



David E. Pierce, Ph.D.
Director

Commonwealth of Massachusetts

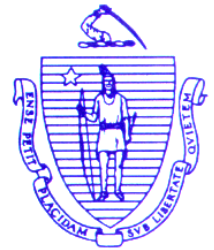
Division of Marine Fisheries

251 Causeway Street, Suite 400

Boston, Massachusetts 02114

(617)626-1520

fax (617)626-1509



Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Matthew A. Beaton
Secretary

Ronald Amidon
Commissioner

Mary-Lee King
Deputy Commissioner

May 29, 2018

Fixed Gear Fishermen of Massachusetts,

Marine Fisheries will be conducting its annual fall trawl survey throughout state coastal waters beginning September 4, 2018. Surveys have been conducted each May and September since 1978 to provide a consistent sampling of benthic fishes and mobile invertebrates. Survey data is used to monitor the condition of fish stocks, as well as to inform the environmental review process that minimizes construction impacts on fisheries resources. Maintaining access to the planned sampling sites is critical to the integrity of the survey.

Please review the attached table of station locations and the accompanying figures which plot the sample sites. Station location information can also be accessed on our website (<http://www.mass.gov/eea/agencies/dfg/dmf/programs-and-projects/resource-assessment-surveys-project.html>). **We kindly ask for your cooperation and insist that all fixed gear be kept clear of station locations (1.5 n. mi. diameter circle as shown in figure - center point reported in table) for the indicated periods until station completion.** While we will make every attempt to complete stations during the assigned period to minimize inconvenience to fixed gear fishermen, *Marine Fisheries* is prepared to attach restrictions to permit renewals (under 322 CMR 7.01 (7)), mandating that fixed gear not be set on designated trawl survey sites for the announced dates. It remains our hope that this action will be unnecessary.

Sign-up to receive text notifications of trawl survey progress on the *Marine Fisheries* website (<http://www.mass.gov/dmf/trawlsurvey>). A daily updated list of completed survey stations will be sent via text, and posted on the *Marine Fisheries* website and on Twitter (handle: @MassDMF). The Massachusetts Lobstermen's Association will also post survey information on their webpage (<http://www.lobstermen.com>), as well as on Facebook (username: lobstermensassoc) and Twitter (handle: @masslobstermens). In the event of a delay due to weather, the schedule will be resumed as soon as working conditions permit. Fishermen can contact the R/V *Gloria Michelle* on VHF channels 13 or 16 to determine the updated daily schedule.

Personnel aboard the NOAA R/V *Gloria Michelle*, a 65' western rigged steel stern trawler with a blue hull and white deckhouse, will carefully check each site for marked gear by cruising along a selected tow path before the net is set. Twenty-minute tows undertaken at 2.5 knots cover approximately 0.8 nautical miles. We encourage communicating helpful information to the R/V officers (via channels 13 or 16).

Your cooperation is greatly appreciated and is vital to the effective monitoring of marine resources in the Commonwealth. If you have any questions about the survey, please contact me (matt.camisa@state.ma.us, (508) 990-2860 x 139). **If you have any questions about the *Marine Fisheries* website, Facebook, or Twitter, please contact Story Reed (story.reed@state.ma.us, 617- 626-1524).**

Sincerely,

Matt Camisa
Senior Marine Fisheries Biologist

Cc. David Pierce, Director

Massachusetts Division of Marine Fisheries
September 2018 Fall Trawl Survey Station Locations
Massachusetts Bay to New Hampshire

* Loran coordinates taken from NOAA paper charts.
Please refer to Lat/Long for best accuracy.

