



David E. Pierce
Director

Commonwealth of Massachusetts

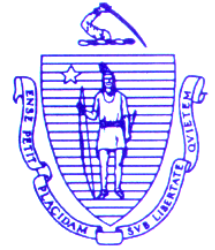
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March 9, 2017

Dear Permit Holders,

Marine Fisheries will be conducting its annual spring trawl survey throughout state coastal waters beginning May 8, 2017. 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 numerous fish stocks, as well as to inform the environmental review process that minimizes construction impacts on fisheries resources. **Survey lobster data is used in lobster stock assessments.** 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 figures - 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.

A list of completed survey stations will be updated daily and posted on the *Marine Fisheries* website (<http://www.mass.gov/dmf/trawlsurvey>) 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
May 2017 Spring 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'	May 12-16	42°47.83	-70°48.14	13820.3 / 44414.5	N-1
	0-30'	May 12-16	42°40.54	-70°41.79	13818.2 / 44364.2	N-2
	31'-60'	May 12-16	42°41.93	-70°43.14	13819.8 / 44374.1	N-3
	31'-60'	May 12-16	42°41.08	-70°41.61	13814.3 / 44366.7	N-4
	61'-90'	May 12-16	42°42.80	-70°43.04	13814.4 / 44378.5	N-5
	61'-90'	May 12-16	42°41.52	-70°36.44	13778.7 / 44359.1	N-6
	61'-90'	May 12-16	42°49.62	-70°46.47	13799.8 / 44420.4	N-7
	91'-120'	May 12-16	42°44.50	-70°43.08	13805.4 / 44387.6	N-8
	91'-120'	May 12-16	42°42.92	-70°41.03	13800.3 / 44375.2	N-9
	91'-120'	May 12-16	42°51.32	-70°45.51	13784.0 / 44427.4	N-10
	121'-180'	May 12-16	42°34.80	-70°36.84	13817.0 / 44324.2	N-11
	121'-180'	May 12-16	42°38.49	-70°32.65	13770.6 / 44336.1	N-12
	121'-180'	May 12-16	42°43.58	-70°38.64	13781.6 / 44374.2	N-13
	181'+	May 12-16	42°42.51	-70°32.16	13745.9 / 44356.3	N-14
	181'+	May 12-16	42°39.79	-70°31.68	13757.5 / 44341.2	N-15
Massachusetts Bay	0-30'	May 10-16	42°16.97	-70°51.56	14001.0 / 44251.1	N-16
	0-30'	May 11-16	42°24.38	-70°57.66	14004.2 / 44305.3	N-17
	31'-60'	May 10-16	42°16.99	-70°48.32	13980.1 / 44245.3	N-18
	31'-60'	May 10-16	42°17.96	-70°51.01	13992.9 / 44256.0	N-19
	31'-60'	May 11-16	42°27.01	-70°54.28	13969.0 / 44313.4	N-20
	61'-90'	May 11-16	42°23.81	-70°53.89	13982.6 / 44294.9	N-21
	61'-90'	May 10-16	42°18.75	-70°47.91	13969.0 / 44255.0	N-22
	61'-90'	May 11-16	42°26.90	-70°52.43	13957.7 / 44309.5	N-23
	91'-120'	May 11-16	42°32.83	-70°43.93	13872.6 / 44326.3	N-24
	91'-120'	May 11-16	42°28.55	-70°46.31	13909.9 / 44307.1	N-25
	91'-120'	May 11-16	42°23.20	-70°49.45	13957.0 / 44283.0	N-26
	121'-180'	May 11-16	42°31.60	-70°42.03	13866.9 / 44315.9	N-27
	121'-180'	May 10-16	42°22.60	-70°41.65	13910.0 / 44265.3	N-28
	121'-180'	May 11-16	42°32.13	-70°39.94	13850.5 / 44315.0	N-29
	181'+	May 10-16	42°24.68	-70°40.00	13889.2 / 44274.1	N-30
	181'+	May 10-16	42°22.27	-70°39.86	13900.2 / 44260.3	N-31

