIED BY OBSERVER <input type="checkbox"/> NO TAG(S) <input type="checkbox"/> TAG PRESENT, LEFT ON <input type="checkbox"/> TAG PRESENT, REMOVED <input type="checkbox"/> UNKNOWN (COMMENT) <input type="checkbox"/>		TAG #1 CODE APPLIED BY OBSERVER <input type="checkbox"/> NO TAG(S) <input type="checkbox"/> TAG PRESENT, LEFT ON <input type="checkbox"/> TAG PRESENT, REMOVED <input type="checkbox"/> UNKNOWN (COMMENT) <input type="checkbox"/>	
TAG #2		TAG #2		TAG #2	
TAG #2 CODE APPLIED BY OBSERVER <input type="checkbox"/> NO TAG(S) <input type="checkbox"/> TAG PRESENT, LEFT ON <input type="checkbox"/> TAG PRESENT, REMOVED <input type="checkbox"/> UNKNOWN (COMMENT) <input type="checkbox"/>		TAG #2 CODE APPLIED BY OBSERVER <input type="checkbox"/> NO TAG(S) <input type="checkbox"/> TAG PRESENT, LEFT ON <input type="checkbox"/> TAG PRESENT, REMOVED <input type="checkbox"/> UNKNOWN (COMMENT) <input type="checkbox"/>		TAG #2 CODE APPLIED BY OBSERVER <input type="checkbox"/> NO TAG(S) <input type="checkbox"/> TAG PRESENT, LEFT ON <input type="checkbox"/> TAG PRESENT, REMOVED <input type="checkbox"/> UNKNOWN (COMMENT) <input type="checkbox"/>	
COMMENTS				FOR OFFICE USE ONLY	

Length Frequency Log

Complete this log on a per haul basis for the biological sampling of certain species. Length frequencies and shell height frequencies should be collected in the priority order listed in the [2016 NEFSC Observer On Deck Reference Guide](#).

Lengths and 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.

Sea scallop and clam/quahog heights are recorded in the right-hand section of this log. Pelagic species sampling is recorded on the [Individual Animal Log](#), unless otherwise instructed. Crustacean sampling (e.g., lobster and crab sampling) is recorded on the [Crustacean Sample Log](#).

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.	N/A	Cannot be unknown.
2	Species Code	Filled in by FSB 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	Actual weight. Finfish and squid: round weight. Shellfish: dressed (meat) weight.	Pounds, to the nearest tenth	Dash.
6	Age Sample Type Code	Must match age structure(s) submitted.	2-digit code	Cannot be unknown.
7	Number of Samples	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 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*	Numbers 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.
10	Volumetric Measure of Scallop Meats	See On Deck Reference Guide .	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 05/01/16

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

SPECIES NAME	1																	
SPECIES CODE	2																	
FISH DISPOSITION CODE	3																	
SEX CODE	4																	
SAMPLE WEIGHT (R/A)	5																	SAMPLE WEIGHT (D/A)
AGE SAMPLE TYPE CODE	6																	VOLUMETRIC MEASURE OF MEATS 10
# SAMPLES	7																	nearest 50 ml

MEASUREMENTS:	8	0	9	0	0	0	0	0	0	0	0	0	0	0	10 - 14	11	110 - 114
Finfish, Squid - cm	1		1		1		1		1		1		1		15 - 19		115 - 119
Shellfish - mm	2		2		2		2		2		2		2		20 - 24		120 - 124
	3		3		3		3		3		3		3		25 - 29		125 - 129
SEX CODES:	4		4		4		4		4		4		4		30 - 34		130 - 134
0=Unknown	5		5		5		5		5		5		5		35 - 39		135 - 139
1=Male	6		6		6		6		6		6		6		40 - 44		140 - 144
2=Female	7		7		7		7		7		7		7		45 - 49		145 - 149
AGE SAMPLE TYPE CODES:	8		8		8		8		8		8		8		50 - 54		150 - 154
00=None	9		9		9		9		9		9		9		55 - 59		155 - 159
01=Scales	0		0		0		0		0		0		0		60 - 64		160 - 164
02=Otoliths	1		1		1		1		1		1		1		65 - 69		165 - 169
03=Shells	2		2		2		2		2		2		2		70 - 74		170 - 174
04=Whole	3		3		3		3		3		3		3		75 - 79		175 - 179
05=Vertebra	4		4		4		4		4		4		4		80 - 84		180 - 184
06=Dorsal Spines	5		5		5		5		5		5		5		85 - 89		185 - 189
07=Scales & Otoliths	6		6		6		6		6		6		6		90 - 94		190 - 194
08=Head	7		7		7		7		7		7		7		95 - 99		195 - 199
09=Illicium	8		8		8		8		8		8		8		100 - 104		200 - 204
99=Other (comment)	9		9		9		9		9		9		9		105 - 109		205 - 209

COMMENTS

Round weight = _____ lbs 12

**LENGTH FREQUENCY LOG
NMFS FISHERIES OBSERVER PROGRAM
OBLNH OBLND 05/01/16**

OBS/TRIP ID	A99010-
DATE LANDED mm/yy	06 / 16
PAGE #	3 OF 3
HAUL #	005

SPECIES NAME	Atlantic Cod	Haddock	Spiny Dogfish	Spiny Dogfish	Spiny Dogfish	Scallop, Sea
SPECIES CODE						
FISH DISPOSITION CODE	100	100	100		100	100
SEX CODE	0	0	2		1	
SAMPLE WEIGHT (R/A)	61	29	503		18.5	SAMPLE WEIGHT (D/A) 7.2
AGE SAMPLE TYPE CODE	02	02	00		00	VOLUMETRIC MEASURE OF MEATS
# SAMPLES	6	5				2650 nearest 50 ml

MEASUREMENTS:	6	0	8	0	6	0	1	0	6	0	8	0	2	10	0	1	0	7	0	0	10	-	14	110	-	114	
Finfish, Squid - cm	1		1		1		1		1		1		1	1		1		1	2		1	15	-	19	115	-	119
Shellfish - mm	2		2		2		2		2		2		4	2		2		2	3		2	20	-	24	120	-	124
	3		3	1	3		1	3	3		3		9	3		3		3	1		3	25	-	29	125	-	129
SEX CODES:	4		4		4		2	4	4		4		9	4		4		4		4	30	-	34	130	-	134	
0=Unknown	5		5		5		1	5	5		5		4	5		5		5		5	35	-	39	135	-	139	
1=Male	6	3	6		6			6	6		6		7	6		6		6		6	40	-	44	140	-	144	
2=Female	7		7		7			7	7		7		8	7		7		7		7	45	-	49	145	-	149	
AGE SAMPLE TYPE CODES:	8	2	8		8			8	8		8		1	8		8		8		8	50	-	54	150	-	154	
00=None	9		9		9			9	9		9		1	9		9		9		9	55	-	59	155	-	159	
01=Scales	7	0	1		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		2	70	-	74	170	-	174	
04=Whole	3		3		3		3	3	3		3			3		3		3		3	75	-	79	175	-	179	
05=Vertebra	4		4		4		4	4	4		4		1	4		4		4		4	80	-	84	180	-	184	
06=Dorsal Spines	5		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		6	90	-	94	190	-	194	
08=Head	7		7		7		7	7	7		7		3	7		7		7		7	95	-	99	195	-	199	
09=Illicium	8		8		8		8	8	8		8		3	8		8		8		8	100	-	104	200	-	204	
99=Other (comment)	9		9		9		9	9	9		9		2	9		9		9		9	105	-	109	205	-	209	

COMMENTS

Round weight = **68** lbs

All kept catch from the last haul weighed (actual, round) and measured. Did not have time to get otoliths from all cod.

LENGTH FREQUENCY LOG (FRONT)
NMFS FISHERIES AT-SEA MONITORING PROGRAM
ASMLNH ASMLND 05/01/16

OBS/TRIPID	A
DATE LANDED mm/yy	B /
PAGE #	C ___ of ___
HAUL #	F

SPECIES NAME		SPECIES NAME		SPECIES NAME		SPECIES NAME		SPECIES NAME	
1									
FISH DISP. CODE		FISH DISP. CODE		FISH DISP. CODE		FISH DISP. CODE		FISH DISP. CODE	
3									
SAMPLE WEIGHT (R/A)		SAMPLE WEIGHT (R/A)		SAMPLE WEIGHT (R/A)		SAMPLE WEIGHT (R/A)		SAMPLE WEIGHT (R/A)	
5									
8	0	9	0	0	0	0	0	0	0
1		1		1	1	1	1	1	1
2		2		2	2	2	2	2	2
3		3		3	3	3	3	3	3
4		4		4	4	4	4	4	4
5		5		5	5	5	5	5	5
6		6		6	6	6	6	6	6
7		7		7	7	7	7	7	7
8		8		8	8	8	8	8	8
9		9		9	9	9	9	9	9
0		0		0	0	0	0	0	0
1		1		1	1	1	1	1	1
2		2		2	2	2	2	2	2
3		3		3	3	3	3	3	3
4		4		4	4	4	4	4	4
5		5		5	5	5	5	5	5
6		6		6	6	6	6	6	6
7		7		7	7	7	7	7	7
8		8		8	8	8	8	8	8
9		9		9	9	9	9	9	9
0		0		0	0	0	0	0	0
1		1		1	1	1	1	1	1
2		2		2	2	2	2	2	2
3		3		3	3	3	3	3	3
4		4		4	4	4	4	4	4
5		5		5	5	5	5	5	5
6		6		6	6	6	6	6	6
7		7		7	7	7	7	7	7
8		8		8	8	8	8	8	8
9		9		9	9	9	9	9	9

COMMENTS

LENGTH FREQUENCY LOG (FRONT)
NMFS FISHERIES AT-SEA MONITORING PROGRAM
 ASMLNH ASMLND 05/01/16

OBS/TRIPID	A99002-
DATE LANDED mm/yy	10 / 16
PAGE #	2 of 3
HAUL #	003

SPECIES NAME			SPECIES NAME			SPECIES NAME			SPECIES NAME			SPECIES NAME								
Spiny Dogfish			Spiny Dogfish			Haddock			Atlantic Cod			Winter Fld.								
FISH DISP. CODE			FISH DISP. CODE			FISH DISP. CODE			FISH DISP. CODE			FISH DISP. CODE								
100			100			100			100			012								
SAMPLE WEIGHT (R/A)			SAMPLE WEIGHT (R/A)			SAMPLE WEIGHT (R/A)			SAMPLE WEIGHT (R/A)			SAMPLE WEIGHT (R/A)								
167			10.8			61			5.3											
5	0		8	0		11	0	1	0	1	0	5	0	0	5	0	0	2	0	0
1			1			1		1	1		1	1		1	1		1	1		1
2			2	2	2	2		2	2		2	2		2	2		2	2		2
3			3			3		3	3	2	3	3		3	3		3	3		3
4			4		5	4		4	4		4	4		4	4		4	4		4
5			5			5		5	5		5	5		5	5		5	5	1	5
6			3	6		6		6	6	1	6	6	3	6	6	3	6	6	3	6
7			7		2	7		7	7		7	7		7	7		7	7	4	7
8			8			8		8	8		8	8		8	8		8	8	6	8
9			9			9		9	9		9	9		9	9		9	9	4	9
6	0		9	0		0		0	0		0	7	0	0	3	0	3	0	3	0
1			1			1		1	1		1	1	2	1	1		1	1		1
2			2	2		2		2	2		2	2	1	2	2		2	2		2
3			1	3	3	3		3	3		3	3	1	3	3		3	3		3
4			1	4		4		4	4		4	4		4	4		4	4		4
5			5			5		5	5		5	5		5	5		5	5		5
6			6		5	6		6	6		6	6		6	6		6	6		6
7			7			7		7	7		7	7		7	7		7	7		7
8			8			8		8	8		8	8		8	8		8	8		8
9			9			9		9	9		9	9		9	9		9	9		9
7	0		10	0		0		0	0		0	8	0	0	0	0	0	0	0	0
1			1			1		1	1		1	1	2	1	1		1	1		1
2			2			2		2	2		2	2		2	2		2	2		2
3			1	3		3		3	3		3	3		3	3		3	3		3
4			4			4		4	4		4	4		4	4		4	4		4
5			5			5		5	5		5	5		5	5		5	5		5
6			6		1	6		6	6		6	6		6	6		6	6		6
7			7			7		7	7		7	7		7	7		7	7		7
8			8			8		8	8		8	8		8	8		8	8		8
9			9			9		9	9		9	9		9	9		9	9		9
COMMENTS																				