Area Description	Depth	Range of Dates	Latitude	Longitude	Loran	Sta. ID#
Cape Ann and North	0-30'	September 8-11	42°40.21	-70°42.07	13821.8 / 44363.1	N-1
	0-30'	September 8-11	42°46.47	-70°47.83	13825.5 / 44406.9	N-2
	31'-60'	September 8-11	42°44.73	-70°45.75	13821.4 / 44394.0	N-3
	31'-60'	September 8-11	42°47.30	-70°47.11	13816.1 / 44409.9	N-4
	61'-90'	September 8-11	42°43.27	-70°42.22	13806.0 / 44379.5	N-5
	61'-90'	September 8-11	42°51.26	-70°47.31	13796.3 / 44430.4	N-6
	61'-90'	September 8-11	42°46.18	-70°45.64	13812.8 / 44401.3	N-7
	91'-120'	September 8-11	42°41.97	-70°38.40	13788.6 / 44365.1	N-8
	91'-120'	September 8-11	42°44.89	-70°43.79	13808.0 / 44390.9	N-9
	91'-120'	September 8-11	42°50.51	-70°44.99	13785.0 / 44422.2	N-10
	121'-180'	September 8-11	42°36.49	-70°33.79	13788.4 / 44327.5	N-11
	121'-180'	September 8-11	42°34.89	-70°35.18	13805.8 / 44321.2	N-12
	121'-180'	September 8-11	42°44.14	-70°39.69	13785.0 / 44379.2	N-13
	181'+	September 8-11	42°42.76	-70°33.77	13754.7 / 44360.6	N-14
	181'+	September 8-11	42°37.72	-70°31.17	13765.1 / 44329.3	N-15
Massachusetts Bay	0-30'	September 7-9	42°24.40	-70°57.72	14004.5 / 44305.7	N-16
	0-30'	September 7-9	42°26.86	-70°55.62	13978.7 / 44315.5	N-17
	31'-60'	September 6-9	42°18.18	-70°49.86	13984.2 / 44255.1	N-18
	31'-60'	September 6-9	42°17.02	-70°48.43	13980.7 / 44245.8	N-19
	31'-60'	September 7-9	42°26.57	-70°54.35	13971.4 / 44311.3	N-20
	61'-90'	September 7-9	42°26.94	-70°52.64	13959.0 / 44310.1	N-21
	61'-90'	September 6-9	42°18.501	-70°48.10	13971.7 / 44253.7	N-22
	61'-90'	September 7-9	42°23.87	-70°53.52	13979.9 / 44294.5	N-23
	91'-120'	September 7-9	42°23.05	-70°49.17	13956.0 / 44281.9	N-24
	91'-120'	September 7-9	42°26.50	-70°50.40	13946.7 / 44303.4	N-25
	91'-120'	September 7-11	42°32.68	-70°43.99	13873.5 / 44325.5	N-26
	121'-180'	September 7-12	42°27.49	-70°43.16	13895.0 / 44295.3	N-27
	121'-180'	September 7-12	42°30.53	-70°42.93	13878.0 / 44311.8	N-28
	121'-180'	September 6-9	42°19.32	-70°42.14	13929.6 / 44247.6	N-29
	121'-180'	September 8-11	42°34.44	-70°37.56	13823.5 / 44323.1	N-30
	181'+	September 7-12	42°30.23	-70°39.08	13855.0 / 44303.0	N-31
	181'+	September 7-12	42°27.70	-70°38.18	13862.5 / 44287.7	N-32

Massachusetts Division of Marine Fisheries
September 2018 Fall Trawl Survey Station Locations
Cape Cod Bay and East of Cape Cod.

* Loran coordinates taken from NOAA paper charts.
Please refer to Lat/Long for best accuracy.