Massachusetts Division of Marine Fisheries
May 2017 Spring 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'	May 10-13	42°08.69	-70°41.23	13975.0 / 44184.2	C-1
	0-30'	May 8-12	41°57.58	-70°36.40	13996.6 / 44109.7	C-2
	0-30'	May 8-12	41°44.64	-70°19.35	13951.9 / 44003.8	C-3
	31'-60'	May 8-12	41°47.00	-70°18.79	13938.0 / 44017.2	C-4
	31'-60'	May 8-12	41°51.05	-70°30.07	13987.4 / 44059.5	C-5
	31'-60'	May 8-12	41°48.52	-70°27.69	13984.3 / 44040.1	C-6
	61'-90'	May 8-12	41°55.16	-70°29.80	13967.2 / 44084.2	C-7
	61'-90'	May 8-12	41°51.18	-70°25.42	13958.8 / 44052.9	C-8
	61'-90'	May 8-12	41°48.74	-70°22.43	13951.9 / 44033.5	C-9
	91'-120'	May 10-17	42°5.02	-70°33.17	13942.5 / 44148.8	C-10
	91'-120'	May 8-12	41°59.01	-70°32.52	13966.4 / 44111.8	C-11
	91'-120'	May 10-17	42°07.34	-70°31.33	13920.0 / 44159.3	C-12
	121'-180'	May 14-18	42°00.39	-70°22.76	13900.0 / 44104.0	C-13
	121'-180'	May 10-17	42°04.06	-70°28.79	13920.0 / 44135.5	C-14
	121'-180'	May 14-18	42°04.80	-70°26.56	13903.0 / 44136.5	C-15
Eastern Cape Cod Bay	0-30'	May 8-12	41°48.73	-70°04.70	13847.3 / 44006.8	C-16
	0-30'	May 8-12, 15-18	41°54.37	-70°06.45	13831.4 / 44043.0	C-17
	31'-60'	May 8-12	41°50.14	-70°12.02	13883.7 / 44026.1	C-18
	31'-60'	May 8-12, 15-18	41°52.27	-70°08.57	13853.6 / 44033.7	C-19
	61'-90'	May 8-12	41°50.21	-70°14.54	13898.3 / 44030.3	C-20
	61'-90'	May 15-18	42°00.79	-70°08.32	13811.9 / 44083.4	C-21
	91'-120'	May 15-18	41°59.13	-70°10.03	13830.0 / 44076.3	C-22
	91'-120'	May 15-18	41°56.50	-70°10.52	13845.3 / 44061.5	C-23
	121'-180'	May 14-19	42°02.68	-70°23.33	13893.5 / 44118.3	C-24
	121'-180'	May 14-19	42°02.80	-70°19.73	13871.0 / 44113.2	C-25
	181'+	May 14-19	42°06.30	-70°25.17	13887.4 / 44142.7	C-26
	181'+	May 14-19	42°04.40	-70°16.90	13846.4 / 44118.0	C-27
	181'+	May 14-19	42°05.99	-70°22.26	13871.1 / 44136.0	C-28
East of Cape Cod	0-30'	May 16-19	42°04.75	-70°07.25	13787.0 / 44104.7	B-1
	0-30'	May 17-20	41°49.81	-69°55.96	13791.6 / 44000.6	B-2
	31'-60'	May 16-20	41°52.21	-69°56.45	13783.0 / 44015.5	B-3
	31'-60'	May 17-20	41°38.17	-69°54.17	13834.3 / 43927.8	B-4
	31'-60'	May 17-20	41°41.29	-69°52.86	13812.7 / 43945.0	B-5
	61'-90'	May 17-20	41°43.71	-69°52.86	13802.0 / 43959.6	B-6
	61'-90'	May 16-20	41°58.34	-69°58.25	13764.5 / 44054.0	B-7
	91'-120'	May 17-20	41°49.60	-69°53.29	13777.0 / 43995.3	B-8
	91'-120'	May 16-19	42°05.85	-70°06.82	13779.0 / 44110.2	B-9
	91'-120'	May 16-20	42°03.28	-70°01.07	13757.0 / 44086.6	B-10
	121'-180'	May 16-19	42°06.52	-70°09.31	13790.5 / 44118.0	B-11
	121'-180'	May 16-19	42°07.43	-70°11.22	13797.5 / 44126.3	B-12
	121'-180'	May 16-19	42°06.19	-70°13.01	13814.3 / 44122.0	B-13

