

# Massachusetts Division of Marine Fisheries Technical Report TR-26

# 2004 Massachusetts Lobster Fishery Statistics

M. J. Dean, S. R. Reed, and T. B. Hoopes

Massachusetts Division of Marine Fisheries
Department of Fish and Game
Executive Office of Environmental Affairs
Commonwealth of Massachusetts

### **Massachusetts Division of Marine Fisheries Technical Report Series**

Managing Editor: Michael P. Armstrong

The Massachusetts Division of Marine Fisheries Technical Reports present information and data pertinent to the management, biology and commercial and recreational fisheries of anadromous, estuarine, and marine organisms of the Commonwealth of Massachusetts and adjacent waters. The series presents information in a timely fashion that is of limited scope or is useful to a smaller, specific audience and therefore may not be appropriate for national or international journals. Included in this series are data summaries, reports of monitoring programs, and results of studies that are directed at specific management problems.

All Reports in the series are available for download in PDF format at:

<u>http://www.mass.gov/marinefisheries/publications/technical.htm</u> or hard copies may be obtained from the Annisquam River Marine Fisheries Station, 30 Emerson Ave., Gloucester, MA 01930 USA (978-282-0308).

- TR-1 McKiernan, D.J., and D.E. Pierce. 1995. The Loligo squid fishery in Nantucket and Vineyard Sound.
- TR-2 McBride, H.M., and T.B. Hoopes. 2001. 1999 Lobster fishery statistics.
- TR-3 McKiernan, D.J., R. Johnston, and W. Hoffman. 1999. **Southern Gulf of Maine raised footrope trawl experimental whiting fishery**.
- TR-4 Nelson, G.A, M.P. Armstrong, and T.B. Hoopes. 2001. Massachusetts 2000 striped bass monitoring report.
- TR-5 Chase, B.C., and A.R. Childs. 2002. Rainbow smelt (Osmerus mordax) spawning habitat in the Weymouth-Fore River.
- TR-6 Chase, B.C., J. Plough, and W. Castonguay. 2002. A study of the marine resources of Salem Sound, 1997.
- TR-7 Estrella, B.T., and R.P. Glenn. 2001. Massachusetts coastal commercial lobster sampling program May-November 2000.
- TR-8 Estrella, B.T. 2002. Techniques for live storage and shipping of American lobster, third edition.
- TR-9 McBride, H.M., and T.B. Hoopes. 2002. 2000 lobster fishery statistics.
- TR-10 Sheppard, J.J, M.P. Armstrong, D.J. McKiernan and D.E. Pierce 2003. Characterization of the Massachusetts scup (*Stenotomus chrysops*) fisheries.
- TR-11 Nelson, G.A., and T.B. Hoopes. 2002. Massachusetts 2001 striped bass fisheries monitoring report.
- TR-12 Howe, A. B., S. J. Correia, T. P. Currier, J. King, and R. Johnston. 2002. **Spatial distribution of ages 0 and 1 Atlantic cod (***Gadus morhua***) off the Eastern Massachusetts coast, relative to 'Habitat Area of Special Concern'.**
- TR-13 Dean, M.J., K.A. Lundy, and T.B. Hoopes. 2002. 2001 Massachusetts lobster fishery statistics.
- TR-14 Estrella, B.T., and R.P. Glenn. 2002. Massachusetts coastal commercial lobster trap sampling program, May-November 2001.
- TR-15 Reback, K.E., P.D. Brady, K.D. McLauglin, and C.G. Milliken. 2004. A survey of anadromous fish passage in coastal Massachusetts: Part 1. Southeastern Massachusetts.
- TR-16 Reback, K.E., P.D. Brady, K.D. McLauglin, and C.G. Milliken. 2004. A survey of anadromous fish passage in coastal Massachusetts: Part 2. Cape Cod and the Islands.
- TR-17 Reback, K.E., P.D. Brady, K.D. McLauglin, and C.G. Milliken. 2004. A survey of anadromous fish passage in coastal Massachusetts: Part 3. South Coastal.
- TR-18 Reback, K.E., P.D. Brady, K.D. McLauglin, and C.G. Milliken. 2004. A survey of anadromous fish passage in coastal Massachusetts: Part 4. Boston and North Coastal.
- TR-19 Nelson, G.A. 2003. 2002 Massachusetts striped bass monitoring report.
- TR-20 Dean, M.J., K.A. Lundy, and T.B. Hoopes. 2003. 2002 Massachusetts lobster fishery statistics.
- TR-21 Nelson, G.A. 2004. 2003 Massachusetts striped bass monitoring report.
- TR-22 Lyman, E.G. and D.J. McKiernan. 2005. Scale modeling of fixed-fishing gear to compare and quantify differently configured buoyline and groundline profiles: an investigation of entanglement threat.
- TR-23 Dean, M.J., K.A. Lundy, and T.B. Hoopes. 2005. 2003 Massachusetts lobster fishery statistics.
- TR-24 Nelson, G.A. 2005. 2004 Massachusetts striped bass monitoring report.
- TR-25 Nelson, G.A. 2006. A guide to statistical sampling for the estimation of river herring run size using visual counts.
- TR-26 Dean, M. J., S. R. Reed, and T. B. Hoopes. 2006. 2004 Massachusetts lobster fishery statistics.



# Massachusetts Division of Marine Fisheries Technical Report TR-26



# 2004 Massachusetts Lobster Fishery Statistics

Micah J. Dean, Story R. Reed, and Thomas B. Hoopes

Massachusetts Division of Marine Fisheries Annisquam River Marine Fisheries Station Gloucester, MA

July, 2006

Massachusetts Division of Marine Fisheries
Paul Diodati, Director

Department of Fisheries, Wildlife and Environmental Law Enforcement
Dave Peters, Commissioner

Executive Office of Environmental Affairs
Stephen R. Pritchard, Secretary
Commonwealth of Massachusetts

Mitt Romney, Governor

## **Contents**

Introduction	1
Methods	1
Results and Discussion	5
Permits issued and Reporting Status	5
Coastal Lobster Permit Transfers	5
Commercial Landings and Value	6
Recreational Landings	11
Catch Rates	12
Fishing Gear and Vessels	15
Validity of Data	16
Acknowledgements	16
Appendix A: Supplementary Tables	18
Appendix B: 2004 Commercial Catch Report Forms	22