LENGTH FREQUENCY LOG (BACK)
NMFS FISHERIES AT-SEA MONITORING PROGRAM
ASMLNH ASMLND 05/01/16

ASM/TRIPID	
DATE LANDED mm/yy	/
PAGE #	___ of ___
HAUL #	

SPECIES NAME		SPECIES NAME		SPECIES NAME		SPECIES NAME		SPECIES NAME	
FISH DISP. CODE		FISH DISP. CODE		FISH DISP. CODE		FISH DISP. CODE		FISH DISP. CODE	
SAMPLE WEIGHT (R/A)		SAMPLE WEIGHT (R/A)		SAMPLE WEIGHT (R/A)		SAMPLE WEIGHT (R/A)		SAMPLE WEIGHT (R/A)	
0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9
0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9
0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9
COMMENTS						FOR OFFICE USE ONLY			

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.

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 (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. 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.

Record all times the pumping stops, and the reason for stoppage.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
1	Estimated Pumping Time	Obtain from captain. If catch is not pumped onboard, record a dash in this field.	Whole Minutes	Dash.
2	Basket Number	Sequential for each basket sample in order of time taken.	Whole number	Cannot be unknown.
3	Time	Time basket sample is taken.	HH:MM (24hr)	Dash.
4	Species Name	See Appendix T – Species Codes.	N/A	Cannot be unknown.
5	Species Code	Filled in by FSB staff for data entry. Observers: leave blank.	4-digit code	Cannot be unknown.
6	Pounds	Round actual weight.	Pounds, to the nearest tenth	Cannot be unknown.
7	Basket Subtotal Weight	Total weight of catch in subsample basket.	Pounds, to the nearest tenth	Cannot be unknown.
8	Total Weight of Pumped Catch	Obtain from captain.	Whole pounds	Cannot be unknown.
9	Species Name	Listing of all species encountered in any basket sample.	N/A	Cannot be unknown.
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 by the total basket weight. 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 05/01/16

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

ESTIMATED PUMPING TIME 1 minutes

BASKET # 2 TIME 3 :

BASKET # _____ TIME _____ :

BASKET # _____ TIME _____ :

SPECIES	CODE	POUNDS (R/A)
4	5	6 . _____
		. _____
		. _____
		. _____
		. _____
SUBTOTAL		7 . _____

SPECIES	CODE	POUNDS (R/A)
		. _____
		. _____
		. _____
		. _____
		. _____
SUBTOTAL		. _____

SPECIES	CODE	POUNDS (R/A)
		. _____
		. _____
		. _____
		. _____
		. _____
SUBTOTAL		. _____

BASKET # _____ TIME _____ :

BASKET # _____ TIME _____ :

BASKET # _____ TIME _____ :

SPECIES	CODE	POUNDS (R/A)
		. _____
		. _____
		. _____
		. _____
		. _____
SUBTOTAL		. _____

SPECIES	CODE	POUNDS (R/A)
		. _____
		. _____
		. _____
		. _____
		. _____
SUBTOTAL		. _____

SPECIES	CODE	POUNDS (R/A)
		. _____
		. _____
		. _____
		. _____
		. _____
SUBTOTAL		. _____

COMMENTS

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

BASKET # 2 TIME 3 :

SPECIES	CODE	POUNDS (R/A)
4	5	6 . _____
		. _____
		. _____
		. _____
		. _____
SUBTOTAL		7 . _____

BASKET # _____ TIME _____ :

SPECIES	CODE	POUNDS (R/A)
		. _____
		. _____
		. _____
		. _____
		. _____
SUBTOTAL		. _____

BASKET # _____ TIME _____ :

SPECIES	CODE	POUNDS (R/A)
		. _____
		. _____
		. _____
		. _____
		. _____
SUBTOTAL		. _____

BASKET # _____ TIME _____ :

SPECIES	CODE	POUNDS (R/A)
		. _____
		. _____
		. _____
		. _____
		. _____
SUBTOTAL		. _____

SPECIES	POUNDS (R/A)	PROPORTION OF TOTAL BASKET WEIGHT (a/b)	EXTRAPOLATED WEIGHT (lbs) (c x d)
9	(a) 10 _____	(c) 0 . _____ 12 _____	13
	(a) . _____	(c) 0 . _____	
	(a) . _____	(c) 0 . _____	
	(a) . _____	(c) 0 . _____	
	(a) . _____	(c) 0 . _____	
	(a) . _____	(c) 0 . _____	
	(a) . _____	(c) 0 . _____	
	(a) . _____	(c) 0 . _____	
	(a) . _____	(c) 0 . _____	
	(a) . _____	(c) 0 . _____	
TOTAL	(b) 11 _____	1	

(d) TOTAL WEIGHT OF PUMPED CATCH (Captain's Estimate) _____ **8** lbs

CATCH COMPOSITION LOG
NMFS FISHERIES OBSERVER PROGRAM
OBCMP 05/01/16

OBS/TRIP ID	A99011-
DATE LANDED mm/yy	11 / 16
PAGE #	2 OF 4
HAUL #	003

ESTIMATED PUMPING TIME 45 minutes

BASKET # 1 TIME 22 : 30

SPECIES	CODE	POUNDS (R/A)
Atlantic Herring		63 . 7
Atlantic Mackerel		0 . 2
		. . .
		. . .
		. . .
SUBTOTAL		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	A99011-		
DATE LANDED mm/yy	11	/	16
PAGE #	3	OF	4
HAUL #	003		

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

SPECIES	POUNDS (R/A)	PROPORTION OF TOTAL BASKET WEIGHT (a/b)	EXTRAPOLATED WEIGHT (lbs) (c x d)
Atlantic Herring	(a) 664 . 2	(c) 0 . 9 4 7 8	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 .	
	(a) .	(c) 0 .	
TOTAL	(b) 700 . 8	1	

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

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.

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**).

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).

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 hundredth	Blank.
3	Species	See Appendix T – Species Codes.	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.
11	Total Estimated Weight	Calculate. Average Weight Per Unit x Total Number of Units.	Whole pounds	Cannot be unknown.
12	Catch Shape, Measurements & Volume	Measure checker pen dimensions. Draw and label all dimensions in comments.	Feet, to the nearest tenth	Cannot be unknown.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
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. Total pile from multiple hauls.	Cubic feet, to the nearest hundredth	Cannot be unknown.
13	Depths	Measure. 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. Use formulas on worksheet. For deckloading: total minus remainder.	Cubic feet, to the nearest hundredth	Cannot be unknown.
15	Total Subsample Volume	Calculate. 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.	Weight: Pounds, to the nearest tenth Other: whole number	Cannot be unknown.
20	Entire Deck Loading Haul Range	Range of hauls where deck loading occurred.	Haul numbers	Cannot be unknown.
21	Number of Hauls	Count.	Whole number	Cannot be unknown.
22	Species	See Appendix T – Species Codes.	N/A	Cannot be unknown.
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.	Whole pounds	Cannot be unknown.

**CATCH ESTIMATION WORKSHEET
NMFS FISHERIES OBSERVER PROGRAM**

05/01/16

OBS/TRIP ID	A
DATE LANDED mm/yy	B /
HAUL #	F

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

**MAREL SCALE
CALIBRATION WT**
2

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

Trapezoid

$$\left(\frac{W1 + W2}{2} \right) \times L \times \text{Avg. Depth} \times 0.5 = \text{Volume (ft}^3\text{)}$$

Rectangle

$$W \times L \times \text{Avg. Depth} = \text{Volume (ft}^3\text{)}$$

Triangle

$$\left(\frac{W}{2} \right) \times L \times \text{Avg. Depth} \times 0.5 = \text{Volume (ft}^3\text{)}$$

Full Oval or Half-Oval

$$\left(\frac{W}{2} \right) \times L \times \text{Avg. Depth} \times 0.785 = \text{Volume (ft}^3\text{)}$$

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.

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 3	4	5	6	7	8	9 .	10	11
2								
3								
4								
5								
6								
7								
8								
9								
10								

COMMENTS :

13

A) Total Haul Vol. 14 _____ ft ³	B) Total Subsample Vol. 15 Basket(s) X 1.47 ft ³ = _____ ft ³ Tote(s) X 2.65 ft ³ = _____ ft ³ Other(s) X _____ ft ³ = _____ ft ³	C) Sample Weight Multiplier (A ÷ B) 16 _____
---	---	---

OTHER SUBSAMP TYPES	Unit Type 17 <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
----------------------------	--	------------------------------	-------------------------------

>> Copy to Front >>

DECKLOADING and CUMULATIVE SUM

Entire Deckloading Haul Range 20	Deckloading Measurements		
	Total Pile Vol. 12B	Remainder Pile Vol. 12A	A) Total Haul Vol. 14
	_____ 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 '98' on front.

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

CATCH ESTIMATION WORKSHEET
NMFS FISHERIES OBSERVER PROGRAM
05/01/16

OBS/TRIP ID	
DATE LANDED mm/yy	/
HAUL #	

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

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								
2								
3								
4								
5								
6								
7								
8								
9								
10								

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

Trapezoid

$$\left(\frac{W1 + W2}{2} \right) \times L \times \text{Avg. Depth} \times 0.5 = \text{Volume (ft}^3\text{)}$$

Rectangle

$$W \times L \times \text{Avg. Depth} = \text{Volume (ft}^3\text{)}$$

Triangle

$$\left(\frac{W}{2} \right) \times L \times \text{Avg. Depth} \times 0.5 = \text{Volume (ft}^3\text{)}$$

Full Oval or Half-Oval

$$W \times L \times \text{Avg. Depth} \times 0.785 = \text{Volume (ft}^3\text{)}$$

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.

1.4	1.6	1.6	1.5	1.0	1.3	1.1	1.2	0.9	0.0
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

A) Total Haul Vol. 5220 ft ³	B) Total Subsample Vol. Basket(s) X 1.47 ft ³ = _____ ft ³ Tote(s) X 2.65 ft ³ = 13.25 ft ³ Other(s) X _____ ft ³ = _____ ft ³	C) Sample Weight Multiplier (A + B) 3.94 >> Copy to Front >>
OTHER SUBSAMPLE TYPES	Unit Type <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 B) Sample

COMMENTS:
Pile doesn't reach edges of checker pen

DECKLOADING and CUMULATIVE SUM

Entire Deckloading Haul Range	Deckloading Measurements		
	Total Pile Vol.	Remainder Pile Vol.	A) Total Haul Vol.
	_____ ft ³	_____ ft ³	= _____ ft ³

Number of Hauls _____ *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 '98' on front.