Massachusetts Division of Marine Fisheries
May 2017 Spring 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'	May 18-28	41°24.82	-70°28.60	14090.5 / 43891.5	S-20
	0-30'	May 18-28	41°37.38	-70°10.52	13931.9 / 43946.0	S-21
	0-30'	May 18-28	41°37.28	-70°07.23	13913.3 / 43940.7	S-22
	0-30'	May 18-28	41°28.70	-70°22.86	14041.3 / 43908.8	S-23
	0-30'	May 18-28	41°31.21	-70°11.39	13963.4 / 43908.8	S-24
	0-30'	May 18-28	41°23.50	-70°10.98	13993.6 / 43859.6	S-25
	0-30'	May 18-28	41°30.43	-70°07.11	13942.4 / 43897.9	S-26
	0-30'	May 18-28	41°25.84	-70°20.52	14039.4 / 43887.3	S-27
	0-30'	May 18-28	41°28.64	-70°16.50	14004.4 / 43899.5	S-28
	0-30'	May 18-28	41°31.79	-70°21.51	14020.5 / 43926.5	S-29
	31'-60'	May 18-28	41°27.08	-70°19.18	14026.0 / 43893.4	S-30
	31'-60'	May 18-28	41°31.67	-70°26.26	14048.5 / 43932.5	S-31
	31'-60'	May 18-28	41°35.03	-70°13.00	13956.7 / 43934.9	S-32
	31'-60'	May 18-28	41°22.17	-70°06.11	13971.5 / 43844.5	S-33
	31'-60'	May 18-28	41°26.94	-70°11.69	13983.6 / 43882.3	S-34
	31'-60'	May 18-28	41°30.22	-70°15.26	13990.4 / 43907.9	S-35
	31'-60'	May 18-28	41°36.24	-70°04.75	13903.7 / 43930.8	S-36
	31'-60'	May 18-28	41°28.01	-70°02.48	13926.0 / 43876.5	S-37
	31'-60'	May 18-28	41°26.73	-70°05.83	13950.8 / 43873.0	S-38
	31'-60'	May 18-28	41°30.04	-70°09.52	13957.8 / 43898.9	S-39
	31'-60'	May 18-28	41°33.14	-70°19.67	14004.0 / 43932.5	S-40
Buzzards Bay and Vineyard Sound	0-30'	May 18-28	41°25.27	-70°45.20	14187.4 / 43918.0	S-1
	0-30'	May 18-28	41°29.79	-71°03.34	14280.0 / 43975.2	S-2
	0-30'	May 18-28	41°40.89	-70°41.90	14103.0 / 44104.1	S-3
	31'-60'	May 18-28	41°35.94	-70°42.75	14129.6 / 43984.0	S-4
	31'-60'	May 18-28	41°30.34	-70°53.93	14220.0 / 43964.6	S-5
	31'-60'	May 18-28	41°28.90	-70°50.68	14206.0 / 43950.5	S-6
	31'-60'	May 18-28	41°29.40	-70°47.60	14185.2 / 43949.0	S-7
	31'-60'	May 18-28	41°34.27	-70°43.86	14143.1 / 43975.4	S-8
	61'-90'	May 18-28	41°24.13	-70°45.62	14194.5 / 43911.0	S-9
	61'-90'	May 18-28	41°23.68	-70°48.19	14211.3 / 43911.5	S-10
Southwest of Gay Head and South of Martha's Vineyard	61'-90'	May 18-28	41°23.66	-70°50.69	14226.5 / 43915.5	S-11
	91'-120'	May 18-28	41°21.43	-70°56.15	14267.8 / 43908.3	S-12
	0-30'	May 18-28	41°20.65	-70°34.83	14143.5 / 43873.0	S-13
	0-30'	May 18-28	41°20.61	-70°39.11	14169.2 / 43878.2	S-14
	31'-60'	May 18-28	41°19.36	-70°30.71	14124.5 / 43858.5	S-15
	31'-60'	May 18-28	41°20.17	-70°33.75	14139.2 / 43868.5	S-16
	61'-90'	May 18-28	41°14.48	-70°46.28	14234.8 / 43847.4	S-17
	61'-90'	May 18-28	41°18.87	-70°35.52	14154.5 / 43862.0	S-18
	91'-120'	May 18-28	41°19.32	-70°53.46	14259.8 / 43889.9	S-19
	0-30'	May 18-28	41°17.29	-70°20.18	14071.5 / 43831.4	S-41
South of Nantucket	0-30'	May 18-28	41°31.47	-69°56.39	13876.4 / 43890.0	S-42
	0-30'	May 18-28	41°14.17	-70°01.21	13976.4 / 43787.3	S-43
	31'-60'	May 18-28	41°14.97	-70°14.31	14047.0 / 43808.5	S-44
	31'-60'	May 18-28	41°12.98	-70°09.35	14026.8 / 43789.5	S-45
	31'-60'	May 18-28	41°14.02	-70°05.05	13998.5 / 43791.0	S-46
	61'-90'	May 18-28	41°12.22	-70°06.93	14016.0 / 43781.6	S-47