# **List of Tables**

1.	Permit information for the Massachusetts lobster fishery, 2000 - 2004	. 2
2.	Recreational lobster permit information 2004	. 5
3.	Massachusetts commercial landings, traps fished and estimated value of landings for 2000 - 2004.	. 6
4.	Number of active commercial lobstermen, traps fished and lobster landings for 2004	. 8
5.	2004 commercial lobster landings by month for territorial and non-territorial areas	. 9
6.	2004 commercial lobster landings by permit and area	. 10
7.	Reported catch and effort information for 2004 Massachusetts recreational lobster fishery	. 11
8.	Types of lobster traps fished and value by permit type for 2004	. 15
A1.	Number of fishermen, landings and value for 2004 Massachusetts commercial lobster fishery	. 19
A2.	Number of fising vessels and pots fished for 2004 Massachusetts commercial lobster fishery	. 20
A3.	. Value of fishing vessels and diving gear for 2004 Massachusetts commercial lobster fishery	. 21

# **List of Figures**

1A.	Map of DMF Statistical Reporting Areas	3
1B.	Map of Lobster Management Areas	4
2.	2004 weighted ex-vessel price derived from audit lobstermen's' records	7
3.	Total commercial lobster landings and estimated value for 1994 - 2004	7
4.	2004 commercial lobster harvest by month for territorial and non-territorial areas	9
5.	Map of 2004 commercial lobster landings from all permit types by statistical reporting area	10
6.	2004 commercial lobster landings by permit type and area	10
7.	Reported recreational landings for 1994 - 2004	11
8.	Reported recreational effort for 1994 - 2004.	11
9.	Catch per unit of effort (pounds per trap-haul) by set-over day for coastal and offshore potmen in 2004.	12
10.	Average catch per unit of effort (pounds per trap-haul * set-over-day) for coastal and offshore potmen for the last 10 years	13
11.	Average catch per unit of effort (pounds per trap-haul * set-over-day) by month for coastal and offshore potmen in 2004	13
12.	2004 catch per unit of effort (pounds per trap-haul * set-over-day) for all license types by are area fished.	14
13.	Map of 2004 median catch per unit of effort (pounds per trap-haul * set-over-day) for all license types by area fished	14
14.	Percent of total traps fished by trap construction type; 1990 - 2004.	15
15.	Frequency distribution of the percent difference between fishermen's reported catch and their audited records for 2004 commercial lobster fishery	16
16.	Map of coastal Massachusetts showing county boundaries and statistical reporting areas	17

#### Introduction

The commercial lobster fishery of Massachusetts is the most economically important fishery conducted within the territorial waters of the Commonwealth. The overall importance of the fishery both in New England and the Mid-Atlantic states has focused the attention of federal, regional and state fishery managers on this species. With the passage of the Magnuson Fishery Conservation and Management Act in 1976, the New England Fisheries Management Council, in cooperation with the Mid-Atlantic Council, developed and implemented a management plan for the entire Atlantic Coast lobster fishery. Management of this fishery was transferred to the Atlantic States Marine Fisheries Commission (ASMFC) in 1997. Since its first implementation, the Interstate Management Plan for Atlantic Coast Lobster (FMP) has been modified several times. The most current revision at the time these data were collected was Addendum VI (February 2005).

The Commission's management plan introduced area management along the coast, with seven separate Lobster Management Areas (LMAs) from Maine to Maryland. Area designations were based primarily on the percent contribution from different stock components, but the manner in which the fisheries have been prosecuted were also taken into consideration. Each area has been designated a Lobster Conservation Management Team (LCMT) composed of fishermen whose task it is to develop management recommendations that achieve the objectives of the plan. The Massachusetts lobster fishery occurs in four of these LMAs: 1, 2, 3 and OC (Figure 1A).

Information provided by a peer-reviewed stock assessment in 2000 indicated a need for an increase in egg production across all Lobster Management Areas. To meet this requirement, ASMFC created a schedule of minimum gauge size increases through Addendum III to Amendment 3 of the FMP. At the end of 2004, the minimum gauge size was 3  $^{1}/_{4}$ " for LMA 1, and 3  $^{3}/_{8}$ " for LMAs 2, 3, and Outer Cape (OC). Additional increases of  $^{1}/_{32}$ " per year may be required, if necessary, for LMA 3 until a final minimum size of 3  $^{1}/_{2}$ " is reached in 2008.

The basis and success of any such management plan is an accurate statistical database. The Commonwealth of Massachusetts, with funding from the National Marine Fisheries Service, has been collecting annual reports from permited lobster fishermen since the early 1960's. In the past, these data were used primarily for descriptive and informational purposes, and occasionally for management. With the emphasis on coastwide management, however, these data have provided the respective management agencies with the information they need to protect the interests of Massachusetts' lobstermen and ensure a productive fishery in the Commonwealth.

During the mid 1970s, concerns over the ability of the resource to support rapidly expanding effort levels prompted statutory and regulatory measures to limit the number of new commercial lobster permits being issued. The issuance of new Coastal Permits was suspended entirely in 1988. As a result of these measures, the number of permits has declined from an all time high of 1,865 in 1988 to a more manageable 1,464 permits in 2004.

This report is the thirty-eighth annual publication of data compiled from the catch reports of permitted lobster fishermen. This report does not, however, cover the scope of the Project's existing database and computational capability. Requests for expanded information, or questions concerning this publication, should be directed to the Division's MIS & Fisheries Statistics Project in Gloucester, MA: (978) 282-0308.

#### Methods

Chapter 130, Massachusetts General Laws, Section 33, requires all lobstermen to file an annual report of their catch by January 31 for the preceding calendar year. Commercial lobstermen (coastal, offshore and seasonal/student) receive a detailed catch report form specific to their permit type with their renewal application (Appendix B). Recreational fishermen are asked to report on their permit renewal application form the number of lobsters taken during the previous year, hours dived and the maximum number of traps fished. Catch reports are visually screened upon receipt and incomplete or improperly filled out forms are returned. Completed reports are entered into an Oracle database and the original forms are kept on file at our Gloucester office. As the data enters the database, it is validated against a set of QA/QC criteria by the data entry software. In addition, the data is once again reviewed for data entry errors prior to the production of this report.

Fisherman catch reports are the primary source of the data presented in this report. Some data elements, such as permits and transfer information come from our permitting database. Price and data

validity information are derived from records submitted by fishermen during our annual audit of commercial lobster catch reports.

Most of the data presented in this publication are broken out either by permit type or by area. Area data is reported according to MA DMF Statistical Reporting Areas (Figure 1A), which conform to National Marine Fisheries Service reporting areas. Reporting areas 1 through 14 are considered "Territorial" areas and include all waters under the jurisdiction of the Commonwealth. Reporting areas 15 through 25 are considered "Non-Territorial" areas, meaning they lie outside the State Waters. Statistical Reporting Area 26 refers to any area outside of Areas 1 through 25.