Species	Disp. Code	Total Sampled Weight	*Est. Method	Weight per Haul
1				
2				
3				
4				
5				

CATCH ESTIMATION WORKSHEET
NMFS FISHERIES OBSERVER PROGRAM

05/01/16

OBS/TRIP ID	
DATE LANDED mm/yy	/
HAUL #	

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

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

Trapezoid
 $(4.4\text{ ft} + 7.2\text{ ft}) \times 3.3\text{ ft} \times 0.87\text{ ft} \times 0.5 = 16.65\text{ ft}^3$

Rectangle
 $6.5\text{ ft} \times 7.2\text{ ft} \times 0.87\text{ ft} = 40.72\text{ ft}^3$

Triangle

Full Oval or Half-Oval

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.

0.8	0.6	0.9	1.1	1.1	0.8	1.0	0.7	0.9	0.8
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

A) Total Haul Vol.	B) Total Subsample Vol.	C) Sample Weight Multiplier (A + B)
57.37 ft ³	8 Basket(s) X 1.47 ft ³ = 11.76 ft ³	4.88
	Tote(s) X 2.65 ft ³ = _____ ft ³	>> Copy to Front >>
	Other(s) X _____ ft ³ = _____ ft ³	

OTHER SUBSAMPLE TYPES	Unit Type	A) Total	B) Sample
	<input type="checkbox"/> Basket <input type="checkbox"/> Tote		
	<input type="checkbox"/> Weight <input type="checkbox"/> Trap		
	<input type="checkbox"/> Count <input type="checkbox"/> Other		

DECKLOADING and CUMULATIVE SUM			
Entire Deckloading Haul Range	Deckloading Measurements		
	Total Pile Vol.	Remainder Pile Vol.	A) Total Haul Vol.
	_____ ft ³	_____ ft ³	= _____ ft ³

Number of Hauls _____
 *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 '98' on front.

Species	Disp. Code	Total Sampled Weight	*Est. Method	Weight per Haul
1				
2				
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	
Cod, Atlantic	012	I	weighed all together	14.6	6	2.4	17	41	
Squid, Shortfin	100	O	21, 23.8, 23, 23.2, 23.4, 23.1, 23, 22						
			23.3, 23	228.8	10	22.9	162	3710	
Skate, Little	001	B	see haul 5	—	—	62.1	5	311	

COMMENTS:

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

9.8 }
 6.5 }
 4.4 }
 7.2 }
 } 9.8 - 6.5 = 3.3

CATCH ESTIMATION WORKSHEET (SCALLOP)
NMFS FISHERIES OBSERVER PROGRAM
05/01/16

OBS/TRIP ID	A
DATE LANDED mm/yy	B /
HAUL #	F

SORTING METHOD
 Check all that apply
 1 Picked
 2 Shoveled
 3 Deckloaded
 4 Conveyor System
 5 Pumping System
 9 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 _____
 Number of Hauls
 21 _____

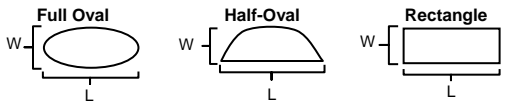
CUMULATIVE SUM
 *Estimation Method used to obtain species Total Samp.Wgt. for cumulative sum calculation. If not '01' or '11' show all additional calculations and use '98' on front.

Species	Disp. Code	Total Sampled Weight	*Est. Method	Weight per Haul
22	23	24	25	26
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

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
3	4	5	6	7	8	9	10	11
1								
2								
3								

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



MAREL SCALE CALIBRATION WT
 2 _____

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.

Other Shapes or Combinations: Draw & label all dimensions in comments

A1) REMAINDER VOLUME from previous haul(s)

Starboard Circle One: Full Oval Half-Oval Rectangle
 _____ ft X _____ ft X _____ ft (X 0.785) = _____ ft³
 Width Length Avg. Depth (ovals) Volume

Port Circle One: Full Oval Half-Oval Rectangle
 _____ ft X _____ ft X _____ ft (X 0.785) = _____ ft³
 Width Length Avg. Depth (ovals) Volume

A1) TOTAL REMAINDER VOLUME (Starboard + Port) = _____ ft³

Depths 13

COMMENTS :

A2) TOTAL VOLUME after current haul dumped

Starboard Circle One: Full Oval Half-Oval Rectangle
 _____ ft X _____ ft X _____ ft (X 0.785) = _____ ft³
 Width Length Avg. Depth (ovals) Volume

Port Circle One: Full Oval Half-Oval Rectangle
 _____ ft X _____ ft X _____ ft (X 0.785) = _____ ft³
 Width Length Avg. Depth (ovals) Volume

A2) TOTAL CATCH PILE VOLUME (Starboard + Port) = _____ ft³

Depths

A) Total Haul Vol. 14 _____ ft³

B) Total Subsample Vol. 15

_____ Basket(s)	X	1.47 ft ³	=	_____ ft ³
_____ Tote(s)	X	2.65 ft ³	=	_____ ft ³
_____ Other(s)	X	_____ ft ³	=	_____ ft ³

C) Sample Weight Multiplier (A ÷ B)
 16 _____

OTHER SUBSAMP TYPES

<input type="checkbox"/> Basket	<input type="checkbox"/> Tote	A) Total	B) Sample
<input type="checkbox"/> Weight	<input type="checkbox"/> Trap	18	19
<input type="checkbox"/> Count	<input type="checkbox"/> Other		

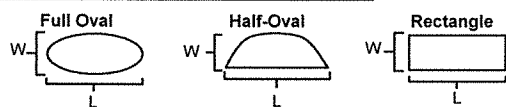
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CATCH ESTIMATION WORKSHEET (SCALLOP)
NMFS FISHERIES OBSERVER PROGRAM
 05/01/16

OBS/TRIP ID.	
DATE LANDED mm/yy	/
HAUL #	

SORTING METHOD Check all that apply 1 <input checked="" type="checkbox"/> Picked 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)	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 <u>147 - 151</u> Number of Hauls <u>5</u>	CUMULATIVE SUM *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.
---	--	--	---

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								
2								
3								
4								
5								
6								
7								
8								
9								
10								

VOLUME-TO-VOLUME CATCH PILE SHAPE AS SEEN FROM ABOVE:  <p>Other Shapes or Combinations: Draw & label all dimensions in comments.</p>	MAREL SCALE CALIBRATION WT _____
---	--

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 pan or slopes to zero.

A1) REMAINDER VOLUME from previous haul(s)

Starboard	Circle One: Full Oval <input type="checkbox"/> Half-Oval <input checked="" type="checkbox"/> Rectangle	Depths
3.2 ft X 7.1 ft X 1.16 ft (X 0.785) = 20.69 ft ³		1 2 1 0 1 3 1 5 2 0
Width Length Avg. Depth (ovals) Volume		1 3 1 2 1 1 1 0 0 0
Port	Circle One: Full Oval <input type="checkbox"/> Half-Oval <input checked="" type="checkbox"/> Rectangle	Depths
3.0 ft X 6.0 ft X 0.84 ft (X 0.785) = 11.87 ft ³		0 8 0 1 1 2 1 0 1 0
Width Length Avg. Depth (ovals) Volume		0 9 0 8 1 1 0 6 0 0
A1) TOTAL REMAINDER VOLUME (Starboard + Port) = 32.56 ft ³		

COMMENTS :

A2) TOTAL VOLUME after current haul dumped		
Starboard	Circle One: Full Oval <input type="checkbox"/> Half-Oval <input checked="" type="checkbox"/> Rectangle	Depths
3.6 ft X 7.6 ft X 1.20 ft (X 0.785) = 25.77 ft ³		1 3 1 0 0 6 0 3 1 7
Width Length Avg. Depth (ovals) Volume		1 9 2 0 1 4 1 8 0 0
Port	Circle One: Full Oval <input type="checkbox"/> Half-Oval <input type="checkbox"/> Rectangle <input checked="" type="checkbox"/>	Depths
3.0 ft X 7.0 ft X 1.30 ft (X 0.785) = 27.30 ft ³		0 7 0 9 1 8 1 3 1 9
Width Length Avg. Depth (ovals) Volume		1 2 1 0 0 8 1 6 1 8
A2) TOTAL CATCH PILE VOLUME (Starboard + Port) = 53.07 ft ³		

A) Total Haul Vol. <u>20.51</u> ft ³	B) Total Subsample Vol. ___ Basket(s) X 1.47 ft ³ = <u>5.88</u> ft ³ ___ Tote(s) X 2.65 ft ³ = _____ ft ³ ___ Other(s) X _____ ft ³ = _____ ft ³	C) Sample Weight Multiplier (A + B) <u>3.49</u> >> Copy to Front >>
--	---	---

Pile on deck when I came on watch

Discard Log

This 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. 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.	1-digit code	"9".
2	All Catch Sampled?	Yes/No. If any catch slipped ¹⁰ 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 box	"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.
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 box	Cannot be unknown.

¹⁰ Does not include operational discards. See the FSB Observer Operations Manual for complete definition of slippage.

Field #	Name	Collection Type/ Special Instructions	Units/ Format	Unknown Values
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".

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

GEAR CODE D <input type="text"/> <input type="text"/> <input type="text"/>	GEAR # E <input type="text"/> <input type="text"/>	HAUL # F <input type="text"/> <input type="text"/> <input type="text"/>	Why was the catch discarded on this haul? <i>(CHECK ALL THAT APPLY)</i> 4 <input type="checkbox"/> Unknown (0) (comment) <input type="checkbox"/> Market (1) <input type="checkbox"/> Regulations (2) <input type="checkbox"/> Quality (4) <input type="checkbox"/> Not brought onboard (5) <input type="checkbox"/> Other (9) (comment) <input type="checkbox"/> Not applicable	Who estimated the weight of the discarded catch? 5 ___ 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) ___ Yes (1) ___ Unknown (9) TRIPID: <u> 8 </u> HAUL #: <u> 9 </u>	Check off the discard event. <i>(CHECK ALL THAT APPLY)</i> 10 <input type="checkbox"/> Unknown (0) (comment) <input type="checkbox"/> Operational discards (1) <input type="checkbox"/> Tow was partially released (2) <input type="checkbox"/> Tow was fully released (3) <input 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
Were there discards for this tow? 1 ___ No (0) ___ 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) ___ Yes, all/some contents seen in water (2)		Was any of the catch pumped to another vessel? 6 ___ No (0) ___ Yes (1) ___ Unknown (9)			
Was all catch brought to the observed vessel pumped/hailed onboard and completely sampled? 2 ___ No (0) ___ Yes (1) ___ Not applicable							

CATCH COMPOSITION OF DISCARDED CATCH: Describe the catch composition of the discarded catch and how those determinations were made.

12

CHALLENGES OBSERVING THIS HAUL: Describe any challenges that occurred with observing this haul:

13

DISCARD LOG
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GEAR CODE 1 7 0	GEAR # 0 1	HAUL # 0 0 1	Why was the catch discarded on this haul? (CHECK ALL THAT APPLY)	Who estimated the weight of the discarded catch?	Was there an observer onboard the other vessel? If yes, provide the Tripid and Haul Number.	Check off the discard event. (CHECK ALL THAT APPLY)	REASONS NOT BROUGHT ONBOARD: Describe any reasons why the catch could not be pumped/hailed onboard.
Were there discards for this tow? ___ 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? ___ 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	<input type="checkbox"/> Captain (2) <input type="checkbox"/> Combination (8) ___ Not applicable	Was any of the catch pumped to another vessel? ___ No (0) X Yes (1) ___ Unknown (9)	___ No (0) X Yes (1) ___ Unknown (9) TRIPID: B99018- HAUL #: 001	<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	~125 pounds of fish could not be pumped from net. They were seen in the water when pump was disconnected.