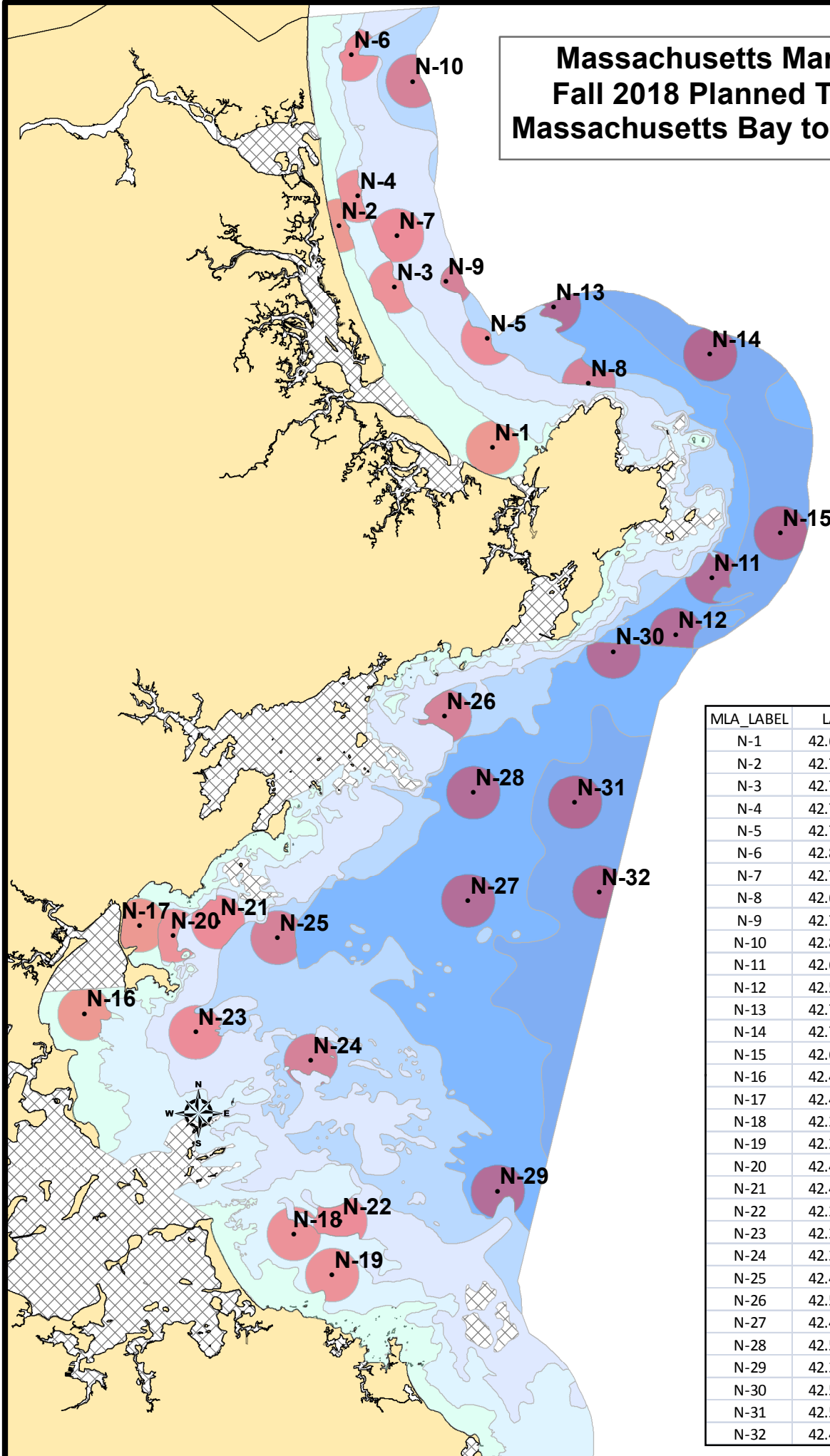
Area Description	Depth	Range of Dates	Latitude	Longitude	Loran	Sta. ID#
Western Cape Cod Bay	0-30'	September 4-7	41°45.72	-70°27.05	13992.9 / 44022.0	C-1
	0-30'	September 4-7	41°44.53	-70°17.66	13942.2 / 44000.5	C-2
	0-30'	September 6-8	42°08.14	-70°40.89	13975.0 / 44180.2	C-3
	31'-60'	September 4-7	41°47.72	-70°28.73	13993.9 / 44036.7	C-4
	31'-60'	September 4-7	41°48.23	-70°14.63	13908.0 / 44018.4	C-5
	31'-60'	September 4-7	41°57.69	-70°34.59	13985.0 / 44107.0	C-6
	31'-60'	September 4-7	41°50.95	-70°29.62	13985.2 / 44058.0	C-7
	61'-90'	September 4-8	42°2.86	-70°34.83	13962.5 / 44138.5	C-8
	61'-90'	September 4-7, 11-13	41°51.32	-70°17.27	13909.4 / 44041.2	C-9
	61'-90'	September 4-7	41°49.73	-70°23.36	13952.6 / 44041.0	C-10
	61'-90'	September 4-7	41°51.03	-70°26.25	13964.5 / 44053.2	C-11
	91'-120'	September 4-8	42°00.52	-70°32.04	13956.2 / 44120.0	C-12
	91'-120'	September 4-7	41°56.22	-70°29.04	13957.9 / 44089.0	C-13
	91'-120'	September 4-7, 10-13	41°54.24	-70°24.32	13938.4 / 44069.6	C-14
	121'-180'	September 4-8	42°03.09	-70°30.23	13933.0 / 44132	C-15
	121'-180'	September 4-7, 10-13	41°59.80	-70°26.17	13923.6 / 44106.0	C-16
	121'-180'	September 10-13	42°05.47	-70°27.28	13903.7 / 44141.3	C-17
Eastern Cape Cod Bay	0-30'	September 4-7	41°48.67	-70°03.44	13840.1 / 44004.6	C-18
	0-30'	September 11-13	41°56.27	-70°05.54	13817.0 / 44052.8	C-19
	31'-60'	September 11-13	41°58.61	-70°06.19	13809.9 / 44067.4	C-20
	31'-60'	September 11-13	41°53.94	-70°07.62	13840.1 / 44042.0	C-21
	31'-60'	September 11-13	41°53.03	-70°09.61	13856.3 / 44039.8	C-22
	61'-90'	September 4-7, 11-13	41°52.08	-70°13.48	13883.3 / 44040.0	C-23