In keeping with Division policy, some of the data are masked or combined to protect the confidentiality of the individual submitting the report. Specifically, any grouping of data that represents less than three fishermen is not shown.

Data referring to the number of fishermen, number and value of gear, and number and value of boats are presented by the homeport of the vessel associated with the permit.

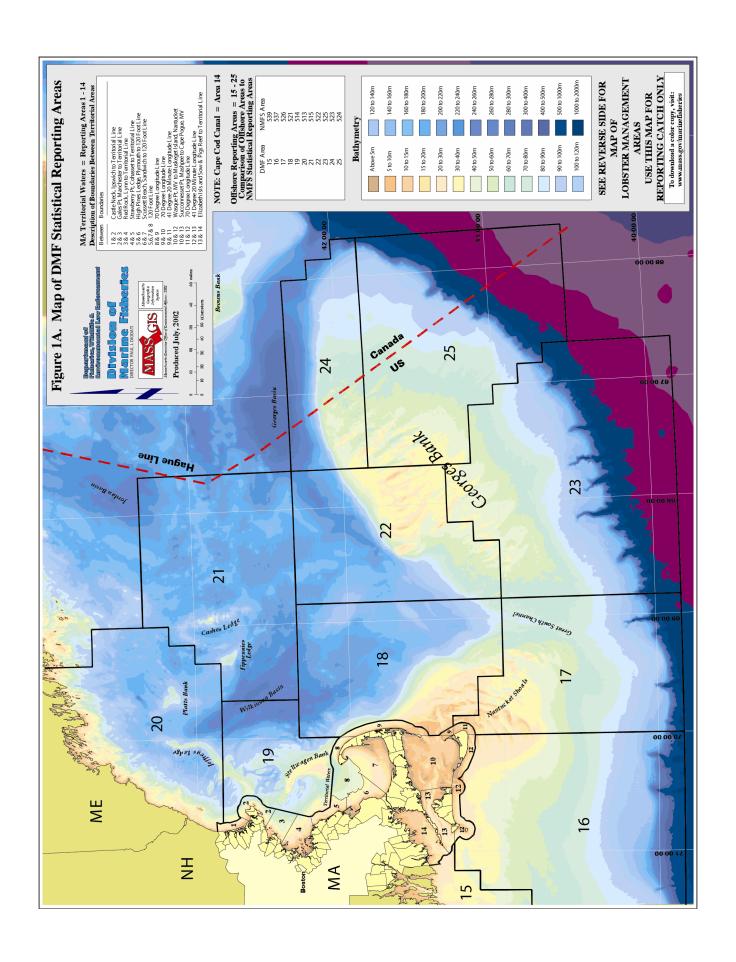
Vessel and SCUBA gear values were calculated on the basis of the fishermen's estimate of its present value and the percentage of the time it is in use specifically for lobstering. When fishermen reported the number of lobsters taken, rather than poundage, a conversion factor of 1.27 pounds per lobster was used to calculate poundage figures. This figure is based on information collected by the Division's Coastal Lobster Investigations Project.

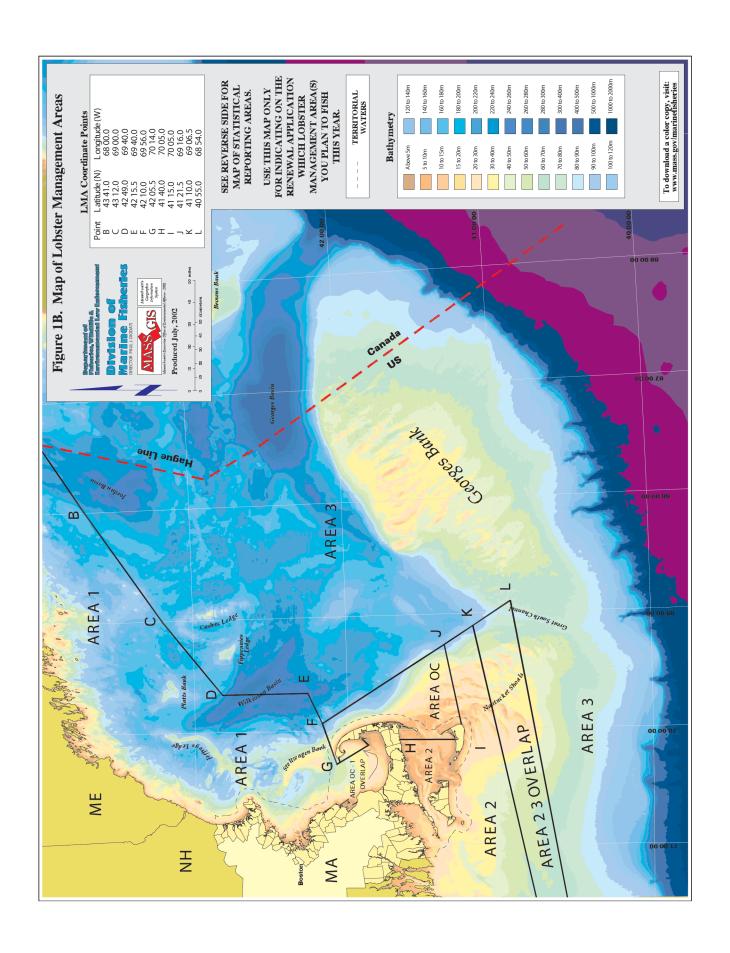
Data presented in this publication are based on catch reports actually received as of April 2006. Late reports received beyond this point are not represented here but will be entered into our databases and accounted for in future publications.

**Table 1**. Permit information for the Massachusetts lobster fishery, 2000-2004

		•			
	2000	2001	2002	2003	2004
Coastal Permits					
Issued	1,541	1,538	1,531	1,504	1,464
Fished	1,125	1,098	1,086	1,044	982
Did Not Fish	399	416	422	433	450
Not Reporting	17	24	23	27	32
Offshore Permits*					
Issued	534	530	555	553	346
Fished	345	344	376	381	203
Did Not Fish	129	142	140	142	116
Not Reporting	60	44	39	30	27
Offshore Non-Trap Permits*					
Issued					202
Fished					129
Did Not Fish					53
Not Reporting					20
Seasonal (Student) Permits					
Issued	92	96	98	104	100
Fished	53	51	57	55	51
Did Not Fish	17	14	16	15	15
Not Reporting	22	31	25	34	34
Recreational Permits					
Issued	11,766	11,957	11,954	11,395	11,113
Fished	6,573	6,605	6,279	5,921	5,800
Did Not Fish	2,590	2,538	2,740	2,688	2,492
Not Reporting	2,604	2,814	2,935	2,786	2,821

<sup>\*</sup> The "Offshore Non-Trap" permit type was created for the 2004 fishing year. In prior years, only one type Offshore permit existed, regardless of gear type.