Massachusetts Marine Fisheries Spring 2017 Planned Tow Locations Massachusetts Bay to New Hampshire

Station Label	LAT	LOX	LORAN_W	LORAN_Y
N-1	42.7972	-70.8023	13820.3	44414.5
N-2	42.6757	-70.6966	13818.2	44364.2
N-3	42.6988	-70.7190	13819.8	44374.1
N-4	42.6846	-70.6935	13814.3	44366.7
N-5	42.7133	-70.7173	13814.4	44378.5
N-6	42.6919	-70.6073	13778.7	44359.1
N-7	42.8270	-70.7745	13799.8	44420.4
N-8	42.7417	-70.7180	13805.4	44387.6
N-9	42.7153	-70.6838	13800.3	44375.2
N-10	42.8553	-70.7585	13784.0	44427.4
N-11	42.5800	-70.6140	13817.0	44324.2
N-12	42.6415	-70.5442	13770.6	44336.1
N-13	42.7263	-70.6439	13781.6	44374.2
N-14	42.7085	-70.5361	13745.9	44356.3
N-15	42.6632	-70.5280	13757.5	44341.2
N-16	42.2829	-70.8593	14001.0	44251.1
N-17	42.4063	-70.9610	14004.2	44305.3
N-18	42.2832	-70.8054	13980.1	44245.3
N-19	42.2994	-70.8502	13992.9	44256.0
N-20	42.4502	-70.9047	13969.0	44313.4
N-21	42.3968	-70.8982	13982.6	44294.9
N-22	42.3125	-70.7985	13969.0	44255.0
N-23	42.4483	-70.8738	13957.7	44309.5
N-24	42.5471	-70.7322	13872.6	44326.3
N-25	42.4759	-70.7719	13909.9	44307.1
N-26	42.3866	-70.8241	13957.0	44283.0
N-27	42.5267	-70.7004	13866.9	44315.9
N-28	42.3767	-70.6942	13910.0	44265.3
N-29	42.5355	-70.6657	13850.5	44315.0
N-30	42.4114	-70.6666	13889.2	44274.1
N-31	42.3712	-70.6644	13900.2	44260.3

Station Label	LAT	LON	LORAN_W	LORAN_Y
C-1	42.1449	-70.6871	13975.0	44184.2
C-2	41.9597	-70.6067	13996.6	44109.7
C-3	41.7440	-70.3225	13951.9	44003.8
C-4	41.7833	-70.3131	13938.0	44017.2
C-5	41.8509	-70.5012	13987.4	44059.5
C-6	41.8087	-70.4615	13984.3	44040.1
C-7	41.9194	-70.4967	13967.2	44084.2
C-8	41.8529	-70.4237	13958.8	44052.9
C-9	41.8124	-70.3739	13951.9	44033.5
C-10	42.0837	-70.5529	13942.5	44148.8
C-11	41.9836	-70.5420	13966.4	44111.8
C-12	42.1223	-70.5222	13920.0	44159.3
C-13	42.0065	-70.3793	13900.0	44104.0
C-14	42.0677	-70.4798	13920.0	44135.5
C-15	42.0800	-70.4426	13903.0	44136.5
C-16	41.8122	-70.0783	13847.3	44006.8
C-17	41.9062	-70.1074	13831.4	44043.0
C-18	41.8357	-70.2004	13883.7	44026.1
C-19	41.8712	-70.1428	13853.6	44033.7
C-20	41.8368	-70.2423	13898.3	44030.3
C-21	42.0131	-70.1386	13811.9	44083.4
C-22	41.9854	-70.1672	13830.0	44076.3
C-23	41.9417	-70.1754	13845.3	44061.5
C-24	42.0447	-70.3889	13893.5	44118.3
C-25	42.0466	-70.3288	13871.0	44113.2
C-26	42.1051	-70.4195	13887.4	44142.7
C-27	42.0733	-70.2816	13846.4	44118.0
C-28	42.0998	-70.3710	13871.1	44136.0
B-1	42.0791	-70.1209	13787.0	44104.7
B-2	41.8302	-69.9327	13791.6	44000.6
B-3	41.8702	-69.9408	13783.0	44015.5
B-4	41.6362	-69.9029	13834.3	43927.8
B-5	41.6882	-69.8809	13812.7	43945.0
B-6	41.7284	-69.8810	13802.0	43959.6
B-7	41.9723	-69.9709	13764.5	44054.0
B-8	41.8266	-69.8881	13777.0	43995.3
B-9	42.0975	-70.1136	13779.0	44110.2
B-10	42.0547	-70.0179	13757.0	44086.6
B-11	42.1086	-70.1551	13790.5	44118.0
B-12	42.1238	-70.1869	13797.5	44126.3
B-13	42.1031	-70.2168	13814.3	44122.0