CATCH COMPOSITION OF DISCARDED CATCH: Describe the catch composition of the discarded catch and how those determinations were made.

Market/discard after pumping = spiny dogfish picket 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:

~100,000 pounds pumped to F/V Susan B.

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GEAR CODE □□□□ D	GEAR # □□ E	HAUL # □□□□ F	Who estimated the weight of the discarded catch? Observer <input type="checkbox"/> Captain <input type="checkbox"/> Combination <input type="checkbox"/>	5
----------------------------	-----------------------	-------------------------	---	----------

CHECK ALL THAT APPLY

Were you able to see the contents of the codend when the catch was released? 3	Why was the catch discarded on this haul? 4	Check off the discard event. 10
No <input type="checkbox"/>	Unknown <input type="checkbox"/>	Tow was partially released <input type="checkbox"/>
Yes, all contents seen on deck <input type="checkbox"/>	Market <input type="checkbox"/>	Tow was fully released <input type="checkbox"/>
Yes, all/some contents seen in water <input type="checkbox"/>	Regulations <input type="checkbox"/>	Other (comment) <input type="checkbox"/>
	Quality <input type="checkbox"/>	
	Not brought onboard <input type="checkbox"/>	
	Other (comment) <input type="checkbox"/>	

REASONS NOT BROUGHT ONBOARD: Describe any reasons why the catch could not be hauled onboard.

11

CATCH COMPOSITION OF DISCARDED CATCH: Describe the catch composition of the discarded catch and how those determinations were made.

12

CHALLENGES OBSERVING THIS HAUL: Describe any challenges that occurred with observing this haul.

13

DISCARD LOG
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GEAR CODE 050	GEAR # 02	HAUL # 004	Who estimated the weight of the discarded catch?		
			Observer <input type="checkbox"/>	Captain <input type="checkbox"/>	Combination <input checked="" type="checkbox"/>

CHECK ALL THAT APPLY

Were you able to see the contents of the codend when the catch was released?	Why was the catch discarded on this haul?	Check off the discard event.
No <input type="checkbox"/>	Unknown <input type="checkbox"/>	Tow was partially released <input type="checkbox"/>
Yes, all contents seen on deck <input type="checkbox"/>	Market <input checked="" type="checkbox"/>	Tow was fully released <input checked="" type="checkbox"/>
Yes, all/some contents seen in water <input checked="" type="checkbox"/>	Regulations <input type="checkbox"/>	Other (comment) <input type="checkbox"/>
	Quality <input type="checkbox"/>	
	Not brought onboard <input type="checkbox"/>	
	Other (comment) <input type="checkbox"/>	

REASONS NOT BROUGHT ONBOARD: Describe any reasons why the catch could not be hauled onboard.

**The codend was not brought onboard due to a large amount of spiny dogfish.
All catch was released into the water.**

CATCH COMPOSITION OF DISCARDED CATCH: Describe the catch composition of the discarded catch and how those determinations were made.

**The majority of the catch was spiny dogfish. There were a few skates (skate, nk).
I did not see any other species.**

CHALLENGES OBSERVING THIS HAUL: Describe any challenges that occurred with observing this haul.

**Due to the size of the bag, the captain did not want me on deck for safety reasons.
I was able to go out on deck moments after the codend was released into the water.**

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 [2016 NEFSC Observer On Deck Reference Guide](#).

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 visual estimate. 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.	1-digit code	"0".
8	Lobster V-Notch	Visually determine.	1-digit code	"0".
9	Lobster Molt	Visually confirm.	1-digit code	"0".
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.

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

SPECIES								ANIMALS CAUGHT							SHELL DISEASE	
NAME				CODE				NUMBER			A / E				PERCENTAGE	
A'				B'				1			2				3	
				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	#	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	#	
LOBSTER - LENGTH CRAB - WIDTH							C L A W	LOBSTER - LENGTH CRAB - WIDTH							C L A W	
1	4	5	6	7	8	9	10	26								
2								27								
3								28								SEX CODES: 0= Unknown 1=Male 2=Female
4								29								
5								30								
6								31								EGG CODES: 0=Unknown 1=No eggs 2=Eggs, stage unknown 3=Eggs, newly extruded 4=Eggs, eyed 5=Eggs, hatching 6=Spent
7								32								
8								33								
9								34								
10								35								
11								36								
12								37								V-NOTCH CODES: 0=Unknown 1=No 2=Yes, old 3=Yes, new
13								38								
14								39								
15								40								MOLT CODES: 0=Unknown 1=Soft 2=Paper 3=Hard 4=Splitter
16								41								
17								42								
18								43								
19								44								
20								45								
21								46								
22								47								
23								48								
24								49								
25								50								

COMMENTS

CRUSTACEAN SAMPLE LOG
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OBS/TRIP ID	A99036-
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PAGE #	3 OF 3
HAUL #	044

SPECIES								ANIMALS CAUGHT								SHELL DISEASE	
NAME								NUMBER								PERCENTAGE	
American Lobster								33								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			
1	117	D	2	4	1	3	2	26	120	D	2	5	1	3	2		
2	90	K	2	1	1	3	2	27	103	K	2	1	2	3	2		
3	93	K	1	1	1	3	2	28	91	K	2	1	1	3	2		
4	133	K	1	1	1	3	2	29	106	K	2	1	2	3	2		
5	124	D	2	4	2	3	2	30	102	K	1	1	1	3	0		
6	130	K	1	1	1	3	2	31	118	D	2	4	1	3	2		
7	131	D	2	4	2	3	2	32	117	D	2	4	2	3	2		
8	122	K	1	1	1	3	2	33	132	D	2	3	2	3	2		
9	118	K	2	1	1	3	2	34									
10	100	K	1	1	1	3	2	35									
11	132	K	2	1	2	3	2	36									
12	148	K	2	1	1	3	2	37									
13	134	K	1	1	1	3	2	38									
14	101	D	2	3	1	3	2	39									
15	102	K	2	1	1	3	2	40									
16	116	K	2	1	2	3	2	41									
17	108	K	2	1	2	3	2	42									
18	105	K	1	1	1	3	2	43									
19	103	K	2	1	1	3	2	44									
20	123	K	2	1	1	3	2	45									
21	138	K	1	1	1	3	2	46									
22	99	K	1	1	1	3	2	47									
23	116	K	1	1	1	3	1	48									
24	107	K	1	1	1	3	2	49									
25	108	D	2	4	1	3	2	50									

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

4 lobsters had a brown, spotting shell disease. Females w/eggs were discarded.

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

		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							LOBSTER - LENGTH							
CRAB - WIDTH							CRAB - WIDTH							
51							76							
52							77							
53							78							SEX CODES:
54							79							0= Unknown
55							80							1=Male
56							81							2=Female
57							82							EGG CODES:
58							83							0=Unknown
59							84							1=No eggs
60							85							2=Eggs, stage unknown
61							86							3=Eggs, newly extruded
62							87							4=Eggs, eyed
63							88							5=Eggs, hatching
64							89							6=Spent
65							90							V-NOTCH CODES:
66							91							0=Unknown
67							92							1=No
68							93							2=Yes, old
69							94							3=Yes, new
70							95							MOLT CODES:
71							96							0=Unknown
72							97							1=Soft
73							98							2=Paper
74							99							3=Hard
75							100							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 trip, regardless of whether or not the scale is used. This worksheet is used for all programs.

Record the results of your daily 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 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 11.00 and 11.10 to use the scale.	Pounds, to the nearest hundredth.	Cannot be unknown.
6	Daily 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
05/01/16

OBS/TRIP ID	A
DATE LANDED mm/yy	B /
PAGE #	C of

SCALE SERIAL NUMBER 1	VESSEL NAME 2
---------------------------------	-------------------------

DAILY TESTS

DATE (mm/dd/yy)	FIT VALUE	CALIBRATION WEIGHT (must be 11.00 - 11.10 to use)	COMMENTS
3 /	4	5 .	6
/ /		. .	
/ /		. .	
/ /		. .	
/ /		. .	
/ /		. .	
/ /		. .	
/ /		. .	
/ /		. .	
/ /		. .	
/ /		. .	

EVENTS

DATE (mm/dd/yy)	EVENT CODE	EXPLANATION
7 /	8	9
/ /		
/ /		
/ /		
/ /		
/ /		
/ /		
/ /		
/ /		
/ /		

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

MAREL SCALE WORKSHEET
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OBS/TRIP ID	A99101-
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SCALE SERIAL NUMBER A114321	VESSEL NAME Comorant
---------------------------------------	--------------------------------

DAILY TESTS

DATE (mm/dd/yy)	FIT VALUE	CALIBRATION WEIGHT (must be 11.00 - 11.10 to use)	COMMENTS
10 /13 /16	2	<u> 1 1 . 0 0 </u>	
10 /14 /16	5	<u> 1 1 . 0 0 </u>	
10 /15 /16	17	<u> 1 1 . 0 0 </u>	
10 /16 /16	24	<u> 1 1 . 0 0 </u>	
10 /17 /16	90	<u> 1 1 . 0 5 </u>	E-05, rough weather, tried 3 times, all high fit values
10 /18 /16	13	<u> 1 1 . 0 0 </u>	
10 /19 /16	11	<u> 1 1 . 0 5 </u>	
10 /20 /16	6	<u> 1 1 . 0 0 </u>	E-08, E-05, recalibrated and codes went away
10 /21 /16	0	<u> 1 1 . 0 5 </u>	
10 /22 /16	9	<u> 1 1 . 0 0 </u>	Scale would not turn on. Changed batteries and worked

EVENTS

DATE (mm/dd/yy)	EVENT CODE	EXPLANATION
10 /17 /16	2	Tried next haul, calibrated fine
10 /21 /16	2	E-08, was not able to correct on deck, tried 3 times. Tried next haul and worked fine.
10 /22 /16	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	A99101-
DATE LANDED mm/yy	10 / 16
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DAILY TESTS

DATE (mm/dd/yy)	FIT VALUE	CALIBRATION WEIGHT (must be 11.00 - 11.05 to use)	COMMENTS
10 /23 /16	6	<u> 1 1 </u> . <u> 0 0 </u>	
10 /24 /16	2	<u> 1 1 </u> . <u> 0 0 </u>	
10 /25 /16	3	<u> 1 1 </u> . <u> 0 0 </u>	
10 /26 /16	4	<u> 1 1 </u> . <u> 0 0 </u>	
/ /		____ . ____	
/ /		____ . ____	
/ /		____ . ____	
/ /		____ . ____	
/ /		____ . ____	
/ /		____ . ____	

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 FSB staff.
- E-14** = ADC not responding - Contact FSB staff.
- E-15** = W&M setup checksum failure - Contact FSB staff.
- E-23** = 24 V power voltage too high - Contact FSB staff.
- E-25** = Low voltage to load cells - Contact FSB 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.