#### **Results and Discussion**

<u>Permits issued and reporting status</u>. The Division of Marine Fisheries issues five types of lobster permits:

Coastal Commercial: Allows the holder to harvest lobster anywhere, most importantly inside territorial waters.

Offshore Commercial: Allows the holder to harvest lobster outside territorial waters only.

Offshore Commercial (Non-trap): Same as Offshore Permit, except the permit holder is restricted to non-trap gear types. This permit type was created for the 2004 fishing year. Prior to 2004, there was only one type of offshore permit, regardless of gear type.

Seasonal Commercial: Allows the holder, if he or she is a student, to harvest lobster anywhere, but with a maximum of 25 traps and only during the months of June - September.

Recreational: Allows the holder to harvest lobster anywhere using SCUBA gear, a maximum of 10 traps, or a combination of both. The catch may not be sold.

A total of 13,225 lobster permits were issued in 2004: 2,112 commercial and 11,113 recreational (Table 1). Of the commercial permits issued, 1,464 were coastal permits, a 2.7 percent decline over the previous year. This represents the 17th consecutive decline since a moratorium on new coastal permits was declared in 1988. The number of offshore permits issued decreased by less than 1 percent, while the number of seasonal permits decreased by 3.8 percent.

As of June 2006, 113 permitted commercial lobstermen (5.4 percent) failed to file a 2004 catch report with the Division. Of the 1,999 commercial fishermen who reported, 634 or 30 percent claimed they did not fish for lobster in 2004.

Recreational permits issued declined in 2004 by 2.5 percent, the third consecutive decrease. Compared to commercial permit holders, substantially more recreational fishermen failed to report at 25.4 percent; However, an annual reporting rate of 75 percent in the recreational fishery is not unusual. Seventy percent of the recreational permit holders that submitted catch reports declared that they

fished for lobster in 2004. Of those that reported fishing, 42.2 percent declared using pots, 26.2 percent used dive gear and 31.6 used a combination of the two (Table 2).

Permit fees collected in 2004 totaled \$962,440: \$514,540 for commercial permits and \$447,900 for recreational permits. The cost of Massachusetts lobster permits remained at \$260 for coastal or off-shore permits (\$520 for non-residents), \$65 for seasonal permits (\$130 for non-residents) and \$40 for recreational permits (\$60 for non-residents). The last increase in permit fees was in 1989.

Coastal lobster permit transfer. During calendar year 2004, the Division authorized the transfer of 64 coastal licenses. Fourteen of the transfers went to captains who were previously authorized to fish another holder's license and who had fished that holder's license for at least twelve months prior to the transfer. Eighteen transfers were allowed within the holder's immediate family (and would have been allowed prior to the new regulation). Eleven transfers were made directly from the holder to a sternman with a documented fishing history. Thirty-six licenses were forfeited to the Division in 2004. Two of these coastal lobster permits were issued directly to waiting list applicants.

Table 2. Recreational lobster permit information for 2004

Permit Type:	Diver	Diver/Pot	Potman	Total
Issued	3,138	3,528	4,447	11,113
Reporting	2,248	2,701	3,336	8,285
Fished	1,520	1,831	2,445	5,796
Did Not Fish	728	870	891	2,489
Not Reporting	890	827	1,111	2,828

Commercial Landings and Value. In 2004, 11,784,110 pounds of lobster were reported landed by commercial lobstermen in Massachusetts, a 3.1 percent increase from 2003 (Table 3). Just over 60 percent of those landings were taken from Territorial Waters. The territorial fishery is predominantly a trap-fishery, with 98.8 percent of the landings coming from traps. In contrast, the non-territorial fishery landed 22.2 percent of its catch from non-trap gear types, such as bottom trawls and gillnets.

The state-wide weighted average ex-vessel price as taken from auditted fishermen's records was \$4.50, a 3.2 percent increase over the previous year (Figure 2). The ex-vessel price followed a seasonal trend similar to prior years: prices increased steadily from the first of the year to a peak in April, then dropped sharply followed by a second smaller peak in mid-summer. The lowest prices of the year were seen in October and November, after which they

rebounded steadily to above-average prices by the end of the year. The estimated total value of the commercial catch rose by 6.4 percent to \$53,028,494 (total lbs x avg. price). This represents the highest value of commercial lobster landings since 2000 (Figure 3).

In total pounds of lobster landed, Essex County continues to be ranked first, Barnstable County second and Plymouth County third (Appendix A, Table A1). Gloucester was the number one port in total pounds landed followed by Sandwich, Beverly and Plymouth, in that order (Table 5). In terms of active commercial lobstermen, Essex County ranked first with 528, Plymouth County second with 254 and Bristol County third with 207. Among the cities and towns of the Commonwealth, Gloucester ranked first in active fishermen followed by Plymouth, Rockport and New Bedford in that order.

**Table 3**. Massachusetts commercial landings, traps fished and estimated value of landings for 2000-2004. "Total Traps" is calculated by summing each individual's maximum traps fished for the year. For the purposes of this table, all of an individual's maximum traps are considered "Territorial" if the majority of their landings come from Territorial Waters. Value is estimated by multiplying total landings by the state-wide average ex-vessel price per pound.

	2000	2001	2002	2003	2004
Total Landings	15,031,538	12,237,121	13,776,018	11,429,379	11,784,110
Total Estimated Value	\$54,865,114	\$45,766,833	\$51,246,785	\$49,832,092	\$53,028,494
Total Traps Fished	482,218	473,027	507,891	480,484	448,844
Average Price (\$) / Lb	\$3.65	\$3.74	\$3.72	\$4.36	\$4.50
Ave. Lbs. / Trap-Haul	0.7763	0.6697	0.7006	0.6052	0.6714
Ave. Lbs. / Trap	29.67	24.22	25.27	21.45	23.75
		Territorial			
Landings	9,859,453	7,175,335	8,189,365	6,884,885	7,100,620
Estimated Value	\$35,987,002	\$26,835,751	\$30,464,437	\$30,018,099	\$31,952,788
Trap Landings	9,837,213	7,163,730	8,159,401	6,831,179	7,016,460
Traps Fished	382,711	370,907	407,317	388,479	366,129
Non-Trap Landings	22,240	11,605	29,964	53,706	84,159
		Non-Territori	al		
Landings	5,172,085	5,061,787	5,586,653	4,544,494	4,683,490
Estimated Value	\$18,878,111	\$18,931,082	\$20,782,348	\$19,813,993	\$21,075,707
Trap Landings	4,468,805	4,293,430	4,675,725	3,473,630	3,641,366
Traps Fished	99,507	102,120	100,574	92,005	82,715
Non-Trap Landings	703,280	768,357	910,928	1,070,864	1,042,124

Figure 2. 2004 weighted ex-vessel price derived from audited lobstermen's records.