	61'-90'	September 11-13	41°58.69	-70°07.54	13817.5 / 44070.0	C-24
	61'-90'	September 11-13	41°56.21	-70°09.34	13839.7 / 44058.2	C-25
	91'-120'	September 11-13	41°57.00	-70°13.38	13859.9 / 44069.0	C-26
	91'-120'	September 11-13	41°55.26	-70°12.19	13861.0 / 44056.8	C-27
	91'-120'	September 11-14	41°59.21	-70°12.11	13842.0 / 44080.0	C-28
	121'-180'	September 10-14	42°02.29	-70°21.38	13883.0 / 44113.0	C-29
	121'-180'	September 11-14	41°58.71	-70°17.01	13873.5 / 44084.8	C-30
	121'-180'	September 11-13	41°57.33	-70°16.59	13877.5 / 44076.0	C-31
	181'+	September 10-14	42°04.79	-70°20.60	13866.3 / 44126.3	C-32
East of Cape Cod	181'+	September 10-14	42°04.74	-70°15.46	13835.6 / 44117.6	C-33
	181'+	September 10-13	42°05.91	-70°23.95	13881.2 / 44138.2	C-34
	0-30'	September 12-15	42°04.17	-70°05.97	13781.7 / 44099.3	B-1
	0-30'	September 12-15	42°05.34	-70°10.41	13802.3 / 44113.2	B-2
	31'-60'	September 13-15	41°42.68	-69°53.75	13811.8 / 43954.5	B-3
	31'-60'	September 13-15	41°36.95	-69°54.59	13842.4 / 43921.0	B-4
	31'-60'	September 13-15	41°40.33	-69°52.68	13816.4 / 43938.8	B-5
	61'-90'	September 13-15	41°42.51	-69°52.67	13806.2 / 43951.9	B-6
	61'-90'	September 12-15	41°58.93	-69°58.30	13761.9 / 44057.2	B-7
	91'-120'	September 12-15	42°05.98	-70°10.70	13800.8 / 44117.0	B-8
	91'-120'	September 12-15	42°06.01	-70°08.05	13785.0 / 44113.1	B-9
	91'-120'	September 13-15	41°46.36	-69°52.20	13786.0 / 43974.6	B-10
	121'-180'	September 12-15	42°04.39	-70°01.15	13752.2 / 44093.1	B-11
	121'-180'	September 12-14	42°05.54	-70°13.54	13820.0 / 44119.3	B-12
	121'-180'	September 12-14	42°07.35	-70°13.40	13810.1 / 44129.5	B-13