**Massachusetts Marine Fisheries
Spring 2017 Planned Tow Locations
Cape Cod Bay to East of Cape Cod**

Massachusetts Marine Fisheries Spring 2017 Planned Tow Locations South of Cape Cod

Station Label	LAT	LON	LORAN_W	LORAN_Y	Station Label	LAT	LON	LORAN_W	LORAN_Y	Station Label	LAT	LON	LORAN_W	LORAN_Y
S-1	41.4211	-70.7533	14187.4	43918.0	S-17	41.2414	-70.7714	14234.8	43847.4	S-33	41.3694	-70.1018	13971.5	43844.5
S-2	41.4965	-71.0556	14280.0	43975.2	S-18	41.3144	-70.5920	14154.5	43862.0	S-34	41.4490	-70.1949	13983.6	43882.3
S-3	41.6815	-70.6983	14103.0	44104.1	S-19	41.3220	-70.8911	14259.8	43889.9	S-35	41.5037	-70.2543	13990.4	43907.9
S-4	41.5990	-70.7125	14129.6	43984.0	S-20	41.4137	-70.4767	14090.5	43891.5	S-36	41.6040	-70.0791	13903.7	43930.8
S-5	41.5057	-70.8988	14220.0	43964.6	S-21	41.6230	-70.1753	13931.9	43946.0	S-37	41.4669	-70.0414	13926.0	43876.5
S-6	41.4817	-70.8447	14206.0	43950.5	S-22	41.6214	-70.1205	13913.3	43940.7	S-38	41.4455	-70.0972	13950.8	43873.0
S-7	41.4900	-70.7933	14185.2	43949.0	S-23	41.4783	-70.3809	14041.3	43908.8	S-39	41.5006	-70.1587	13957.8	43898.9
S-8	41.5712	-70.7311	14143.1	43975.4	S-24	41.5202	-70.1898	13963.4	43908.8	S-40	41.5523	-70.3279	14004.0	43932.5
S-9	41.4021	-70.7603	14194.5	43911.0	S-25	41.3917	-70.1829	13993.6	43859.6	S-41	41.2882	-70.3364	14071.5	43831.4
S-10	41.3946	-70.8031	14211.3	43911.5	S-26	41.5072	-70.1185	13942.4	43897.9	S-42	41.5245	-69.9398	13876.4	43890.0
S-11	41.3944	-70.8448	14226.5	43915.5	S-27	41.4306	-70.3420	14039.4	43887.3	S-43	41.2362	-70.0201	13976.4	43787.3
S-12	41.3572	-70.9358	14267.8	43908.3	S-28	41.4773	-70.2750	14004.4	43899.5	S-44	41.2496	-70.2385	14047.0	43808.5
S-13	41.3441	-70.5806	14143.5	43873.0	S-29	41.5298	-70.3586	14020.5	43926.5	S-45	41.2163	-70.1559	14026.8	43789.5
S-14	41.3435	-70.6518	14169.2	43878.2	S-30	41.4513	-70.3197	14026.0	43893.4	S-46	41.2337	-70.0841	13998.5	43791.0
S-15	41.3226	-70.5118	14124.5	43858.5	S-31	41.5278	-70.4377	14048.5	43932.5	S-47	41.2037	-70.1154	14016.0	43781.6
S-16	41.3362	-70.5625	14139.2	43868.5	S-32	41.5839	-70.2167	13956.7	43934.9					