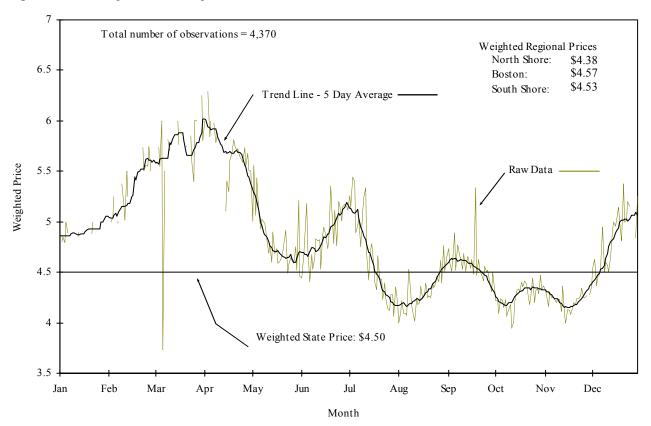
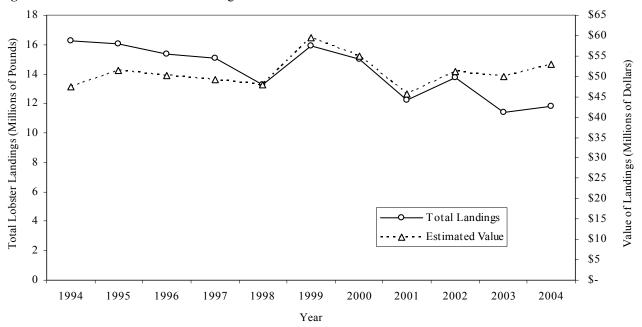


Figure 3. Total commercial lobster landings and estimated value for 1994—2004.



**Table 4.** Number of active commercial lobstermen and lobster landings by homeport for 2004 (does not include seasonal permits). Homeport data is taken from vessel information on the permit applications. In cases where no vessel or homeport was specified, the port of landing was used. Catch data encompasses all reported landings, regardless of gear type, while effort data represents only trap effort. Shaded areas denote towns which rank in the top 10 for either number of fishermen, total catch, or total effort. Some cities and towns are combined to protect the confidentiality of the data.

	Fisher	men	Catch (Pounds)		Effort *					
City / Town	Number		Territorial	Non-Territorial	Total	Percent	Rank	Traps	Percent	Rank
Amesbury-Newbury-Rowley	4	45	3,609	200	3,809	0.03%	48	450	0.10%	47
Barnstable-Yarmouth	7	35	35,794	231,343	267,137	2.30%	15		0.88%	28
Beverly	40	9	472,020	120,328	592,348	5.10%	7	20,558	4.62%	7
Boston	57	6	351,659	471,959	823,618	7.10%	2	21,161	4.76%	6
Bourne	3	48	3,433	0	3,433	0.03%	49	355	0.08%	49
Chatham	44	8	202,300	263,063	465,363	4.01%	10	10,595	2.38%	14
Chilmark	13	24	11,840	14,292	26,132	0.23%	39	2,948	0.66%	30
Cohasset	29	13	274,293	71,709	346,002	2.98%	12	13,405	3.01%	11
Danvers	8	34	45,933	0	45,933	0.40%	31	2,660	0.60%	33
Dartmouth	10	28	14,980	1,420	16,400	0.14%	43		0.40%	39
Dennis	14	23	63,323	0	63,323	0.55%	28	_	1.12%	24
Duxbury-Kingston	9	30	40,500	7	40,507	0.35%	34	-	0.63%	31
Edgartown-Oak Bluffs	3	48	1,363	0	1,363	0.01%	50	_	0.07%	50
Essex	5	41	15,365	0	15,365	0.13%	44		0.40%	40
Fairhaven	29	13	91,888	115,887	207,775	1.79%	18	11,590	2.61%	13
Falmouth	9	30	5,612	26,282	31,894	0.27%	35	-	0.14%	45
Gloucester	202	1	902,527	843,334	1,745,861	15.05%	1		13.77%	1
Gosnold	3	48	5,172	0	5,172	0.04%	46		0.09%	48
Harwich	7	35	4,350	24,250	28,600	0.25%	36		0.28%	43
Hingham	13	24	165,753	19,265	185,018	1.59%	21	6,381	1.43%	22
Hull	18	22	243,021	41,492	284,513	2.45%	14		2.14%	17
Ipswich	10	28	243,021	41,492	24,363	0.21%	40	-	0.53%	37
Lynn	4	45	24,363	5,475	26,902	0.21%	38		0.35%	41
Manchester	26	16	193,018	1,032	194,050	1.67%	20		2.15%	16
Marblehead	35	12	278,720	31,231	309,951	2.67%	13	_	3.61%	9
Marion	5	41	6,276	39,051	45,327	0.39%	32	_	0.58%	34
Marshfield	61	5	461,695	104,407	566,102	4.88%	8		6.44%	34
Mattapoisett	11	27	61,127	14,293	75,420	0.65%	26		1.13%	23
Nahant	20	20	254,169	6,736	260,905	2.25%	16		2.65%	12
Nantucket	6	38	12,214	34,349	46,563	0.40%	30		0.27%	44
New Bedford	117	2	49,070	418,531	467,600	4.03%	9		1.64%	21
Newburyport	20	20	53,516	21,296	74,812	0.64%	27	4,563	1.03%	26
Orleans	21	19	192,228	7,778	200,006	1.72%	19		1.66%	20
Plymouth	83	3	646,019	36,452	682,471	5.88%	5		8.47%	20
Provincetown	36	11	232,844	9,381	242,225	2.09%	17	8,811	1.98%	18
Quincy	5	41	22,990	0,581	22,990	0.20%	41	1,830	0.41%	38
Rockport	64	4	483,275	128,329	611,604	5.27%	6		5.01%	5
Salem	-	38		0	28,165	0.24%	37	-	0.54%	36
Salisbury	6	30	19,113	1,130	20,243	0.24%	42		0.55%	35
Sandwich	40	9	278,641	460,685	739,326	6.37%	42	23,187	5.21%	4
Saugus-Revere	22	17	157,758	1,248	159,006	1.37%	22	10,294	2.31%	15
Scituate Scituate	46	7	215,546	188,834	404,381	3.48%	11	19,480		8
	22	17			156,697				4.38%	19
Swampscott Tisbury	5	41	152,103 5,807	4,595 738		1.35% 0.06%	23 45	7,537	1.69% 0.28%	42
	9				6,545			-		
Truro Wareham	4	30 45	42,382 3,982	200 0	42,582 3,982	0.37% 0.03%	33 47	_	0.60% 0.11%	32 46
Wellfleet-Eastham	7	35		0		0.69%				29
Westport-Fall River	27	15	80,111 27,765	719,716	80,111 747,481	6.44%	25 3		0.78%	10
Weymouth		38			101,753	0.88%	24		3.44%	25
Winthrop	6 13	24	56,351 62,418	45,402 0	62,418	0.88%	29	4,815 4,077	1.08% 0.92%	25 27
		24			11,603,546	0.34/0	29		0.74/0	41
Statewide Total Out Of State	1,267 45		7,077,826	163,678	163,678			444,744 1,860		
Out Of State	43		U	103,078	103,078			1,000		