Massachusetts Division of Marine Fisheries
September 2018 Fall Trawl Survey Station Locations
South of Cape Cod

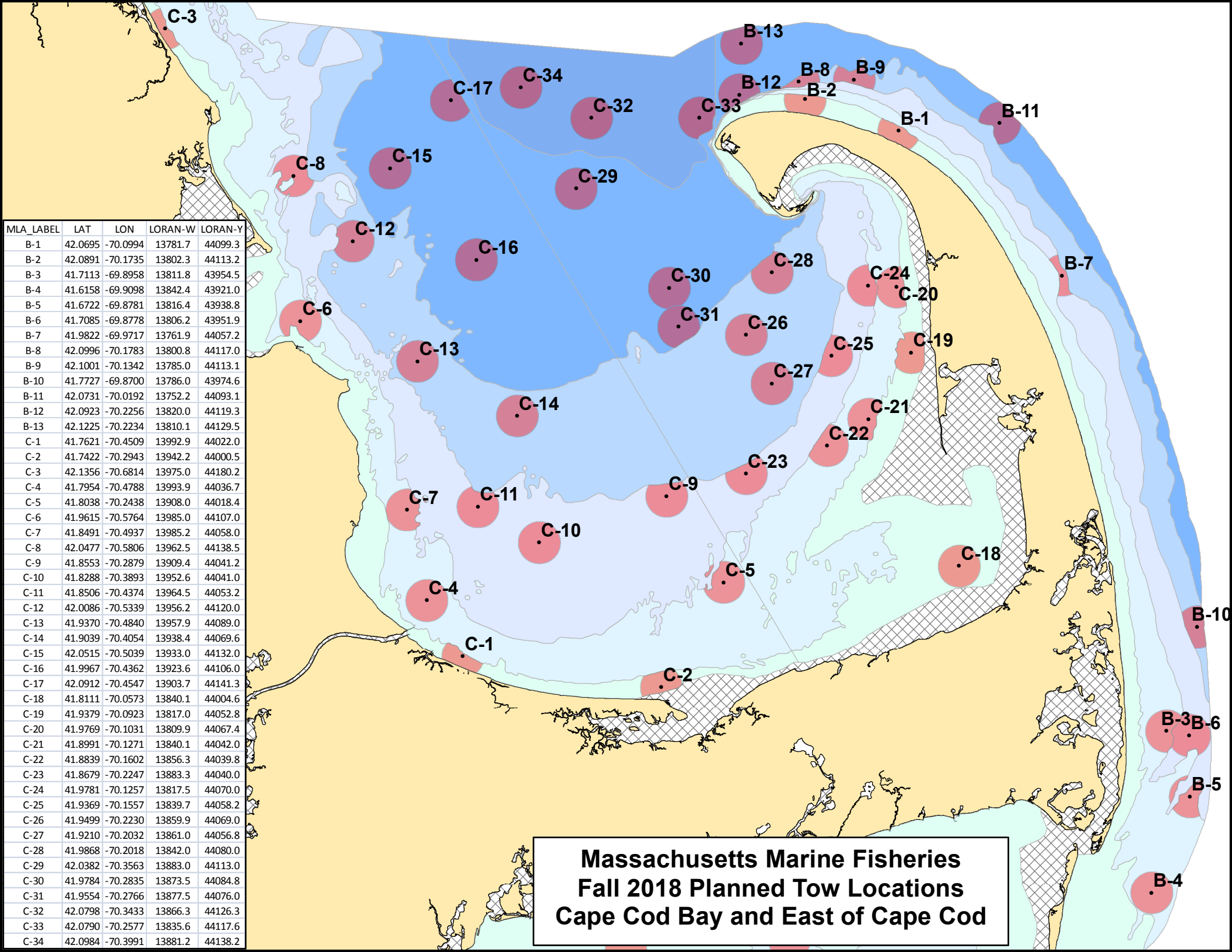
* Loran coordinates taken from NOAA paper charts.
Please refer to Lat/Long for best accuracy.