CONTACTS

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Appendix A - Northeast Statistical Areas

Chart 1. Overview of the Northeast Statistical Areas

Do not use for navigation

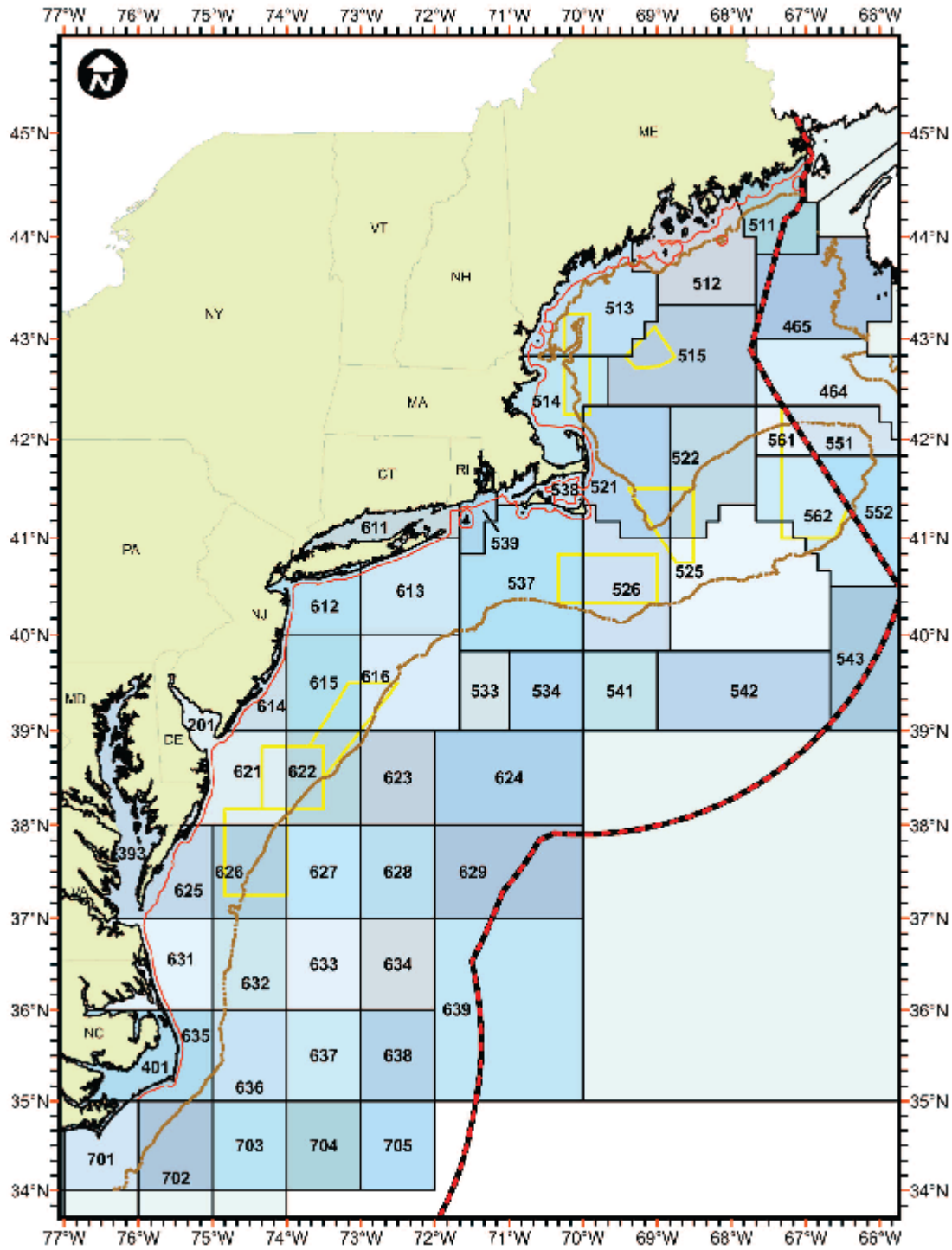


Chart 2a. Gulf of Maine

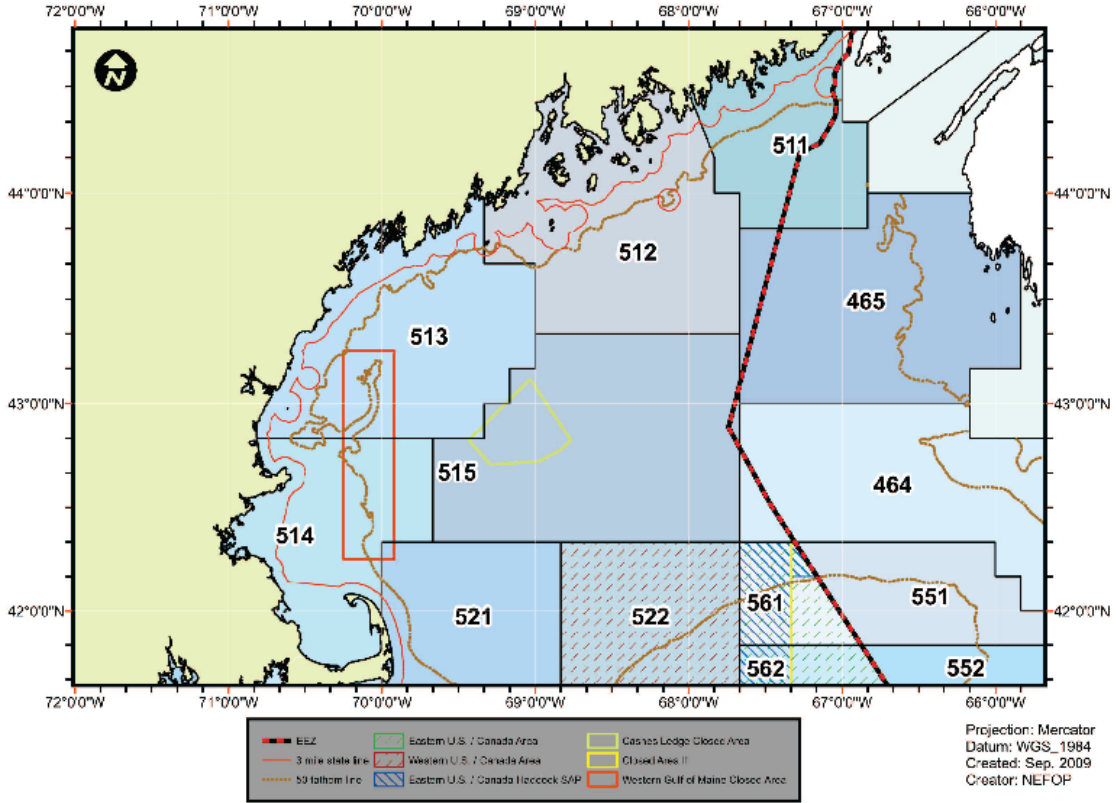


Chart 2b. Gulf of Maine with Loran Lines

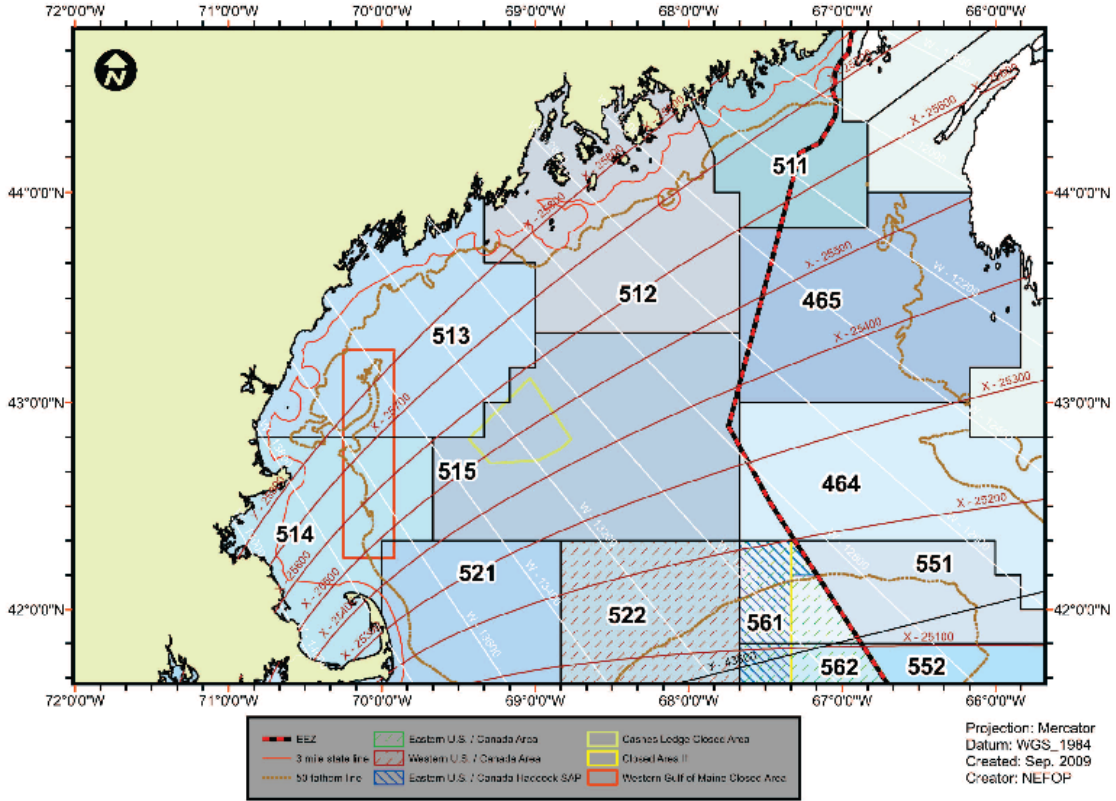


Chart 3a. Georges Bank

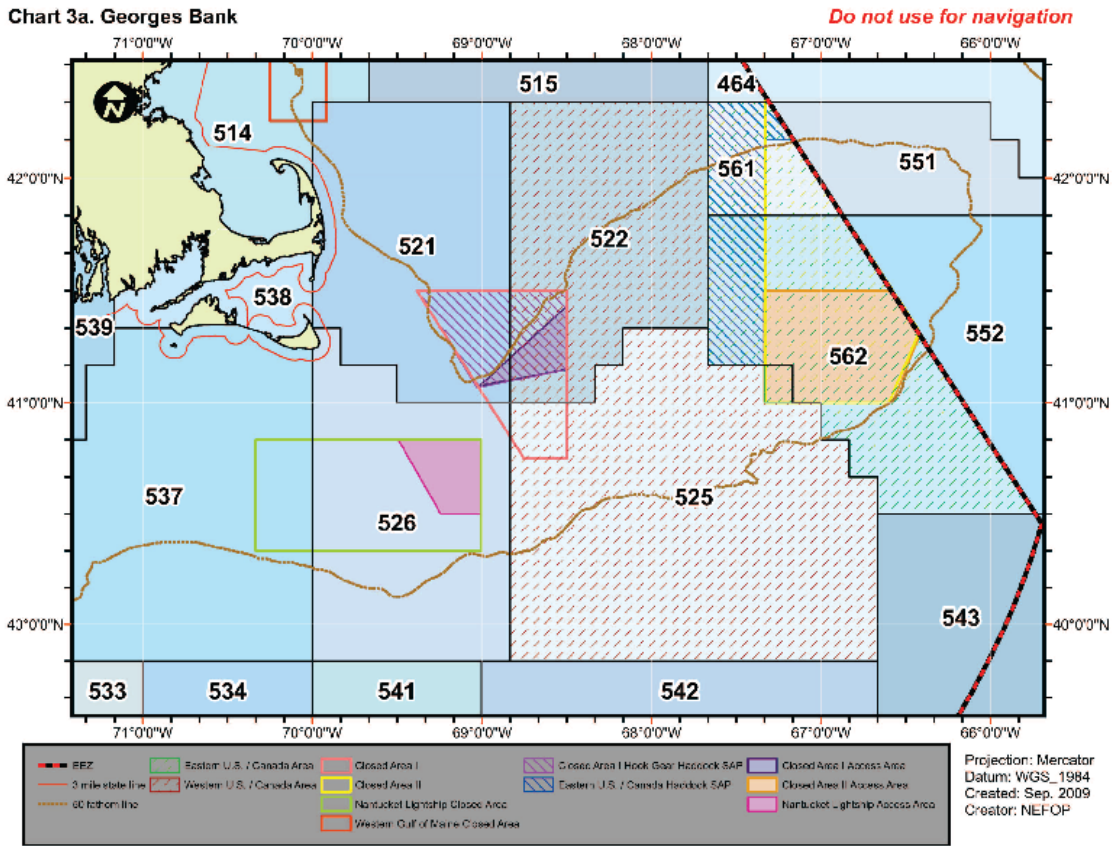


Chart 3b. Georges Bank with Loran Lines

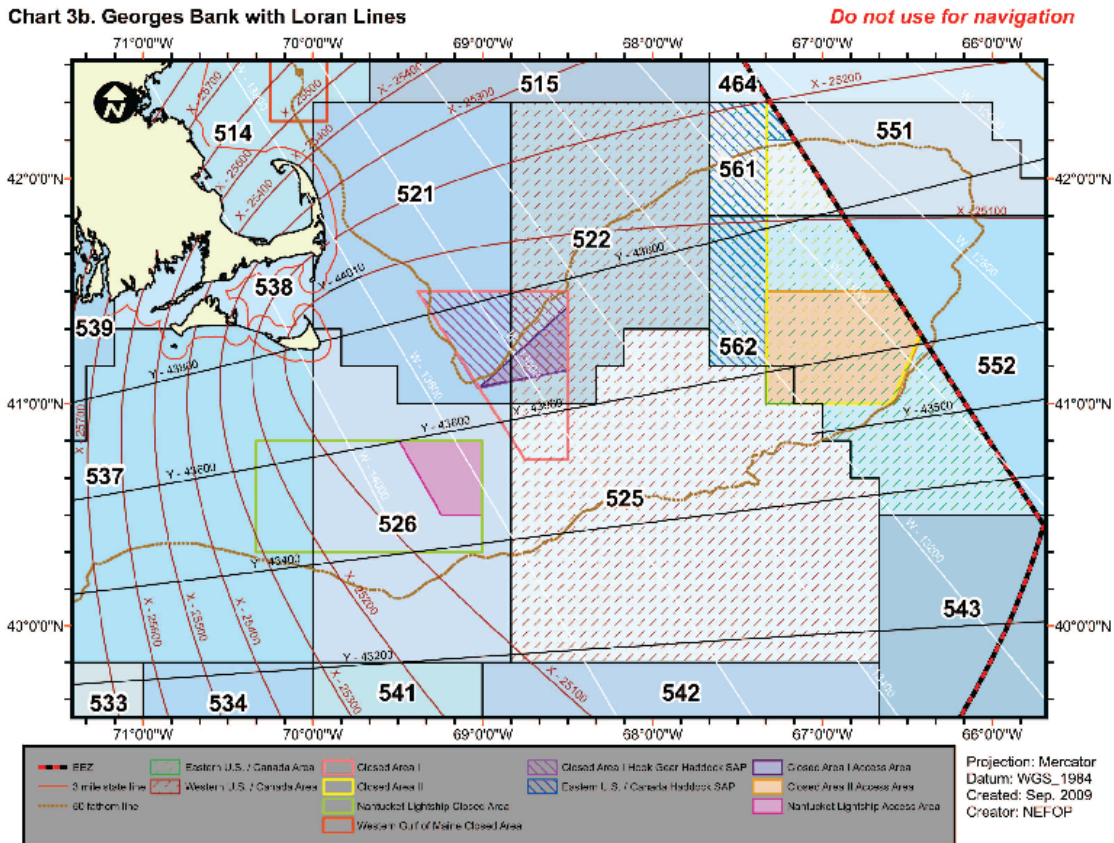


Chart 4. Detail of US/Canada Management Area and SAPs

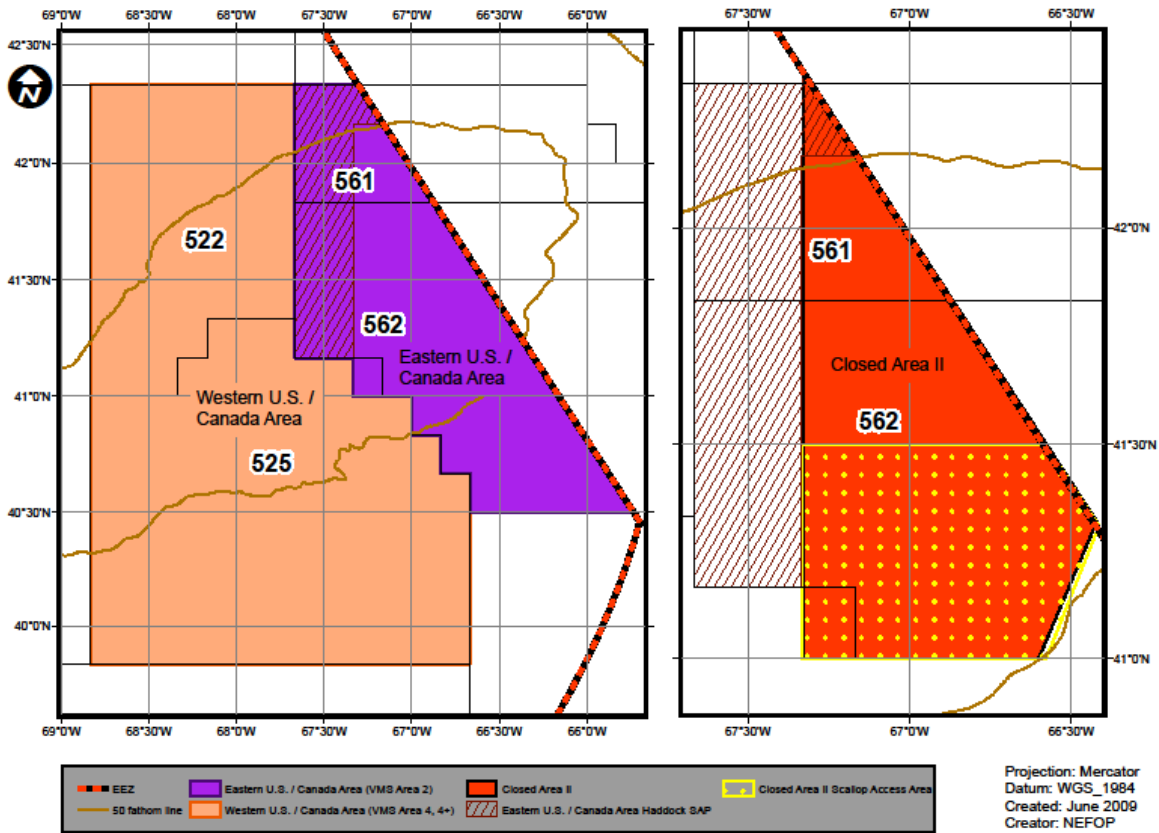


Chart 5a. Southern New England

Do not use for navigation

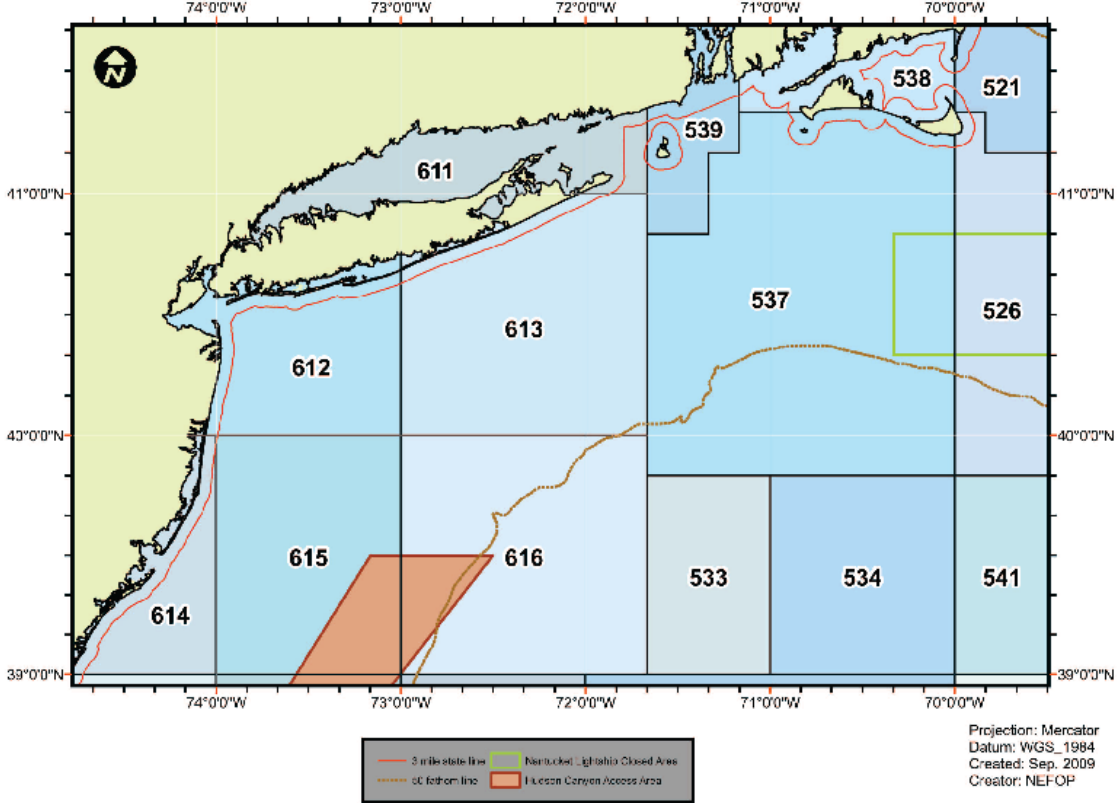


Chart 5b. Southern New England with Loran Lines

Do not use for navigation

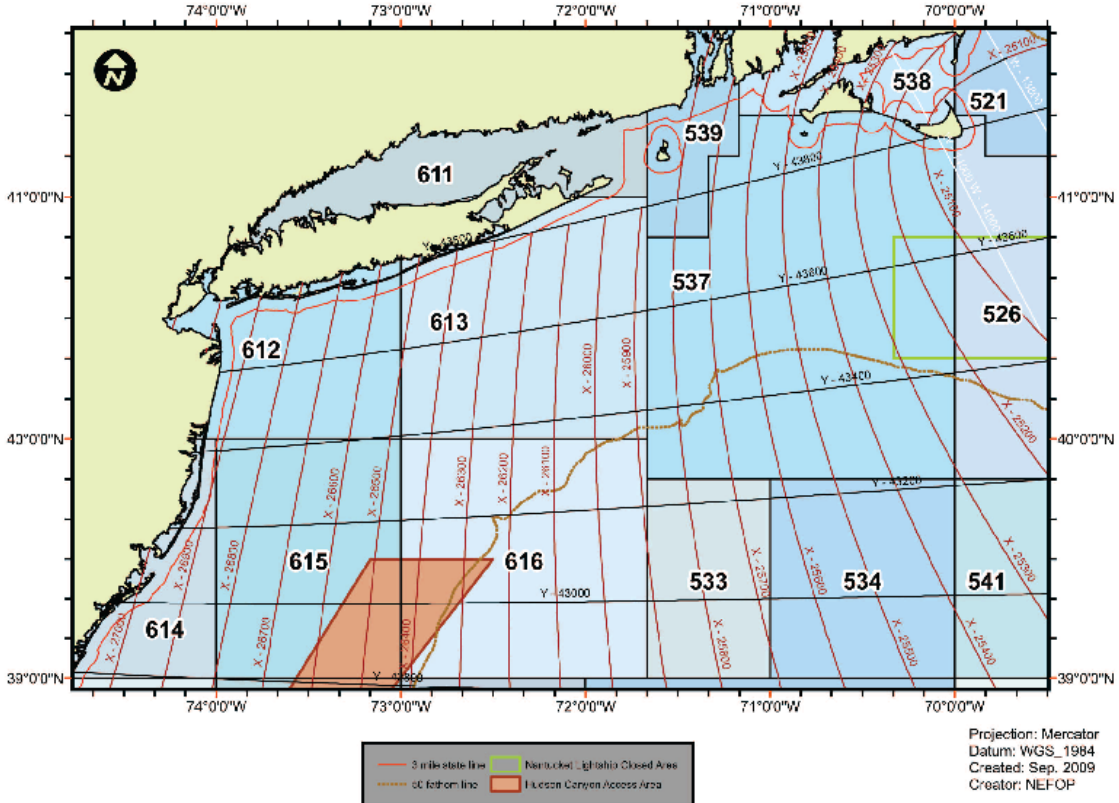
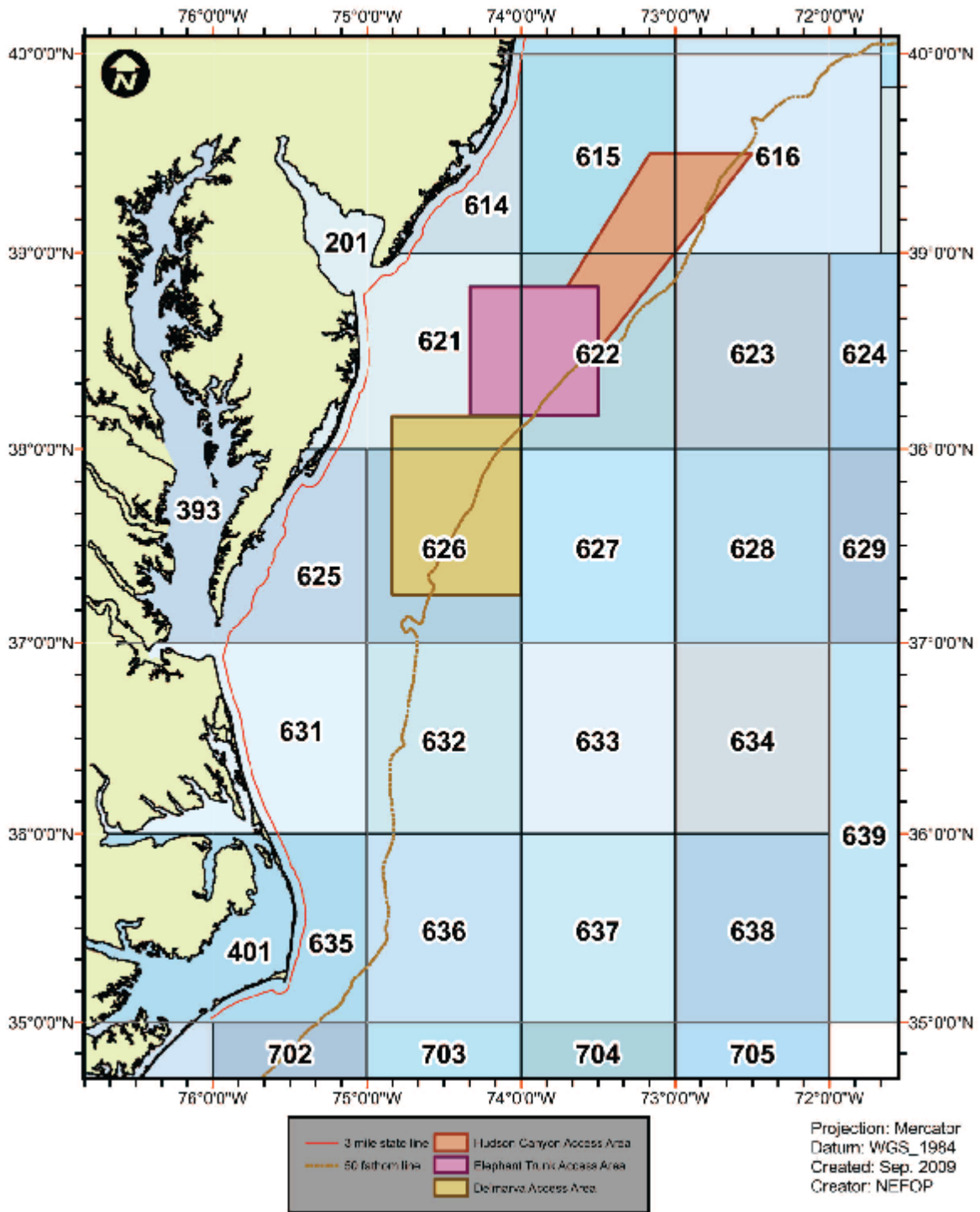


Chart 6a. Mid-Atlantic

Do not use for navigation



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.

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) and 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.

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”. These logs should be included at the end of the trip.

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).

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

Gillnet

Set Begin: First component of gillnet gear deployed.

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

Haul Begin: Hauling equipment put into gear or retrieval of gear commences.

Haul End: Gillnet gear completely retrieved and aboard vessel.

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.

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

Haul Begin: Hauling equipment put into gear or retrieval of gear commences.

Haul End: Gear completely retrieved and aboard vessel.

Rod and Reel or Other Line Gears

Set Begin: First component of gear deployed.

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 a significant change in location.

Lobster, Crab, and Fish Pot

Set Begin: First component of lobster, crab, or fish pot gear deployed, i.e. high flyer and/or anchor hits the water.

Set End: Trawl secured to anchoring device, i.e. trawl completely deployed.

Haul Begin: Hauling equipment put into gear.

Haul End: Lobster, crab, and fish pot gear completely retrieved and aboard vessel.

Bottom Trawl, Twin Trawl, Scallop Trawl

Haul Begin: First component of net deployed, i.e. net hits the water.

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

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

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

Single Mid-water Trawl Fishery

Haul Begin: First component of net deployed, i.e. net hits the water.

Haul End: When the hauling equipment is put into gear with intention to haul back.

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

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, i.e. net hits the water.

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

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