<sup>\*</sup> The number of "Traps" for each city/town represents the sum of each individual's maximum traps fished for the year.

Territorial landings by commercial lobstermen showed a distinct seasonal trend (Figure 4; Table 5). Landings increased steadily from a low of 40,019 pounds in February to a high of 1,223,601 pounds in October and then dropped off again to 270,864 pounds in December. Commercial landings from non-territorial waters showed a slightly different seasonal trend, with the low in May and the peak in November. These annual patterns in territorial and non-territorial landings are similar to previous years.

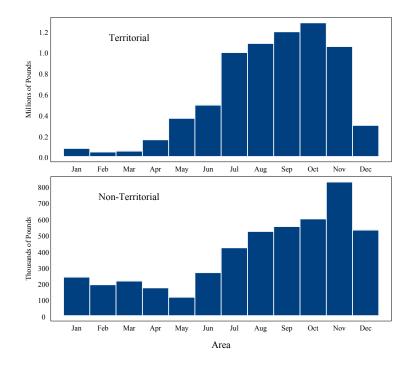
The greatest harvest of lobster from territorial waters came from the Cape Ann vicinity (Statistical Reporting Area 2), where approximately 22 percent of the state's territorial harvest was caught (Figure 4). Reporting Areas 4, 3 and 5 had the next highest territorial landings, respectively, with over 80 percent of the territorial harvest came from areas north of Cape Cod (Statistical Reporting Areas 1-7). In all, territorial landings were down 16.5 percent

from 2002.

Reporting area 19 saw the highest non-territorial landings, which were dominated by Coastal permit holders (Figures 5 and 6; Table 6). Offshore permit holders, which are not permitted to harvest lobsters from territorial waters, had their highest landings from Georges Bank (reporting areas 25, 22 and 23 in decreasing order).

Some misreporting has occurred in the past due to lobstermen reporting by Lobster Management Area (Figure 1B) as opposed to Statistical Reporting Area (Figure 1A), thereby artificially inflating landings in Reporting Areas 1, 2 and 3. However, we feel this problem has been minimized since 2002, due to a redesigned catch report form and visual screening of effort data prior to data entry.

**Figure 4.** 2004 commercial lobster landings by month for territorial and non-territorial areas



**Table 5.** 2004 commercial lobster landings by month for territorial and non-territorial areas

Month	Territorial	Non-Territorial
January	71,343	246,219
February	37,498	198,064
March	52,120	215,745
April	159,699	176,212
May	369,470	114,148
June	492,514	270,449
July	999,471	421,442
August	1,081,958	524,063
September	1,196,081	548,143
October	1,284,443	601,753
November	1,056,663	832,123
December	299,360	535,128
Total	7,100,620	4,683,490

**Figure 5**. 2004 total commercial lobster landings from all permit types by statistical reporting area (A - territorial areas; B- non-territorial areas).

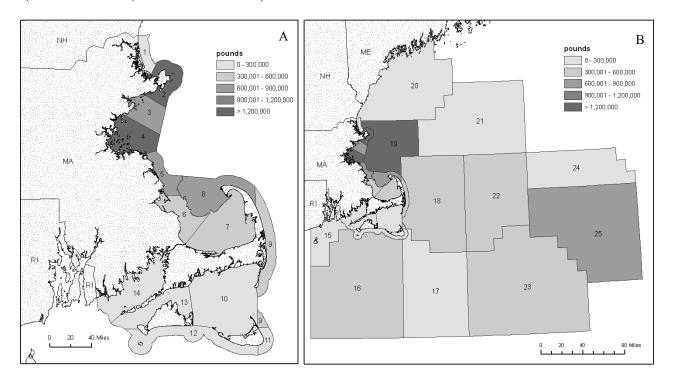
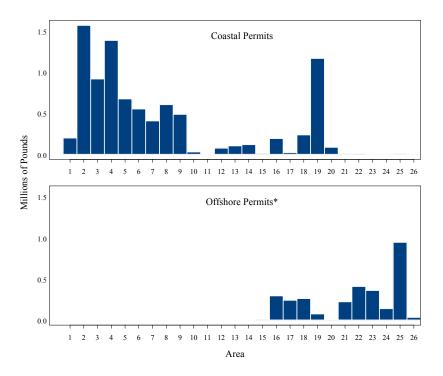


Figure 6. 2004 Commercial lobster landings by permit type and area



<sup>\*</sup> Offshore and Offshore Non-Trap landings combined

**Table 6**. 2004 Commercial lobster landings by permit and area.

	• J P • • • • • • • • • • • • • • • • •	
Area	Coastal	Offshore*
1	197,548	947
2	1,564,542	4,002
3	914,199	803
4	1,381,955	234
5	671,873	360
6	549,233	285
7	405,425	1,074
8	601,556	0
9	485,407	508
10	27,796	0
11	0	0
12	74,163	0
13	102,303	324
14	115,933	150
15	9,510	5,654
16	190,368	293,087
17	19,302	240,150
18	235,785	259,942
19	1,163,475	74,054
20	84,514	7,186
21	520	221,374
22	3,635	406,368
23	0	357,524
24	0	137,302
25	179	942,054
26†	0	31,508
Total	8,799,221	2,984,889

<sup>†</sup> Area 26 includes any landings from outside the MA Statistical Reporting Areas

Recreational Landings. Recreational lobstermen reported landing 197,136 lobsters in 2004, a 2.7 percent increase from 2003 (Table 7). This represents the first increase in recreational landings since 1999 (Figure 7). Although recreational landings are reported in numbers of lobsters harvested, a rough estimate of total pounds harvested can be made by multiplying by an average size of 1.27 pounds per lobster. Therefore, estimated recreational landings of 250,363 pounds represents approximately 2.1 percent of the total commercial landings.