Area Description	Depth	Range of Dates	Latitude	Longitude	Loran	Sta. ID#
Nantucket Sound	0-30'	September 14-24	41°24.26	-70°19.08	14037.5 / 43875.0	S-21
	0-30'	September 14-24	41°25.69	-70°21.11	14043.7 / 43887.0	S-22
	0-30'	September 14-24	41°24.51	-70°09.79	13982.7 / 43864.3	S-23
	0-30'	September 14-24	41°37.18	-70°11.05	13936.5 / 43945.2	S-24
	0-30'	September 14-24	41°35.14	-70°19.51	13994.8 / 43944.5	S-25
	0-30'	September 14-24	41°21.02	-70°16.39	14035.0 / 43850.4	S-26
	0-30'	September 14-24	41°19.17	-70°08.91	13999.8 / 43828.8	S-27
	0-30'	September 14-24	41°32.36	-70°31.70	14078.5 / 43944.4	S-28
	0-30'	September 14-24	41°32.65	-70°17.15	13991.0 / 43925.8	S-29
	0-30'	September 14-24	41°31.52	-70°12.05	13966.5 / 43911.3	S-30
	31'-60'	September 14-24	41°22.65	-70°12.12	14004.0 / 43855.5	S-31
	31'-60'	September 14-24	41°31.08	-70°09.24	13952.1 / 43904.8	S-32
	31'-60'	September 14-24	41°28.01	-70°04.33	13937.0 / 43878.8	S-33
	31'-60'	September 14-24	41°30.25	-70°18.74	14010.7 / 43912.7	S-34
	31'-60'	September 14-24	41°27.85	-70°27.31	14070.8 / 43909.4	S-35
	31'-60'	September 14-24	41°31.34	-70°35.88	14107.5 / 43944.0	S-36
	31'-60'	September 14-24	41°35.50	-70°11.77	13948.0 / 43936.0	S-37
	31'-60'	September 14-24	41°21.47	-70°10.32	13998.5 / 43845.4	S-38
	31'-60'	September 14-24	41°26.22	-70°28.08	14082.0 / 43900.0	S-39
	31'-60'	September 14-24	41°24.54	-70°03.87	13949.2 / 43856.7	S-40
	31'-60'	September 14-24	41°28.46	-70°02.30	13923.3 / 43879.2	S-41
Buzzards Bay and Vineyard Sound	0-30'	September 14-24	41°38.80	-70°43.29	14121.0 / 44003.0	S-1
	0-30'	September 14-24	41°37.80	-70°45.04	14136.0 / 43999.4	S-2
	0-30'	September 14-24	41°35.83	-70°48.60	14165.5 / 43992.3	S-3
	31'-60'	September 14-24	41°26.77	-70°53.03	14228.8 / 43939.5	S-4
	31'-60'	September 14-24	41°25.15	-70°51.24	14224.5 / 43925.6	S-5
	31'-60'	September 14-24	41°31.03	-70°49.73	14192.0 / 43962.6	S-6
	31'-60'	September 14-24	41°32.95	-70°48.67	14178.0 / 43973.5	S-7
	31'-60'	September 14-24	41°30.07	-70°54.01	14222.0 / 43962.7	S-8
	61'-90'	September 14-24	41°28.73	-70°41.68	14152.9 / 43935.8	S-9
	61'-90'	September 14-24	41°21.47	-70°52.93	14248.9 / 43903.6	S-10
	61'-90'	September 14-24	41°23.93	-70°54.86	14250.8 / 43923.0	S-11
	91'-120'	September 14-24	41°21.67	-71°00.30	14292.5 / 43915.5	S-12
Southwest of Gay Head and South of Martha's Vineyard	91'-120'	September 14-24	41°20.25	-70°54.73	14264.0 / 43898.0	S-13
	0-30'	September 14-24	41°17.90	-70°23.80	14090.0 / 43840.0	S-14
	0-30'	September 14-24	41°20.46	-70°40.95	14180.6 / 43879.8	S-15
	31'-60'	September 14-24	41°16.52	-70°47.41	14234.3 / 43862.3	S-16
	31'-60'	September 14-24	41°18.92	-70°32.69	14138.2 / 43858.4	S-17
	61'-90'	September 14-24	41°14.35	-70°46.29	14236.0 / 43846.3	S-18
	61'-90'	September 14-24	41°18.91	-70°50.97	14246.6 / 43883.6	S-19
	91'-120'	September 14-24	41°18.36	-70°51.90	14254.0 / 43881.2	S-20
South and East of Nantucket	0-30'	September 13-24	41°23.71	-69°58.42	13921.8 / 43844.5	S-42
	0-30'	September 13-24	41°21.49	-69°58.83	13933.0 / 43831.0	S-43
	0-30'	September 14-24	41°13.25	-70°02.57	13987.6 / 43783.0	S-44
	31'-60'	September 14-24	41°15.28	-70°12.49	14035.5 / 43808.5	S-45
	31'-60'	September 13-24	41°21.50	-69°57.06	13923.2 / 43828.9	S-46
	31'-60'	September 13-24	41°23.03	-69°57.35	13918.7 / 43839.0	S-47
	61'-90'	September 14-24	41°12.37	-70°08.25	14023.0 / 43784.2	S-48

Massachusetts Marine Fisheries Fall 2018 Planned Tow Locations Massachusetts Bay to New Hampshire