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

Gear Onboard: Fill in date but leave time blank or dash if you are not on the vessel that brings the net onboard.

Purse Seine

Set Begin: When the 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 onboard the vessel.

Scallop Dredge

Haul Begin: First component of dredge(s) deployed, i.e., dredge(s) hit the water.

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

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

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

Clam/Quahog Dredge

Haul Begin: First component of dredge deployed, i.e., dredge hits the water.

Haul End: Hauling equipment put into gear.

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

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

Appendix D – Conversion Tables

Nautical Units	Mass	24 Hour Clock
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	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	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
Length	Metric Units	
1 inch = 2.54 centimeters 1 foot = 30.48 centimeters 1 foot = 0.30 meters 1 yard = 3 feet 1 meter = 3.28 feet 1 meter = 39.37 inches 1 statute mile = 5280 feet 1 statute mile = 1.61 kilometers 1 kilometer = 0.62 statute mile	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)	
Seconds to Tenths of Minutes or Minutes to Tenths of Hours	Circular Measure	
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	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	

LORAN Station Codes

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

Gillnet Monofilament			Pelagic Drift Gillnet Twisted Nylon			
Twine Size	Diameter (mm)	Old Size	Twine Size	Deniers	Breaking Strength (lbs)	# Feet/lb
3	0.28	69	9	24	84	2250
4	0.33	104	12	30	105	1824
6	0.40	139	15	36	125	1550
7	0.45	-	18	48	160	1152
8	0.47	177	21	60	217	860
10	0.52	208	24	72	242	740
12	0.57	277	30	84	297	625
14	0.62	-	36	96	336	520
16	0.66	-	42	108	365	470
18	0.70	-	54	144	460	360
20	0.74	-	60	168	552	305
24	0.81	-	72	192	601	270
30	0.90	-	84	228	765	220
40	1.05	-	96	276	905	177
			120	336	1090	135

General Twine Size Codes: 000 = Unknown, 998 = Combination

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

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 time on the water. An aborted trip is considered to be a unique trip and should be numbered accordingly.

Set Only 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 will be recorded as observed, and 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 after the **last haul only**.

Appendix F – Program Codes

Program Code	Description
000	Standard Sea Sampling Trips
010*	Training Trips
020	Alternative Platform
030	Mid-Atlantic Sea Turtle Trips
040	Social Sciences
044	NY State Observer Coverage
045	Herring Groundfish Closed Area
101	Pinger Tester Trips
102	Scallop Trip With Chain Turtle Excluders
130	US/Canada Management Area
150	Regular B-DAS Program
160	Research - No Kept Fish
170	Small Mesh Redfish Exemption
171	SNE Monkfish ASM Exemption