The total number of recreational traps-fished decreased by 1.9 percent to 24,849 and the number

of hours diving decreased by 6.2 percent to 42,423 (Figure 8). The average number traps fished by potmen was 4.1 traps, while the average numbers of hours diving was 6.5 hours.

**Table 7.** Reported catch and effort information for 2004 Massachusetts recreational lobster fishery

	Diver	Diver/Pot	Potman	Total
Number of Lobsters	28,469	66,190	102,477	197,136
Pounds of Lobster *	36,156	84,061	130,146	250,363
Traps Fished		7,113	17,736	24,849
Hours Diving	20,456	21,967		42,423

<sup>\*</sup> Based on 1.27 Pounds per Lobster.

Figure 7. Reported recreational lobster landings for 1994-2004

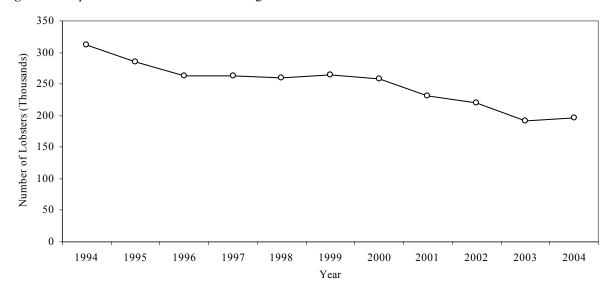
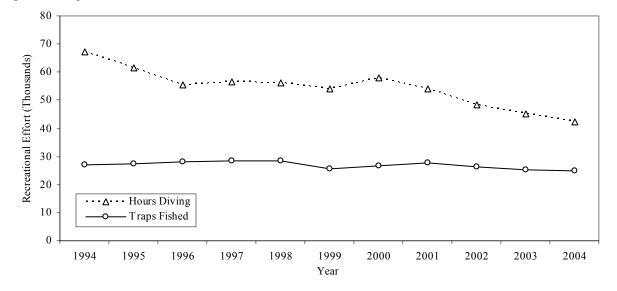


Figure 8. Reported recreational lobster effort for 1994-2004



<u>Catch rates</u>. The average catch per trap-haul for coastal lobstermen in 2004 was 0.662 pounds, a 2.2% increase from 2003. Catch rates gradually increased with respect to set-over-days, up to about 7 days (Figure 9). Beyond 7 days, catch rates became more variable. This relationship between catch rate and soak time is consistent with years past.

For offshore lobstermen, the average catch per trap-haul was 1.977 pounds, a 6.4% increase from 2003. Catch rates for offshore lobstermen were higher than those of their coastal counterparts, yet far more variable. In consequence, the relationship

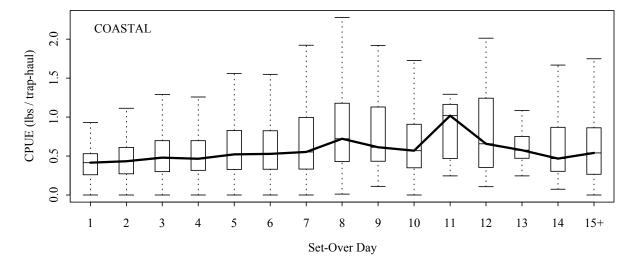
between catch rates and soak time is less well defined for offshore permit holders

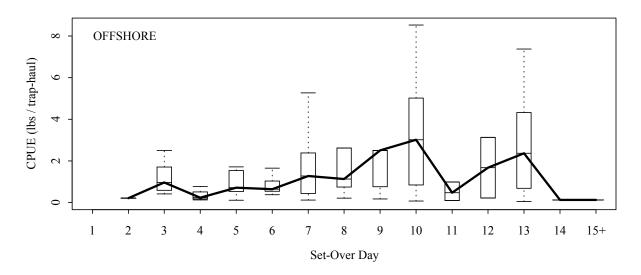
Figures 10 through 12 show the average catch rate with set-over-day factored into the effort (pounds per trap-haul\*set-over-day).

The average catch per trap-haul\*set-over-day for offshore lobstermen was 0.237 pounds, a 3.3% decrease from 2003 (Figure 10). Coastal lobstermen landed 0.162 pounds per trap-haul\*set-over-day, a 14% increase from 2003. This represents the highest catch rate for Coastal lobstermen since 2000.

Catch rates also followed a distinct annual trend

**Figure 9**. Catch per unit of effort (pounds per trap-haul) by set-over day for coastal and offshore potmen in 2004. The solid line represents the median values, the boxes represent 50% of the observations at each SOD, and the "whiskers" indicate the minimum and maximum values; outliers are not shown.





(Figure 11). Offshore lobstermen experienced their year, coastal permit holders were more productive in lowest catch rates in April and their highest in July. March and April. This general annual pattern is similar to previous years, but differs from 2003 in that the highest catch rates occurred in September in that year. Average catch rates for Coastal permit holders hit their low in February and high in November. Although offshore lobstermen had higher catch rates for most of the

The highest catch rates occurred in non-territorial waters in 2004 (Figures 12 and 13). However, catch rates in these areas were more variable than in territorial waters, as is indicated by the width of the box and whisker plots in Figure 12. Within territorial waters,

Figure 10. Average catch per unit of effort (pounds per trap-haul \* set-over-day) for coastal and offshore potmen for the last 10 years.