MLA_LABEL	LAT	LOX	LORAN-W	LORAN-Y
N-1	42.6701	-70.7012	13821.8	44363.1
N-2	42.7745	-70.7972	13825.5	44406.9
N-3	42.7455	-70.7624	13821.4	44394.0
N-4	42.7883	-70.7852	13816.1	44409.9
N-5	42.7211	-70.7037	13806.0	44379.5
N-6	42.8544	-70.7884	13796.3	44430.4
N-7	42.7697	-70.7606	13812.8	44401.3
N-8	42.6996	-70.6400	13788.6	44365.1
N-9	42.7481	-70.7298	13808.0	44390.9
N-10	42.8418	-70.7498	13785.0	44422.2
N-11	42.6082	-70.5632	13788.4	44327.5
N-12	42.5815	-70.5863	13805.8	44321.2
N-13	42.7357	-70.6616	13785.0	44379.2
N-14	42.7127	-70.5629	13754.7	44360.6
N-15	42.6286	-70.5195	13765.1	44329.3
N-16	42.4067	-70.9620	14004.5	44305.7
N-17	42.4477	-70.9269	13978.7	44315.5
N-18	42.3030	-70.8311	13984.2	44255.1
N-19	42.2836	-70.8072	13980.7	44245.8
N-20	42.4429	-70.9058	13971.4	44311.3
N-21	42.4490	-70.8774	13959.0	44310.1
N-22	42.3084	-70.8017	13971.7	44253.7
N-23	42.3978	-70.8920	13979.9	44294.5
N-24	42.3841	-70.8195	13956.0	44281.9
N-25	42.4416	-70.8399	13946.7	44303.4
N-26	42.5446	-70.7331	13873.5	44325.5
N-27	42.4582	-70.7194	13895.0	44295.3
N-28	42.5088	-70.7155	13878.0	44311.8
N-29	42.3220	-70.7024	13929.6	44247.6
N-30	42.5740	-70.6261	13823.5	44323.1
N-31	42.5039	-70.6513	13855.0	44303.0
N-32	42.4617	-70.6364	13862.5	44287.7



MLA_LABEL	LAT	LON	LORAN-W	LORAN-Y
B-1	42.0695	-70.0994	13781.7	44099.3
B-2	42.0891	-70.1735	13802.3	44113.2
B-3	41.7113	-69.8958	13811.8	43954.5
B-4	41.6158	-69.9098	13842.4	43921.0
B-5	41.6722	-69.8781	13816.4	43938.8
B-6	41.7085	-69.8778	13806.2	43951.9
B-7	41.9822	-69.9717	13761.9	44057.2
B-8	42.0996	-70.1783	13800.8	44117.0
B-9	42.1001	-70.1342	13785.0	44113.1
B-10	41.7727	-69.8700	13786.0	43974.6
B-11	42.0731	-70.0192	13752.2	44093.1
B-12	42.0923	-70.2256	13820.0	44119.3
B-13	42.1225	-70.2234	13810.1	44129.5
C-1	41.7621	-70.4509	13992.9	44022.0
C-2	41.7422	-70.2943	13942.2	44000.5
C-3	42.1356	-70.6814	13975.0	44180.2
C-4	41.7954	-70.4788	13993.9	44036.7
C-5	41.8038	-70.2438	13908.0	44018.4
C-6	41.9615	-70.5764	13985.0	44107.0
C-7	41.8491	-70.4937	13985.2	44058.0
C-8	42.0477	-70.5806	13962.5	44138.5
C-9	41.8553	-70.2879	13909.4	44041.2
C-10	41.8288	-70.3893	13952.6	44041.0
C-11	41.8506	-70.4374	13964.5	44053.2
C-12	42.0086	-70.5339	13956.2	44120.0
C-13	41.9370	-70.4840	13957.9	44089.0
C-14	41.9039	-70.4054	13938.4	44069.6
C-15	42.0515	-70.5039	13933.0	44132.0
C-16	41.9967	-70.4362	13923.6	44106.0
C-17	42.0912	-70.4547	13903.7	44141.3
C-18	41.8111	-70.0573	13840.1	44004.6
C-19	41.9379	-70.0923	13817.0	44052.8
C-20	41.9769	-70.1031	13809.9	44067.4
C-21	41.8991	-70.1271	13840.1	44042.0
C-22	41.8839	-70.1602	13856.3	44039.8
C-23	41.8679	-70.2247	13883.3	44040.0
C-24	41.9781	-70.1257	13817.5	44070.0
C-25	41.9369	-70.1557	13839.7	44058.2
C-26	41.9499	-70.2230	13859.9	44069.0
C-27	41.9210	-70.2032	13861.0	44056.8
C-28	41.9868	-70.2018	13842.0	44080.0
C-29	42.0382	-70.3563	13883.0	44113.0
C-30	41.9784	-70.2835	13873.5	44084.8
C-31	41.9554	-70.2766	13877.5	44076.0
C-32	42.0798	-70.3433	13866.3	44126.3
C-33	42.0790	-70.2577	13835.6	44117.6
C-34	42.0984	-70.3991	13881.2	44138.2