201	Scallop Access Area, Nantucket Lightship
202	Scallop Access Area, Closed Area I
203	Scallop Access Area, Closed Area II
204	Scallop Access Area, Hudson Canyon
205	Scallop Access Area, VA Beach
206	Scallop Access Area, Elephant Trunk
207	Scallop Access Area, Delmarva
208	Scallop Access Area, Mid-Atlantic
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

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

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
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
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
02	A.I.S. Inc, Industry Funded
04	East West Technical Services, Industry Funded
06	FSB Personnel
07	A.I.S. Inc, NMFS ASM Funded
08	East West Technical Services, NMFS ASM Funded
09	MRAG Americas, NMFS ASM Funded
11	A.I.S. Inc, Industry ASM Funded
12	East West Technical Services, Industry ASM Funded
13	MRAG Americas, Industry ASM Funded
16	Fathom Research LLC, Industry Funded
17	MRAG Americas, NMFS Funded
18	Fathom Research LLC, Industry ASM 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
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	Engine Repair
04	Awaiting Arrival Of Other Vessel
05	Coast Guard Boarding
06	Medical Emergency
07	Weather Conditions
08	Marine Mammal Interaction
09	Gear Loss
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.

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 50% of meshes.
- 070 = Belly torn, exceeding 50% 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 code 02, but not total net destruction.
- 130 = Obstruction in the gear, such as a large amount of fixed gear, boulders, etc.
- 140 = Crossed doors.
- 150 = 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 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.
- 240 = 50% or more of the nets have less than 50% of the meshes torn.
- 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.
- 280 = 50% or more of the nets have 50% or more of the meshes torn.
- 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 un-fishable.
- 460 = Between 25% and 50% of the pots are un-fishable.
- 470 = Greater than 50% of the pots are un-fishable.

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 54, 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 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.

870 = Broken knife frame.

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. 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. 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 Atlantic wolffish caught are discarded because “Regulations prohibit any retention (including no permit)” (025). Therefore, any undersized wolffish 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.

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 = No market, but retained by vessel for alternate program.

007 = No market, 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.

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).

Quality

030 = Poor quality, grey meat and/or parasites observed.

031 = Poor quality, reason not specified.

032 = Poor quality, due to sandflea 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. 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").

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.

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. 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, 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, consumed by captain/crew.

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.

900 = Unknown.

Appendix N – Estimation Method Codes

Used on all Haul Logs, the Length Frequency Log, 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
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 FSB Observer Operations Manual for more information on estimation methods.

Appendix O – Net Name, Type, and Builder Codes

Used on all Trawl Gear Characteristics Logs.

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
	17		Mid-Size Ruhle 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
81	82	80	Shuman Trawl
71	72	70	Sweepless Trawl
91	92	00	Unknown Trawl
99			Other, comment

Appendix O3 – 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
22	K.T. Nets
99	Other, comment

Appendix P – Bait Codes

Used on Longline Haul Log and Lobster, Crab, and Fish Pot Haul Log.

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

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

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

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

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.
- 11 = *Seabird* caught, gangion unattached 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 FSB 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.

- 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.

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.

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	Anthozoa	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, BLOODARC	<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, STIMPSONS 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
6605	CODLING, METALLIC	<i>Physiculus fulvus</i>	SPP
6885	CORAL, SOFT, NK	Alcyonacea	SPP
6880	CORAL, STONY, NK	Scleractinia	SPP

Species Code	Common Name(s)	Scientific Name	Log
6111	CORMORANT, DOUBLE CRESTED	<i>Phalacrocorax auritus</i>	INC
6112	CORMORANT, GREAT	<i>Phalacrocorax carbo</i>	INC
6113	CORMORANT, NK	<i>Phalacrocorax</i>	INC
6625	CORNETFISH, BLUESPOTTED	<i>Fistularia tabacaria</i>	SPP
7000	CRAB, BLUE	<i>Callinectes sapidus</i>	SPP
7140	CRAB, CANCER, NK	<i>Cancer</i>	SPP
7100	CRAB, DEEP SEA, RED	<i>Chaceon quinquegens</i>	SPP
7101	CRAB, DEEP SEA, RED (BUTCHERED)	<i>Chaceon quinquegens</i>	SPP
7102	CRAB, DEEP SEA, RED (PARTIALLY PROCESSED)	<i>Chaceon quinquegens</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
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
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>	IAL
0985	DEALFISH (RIBBONFISH)	<i>Trachipterus arcticus</i>	SPP
6810	DEBRIS, FISHING GEAR ¹¹		SPP
6802	DEBRIS, GLASS ¹¹		SPP
6801	DEBRIS, METAL ¹¹		SPP
6800	DEBRIS, NK ¹¹		SPP
6830	DEBRIS, PLASTIC ¹¹		SPP
6805	DEBRIS, ROCK		SPP
6820	DEBRIS, WOOD ¹¹		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

¹¹ 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	<i>Lycenchelys, Lycodes sp</i>	SPP
6858	EGGS, ELASMOBRANCH, NK		SPP
6856	EGGS, FISH, NK		SPP
6857	EGGS, MOLLUSCA, NK		SPP
6855	EGGS, NK		SPP
8018	EGGS, SQUID, ATLANTIC LONG-FIN	<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	Osteichthyes	SPP
1240	FLOUNDER, AMERICAN PLAICE	<i>Hippoglossoides platessoides</i>	SPP
1270	FLOUNDER, FOURSPOT	<i>Hippoglossoides oblonga</i>	SPP
1290	FLOUNDER, GULFSTREAM	<i>Citharichthys arctifrons</i>	SPP
6886	FLOUNDER, LEFT EYE, 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
6171	GANNET, NORTHERN	<i>Sula bassanus</i>	INC
6660	GAPER, RED EYE	<i>Chaunax stigmaeus</i>	SPP

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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 (MARLINSPIKE)	<i>Nezumia bairdii</i>	SPP
6672	GRENADIER, LONG-NOSED	<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>Larus ridibundus</i>	INC
6202	GULL, BONAPARTE'S	<i>Larus philadelphia</i>	INC
6203	GULL, FRANKLIN'S	<i>Larus 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>Larus autricilla</i>	INC
6209	GULL, LESSER BLACK-BACK	<i>Larus fuscus</i>	INC
6210	GULL, LITTLE	<i>Larus minutus</i>	INC
6211	GULL, MEW	<i>Larus canus</i>	INC
6200	GULL, NK	Larinae	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	HAGFISH, 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	<i>Urophycis, Merluccius, Phycis</i>	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
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
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

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6690	HOUNDFISH	<i>Tylosurus crocodilus</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
6300	JAEGER, NK	Stercorariidae	INC
6302	JAEGER, PARASITIC	<i>Stercorarius parasiticus</i>	INC
6303	JAEGER, POMARINE	<i>Stercorarius pomarinus</i>	INC
6305	JAEGER, SOUTH POLAR	<i>Carharacta maccormicki</i>	INC
6871	JELLYFISH, NK	Scyphozoa	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	LAMPSHELL, 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	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, 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	INC
2171	MARLIN, BLUE	<i>Makaira nigricans</i>	IAL
2181	MARLIN, NK (BILLFISHES)	Istiophoridae	IAL
2161	MARLIN, WHITE	<i>Tetrapturus albidus</i>	IAL
2210	MENHADEN, ATLANTIC	<i>Brevoortia tyrannus</i>	SPP
6103	MERGANSER, NK	Anatidae	INC
6770	MOLA, NK	Molidae	IAL
6772	MOLA, OCEAN SUNFISH	<i>Mola mola</i>	IAL
6771	MOLA, SHARPTAIL	<i>Mosturus lanceolatus</i>	IAL
6773	MOLA, SLENDER	<i>Ranzania laevis</i>	IAL
8040	MOLLUSK, NK	Mollusca	SPP

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0124	MONKFISH (GOOSEFISH)	<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	<i>Mytilus, Modiolus</i>	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	Littorinidae	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>Naucrates 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
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	Tetraodontidae	SPP

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4290	PUFFER, NORTHERN	<i>Sphoeroides maculatus</i>	SPP
6381	PUFFIN, ATLANTIC	<i>Fratercula arctica</i>	INC
7488	QUAHOG, HARD SHELL CLAM	<i>Mercenaria mercenaria, M.campechiensis</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, NK (OCEAN PERCH)	<i>Sebastes</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>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
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 deglandi</i>	INC
6678	SCULPIN, LONGHORN	<i>Myoxocephalus octodecemspinosus</i>	SPP

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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	<i>Peristedion miniatum</i>	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	Ascidiacea	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>Phoca groenlandica</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>Phoca fasciata</i>	INC
6983	SEAL, RINGED	<i>Phoca hispida</i>	INC
3340	SEATROUT, NK (WEAKFISHES)	<i>Cynoscion</i>	SPP
3450	SEATROUT, SPOTTED	<i>Cynoscion nebulosus</i>	SPP
8171	SEAWEED, NK	Phaeophyta	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	Carcharhinus	IAL
4978	SHARK, CARCHARHINID, NK (FINS)	Carcharhinus	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

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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>Odontaspis taurus</i>	IAL
3498	SHARK, SAND TIGER (FINS)	<i>Odontaspis 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>Heptanchias 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
4808	SHARK, WHITE (FINS)	<i>Carcharodon carcharias</i>	SPP
6401	SHEARWATER, AUDUBON'S	<i>Puffinus lherminieri</i>	INC
6407	SHEARWATER, CORY'S	<i>Puffinus diomedea</i>	INC
6402	SHEARWATER, GREATER	<i>Puffinus gravis</i>	INC
6403	SHEARWATER, LITTLE	<i>Puffinus assimilis</i>	INC

Species Code	Common Name(s)	Scientific Name	Log
6405	SHEARWATER, MANX	<i>Puffinus puffinus</i>	INC
6400	SHEARWATER, NK	<i>Puffinus</i>	INC
6406	SHEARWATER, SOOTY	<i>Puffinus griseus</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	SPP
7360	SHRIMP, PANDALID, NK (NORTHERN)	<i>Pandalus</i>	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, BARNDOOR	<i>Dipturus laevis</i>	SPP
3681	SKATE, BARNDOOR (WINGS)	<i>Dipturus laevis</i>	SPP
3720	SKATE, CLEARNOSE	<i>Raja eglantera</i>	SPP
3721	SKATE, CLEARNOSE (WINGS)	<i>Raja eglantera</i>	SPP
3660	SKATE, LITTLE	<i>Leucoraja erinacea</i>	SPP
3661	SKATE, LITTLE (WINGS)	<i>Leucoraja erinacea</i>	SPP
3730	SKATE, LITTLE/WINTER, NK ¹²	Leucoraja	SPP
3731	SKATE, LITTLE/WINTER, NK (WINGS) ¹²	Leucoraja	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>Catharacta skua</i>	INC
3710	SMELT, RAINBOW	<i>Osmerus mordax</i>	SPP
6870	SNAIL, MOONHELL, NK	Naticidae	SPP
6877	SNAIL, NK	Gastropoda	SPP
6628	SNAKEBLenny	<i>Lumpenus lampraeformis</i>	SPP
3754	SNAPPER, DOG	<i>Lutjanus jocu</i>	SPP
3360	SNAPPER, NK	Lutjanidae	SPP
3764	SNAPPER, RED	<i>Lutjanus campechanus</i>	SPP
3740	SNAPPER, VERMILLION	<i>Rhomboplites aurorubens</i>	SPP
6633	SNIPEFISH, LONGSPINE	<i>Macroramphosus scolopax</i>	SPP
6622	SNIPEFISH, NK	Centriscidae	SPP
6634	SNIPEFISH, 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

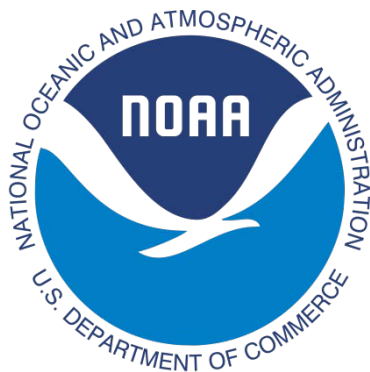
¹² Only to be used for skates under 35cm in length that cannot be distinguished.

Species Code	Common Name(s)	Scientific Name	Log
4060	SPOT	<i>Leiostomus xanthurus</i>	SPP
8010	SQUID, ATLANTIC LONG-FIN	<i>Doryteuthis pealeii</i>	SPP
8030	SQUID, NK	Teuthida	SPP
8020	SQUID, SHORT-FIN	<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	Dasyatidae	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>Sterna anaethetus</i>	INC
6503	TERN, CASPIAN	<i>Sterna 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>Sterna albifrons</i>	INC
6500	TERN, NK	Sterninae	INC
6509	TERN, ROSEATE	<i>Sterna dougallii</i>	INC
6510	TERN, ROYAL	<i>Sterna maxima</i>	INC
6511	TERN, SANDWICH	<i>Sterna sandvicensis</i>	INC
6512	TERN, SOOTY	<i>Sterna fuscata</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

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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>Oncorhynchus mykiss</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	IAL
4658	TUNA, NK (CHUNKS)	Thunnini	SPP
4656	TUNA, NK (DRESSED)	Thunnini	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
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 simus</i>	INC

Species Code	Common Name(s)	Scientific Name	Log
6930	WHALE, FALSE KILLER	<i>Pseudorca crassidens</i>	INC
6929	WHALE, FIN/SEI	<i>Balaenoptera physalus</i> , <i>B. borealis</i>	INC
6931	WHALE, FINBACK	<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 melaena</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 (SMOOTH)	<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	Buccinidae	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.



Revised 05/01/2016