**Massachusetts Marine Fisheries
Fall 2018 Planned Tow Locations
Cape Cod Bay and East of Cape Cod**

Massachusetts Marine Fisheries Fall 2018 Planned Tow Locations South of Cape Cod

MLA_LABEL	LAT	LON	LORAN-W	LORAN-Y	MLA_LABEL	LAT	LON	LORAN-W	LORAN-Y	MLA_LABEL	LAT	LON	LORAN-W	LORAN-Y
S-1	41.6466	-70.7215	14121.0	44003.0	S-17	41.3153	-70.5448	14138.2	43858.4	S-33	41.4668	-70.0721	13937.0	43878.8
S-2	41.6299	-70.7507	14136.0	43999.4	S-18	41.2391	-70.7716	14236.0	43846.3	S-34	41.5042	-70.3124	14010.7	43912.7
S-3	41.5971	-70.8100	14165.5	43992.3	S-19	41.3152	-70.8494	14246.6	43883.6	S-35	41.4642	-70.4552	14070.8	43909.4
S-4	41.4462	-70.8838	14228.8	43939.5	S-20	41.3059	-70.8650	14254.0	43881.2	S-36	41.5223	-70.5979	14107.5	43944.0
S-5	41.4192	-70.8541	14224.5	43925.6	S-21	41.4043	-70.3181	14037.5	43875.0	S-37	41.5916	-70.1962	13948.0	43936.0
S-6	41.5172	-70.8288	14192.0	43962.6	S-22	41.4282	-70.3519	14043.7	43887.0	S-38	41.3578	-70.1720	13998.5	43845.4
S-7	41.5491	-70.8112	14178.0	43973.5	S-23	41.4085	-70.1631	13982.7	43864.3	S-39	41.4369	-70.4680	14082.0	43900.0
S-8	41.5011	-70.9002	14222.0	43962.7	S-24	41.6196	-70.1841	13936.5	43945.2	S-40	41.4090	-70.0646	13949.2	43856.7
S-9	41.4788	-70.6947	14152.9	43935.8	S-25	41.5857	-70.3252	13994.8	43944.5	S-41	41.4744	-70.0383	13923.3	43879.2
S-10	41.3579	-70.8821	14248.9	43903.6	S-26	41.3503	-70.2732	14035.0	43850.4	S-42	41.3952	-69.9737	13921.8	43844.5
S-11	41.3988	-70.9143	14250.8	43923.0	S-27	41.3194	-70.1485	13999.8	43828.8	S-43	41.3582	-69.9804	13933.0	43831.0
S-12	41.3612	-71.0049	14292.5	43915.5	S-28	41.5393	-70.5284	14078.5	43944.4	S-44	41.2209	-70.0428	13987.6	43783.0
S-13	41.3374	-70.9121	14264.0	43898.0	S-29	41.5442	-70.2858	13991.0	43925.8	S-45	41.2547	-70.2082	14035.5	43808.5
S-14	41.2983	-70.3967	14090.0	43840.0	S-30	41.5253	-70.2009	13966.5	43911.3	S-46	41.3583	-69.9509	13923.2	43828.9
S-15	41.3409	-70.6826	14180.6	43879.8	S-31	41.3774	-70.2019	14004.0	43855.5	S-47	41.3838	-69.9559	13918.7	43839.0
S-16	41.2753	-70.7902	14234.3	43862.3	S-32	41.5181	-70.1539	13952.1	43904.8	S-48	41.2062	-70.1376	14023.0	43784.2