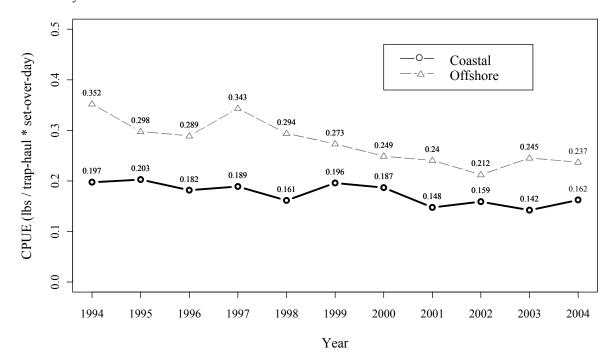
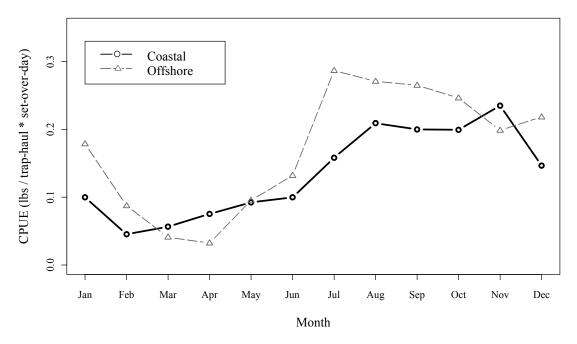


Figure 11. Average catch per unit of effort (pounds per trap-haul \* set-over-day) for coastal and offshore potmen by month in 2004



Cape Cod), 10 (Nantucket Sound) and 8 (Cape Cod coast of Rhode Island, had the lowest catch rates for Bay). The lowest catch rates for territorial waters non-territorial waters. No traps were fished in areas occurred in areas 14 (Buzzards Bay), 12 (South of 11 or 24 in 2004, therefore no catch rate information Martha's Vineyard and Nantucket) and 13 (Vineyard is available for these areas. Sound). In non-territorial waters, the highest catch rates occurred in the vicinity of Georges Bank (areas

the highest catch rates occurred in areas 9 (Outer 22 and 25) and area 21. Area 15, directly off the

Figure 12. 2004 catch per unit of effort (pounds per trap-haul \* set-over-day) for all license types by area fished. The center line of each box represents the median value for that area. The box represents 50% of the observed values, while the "whiskers" show the minimum and maximum values; outliers are not shown.

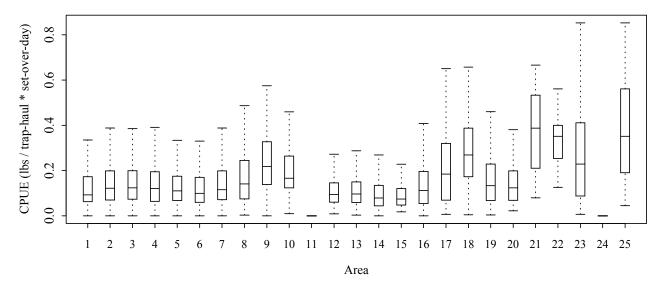
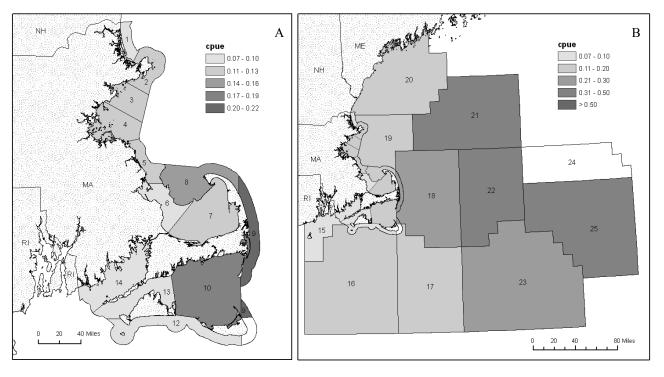


Figure 13. 2004 median catch per unit of effort (pounds per trap-haul \* set-over-day) for all license types by area fished (A - territorial areas; B- non-territorial areas).



Fishing gear and vessels. In the commercial fishery, traps were valued at \$31,742,670 (Table 8), diving gear at \$88,650 and power and non-power boats at \$66,910,710 (Table A3) yielding a total gear value of \$98,742,120, a 2.7% increase over last year. Combined with the ex-vessel value of lobster sold, \$53,028,494 (Table 4), this gives a total fishery value of \$151,770,614, a 4.1% increase over last year.

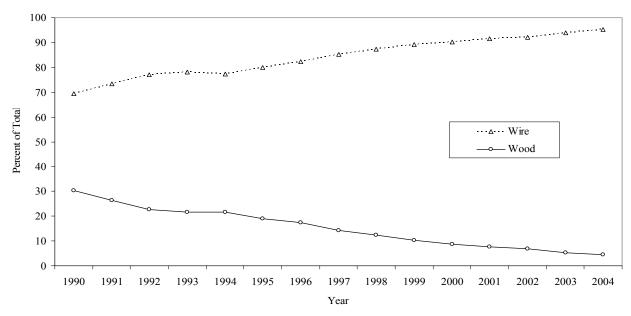
Overall, 95.25 percent of the traps fished in the commercial fishery were wire framed, with 4.43% percent being wooden framed and approximately 0.31 percent categorized as "other." This represents the 10th consecutive increase in the percentage of wire-framed traps (Figure 14). Average value (including warp and buoy) ranged from \$35.00 to \$175.00 with an overall average value of \$70.72. See Table 9.

Table 8. Types of lobster traps fished and value by permit type for 2004

				Total for	Percent
	Coastal	Offshore	Seasonal	Trap Type	of Total
Wooden Framed Traps	18,620	1,280	4	19,904	4.43%
Value	\$1,256,618	\$164,566	\$140	\$1,421,324	
Value/Trap	\$60.71	\$144.25	\$35.00	\$71.41	
Wire Framed Traps	390,958	35,546	1,036	427,540	95.25%
Value	\$25,975,435	\$4,122,764	\$54,929	\$30,153,128	
Value/Trap	\$62.84	\$99.91	\$53.27	\$70.53	
Other Trap Types	533	867	0	1,400	0.31%
Value	\$34,613	\$133,605	\$0	\$168,218	
Value/Trap	\$65.00	\$175.00	\$0.00	\$120.16	
Total for License Type	410,111	37,693	1,040	448,844	
Value	\$27,266,666	\$4,420,935	\$55,069	\$31,742,670	
Value/Trap	\$66.49	\$117.29	\$52.95	\$70.72	

Value of trap includes warp and buoy. These figures include out-of-state fishermen.

**Figure 14**. Percent of total traps fished by trap construction type; 1990 - 2004.



Validity of data. Each year 150 coastal license holders are selected for audit and asked to submit the records they used to complete the harvest portion of their catch report. The Division does this to help estimate the amount of error involved in the reporting process. Selection is done randomly except when fishermen fail an audit. In these cases, they are audited again the following year. Over the last five years the lobstermen selected for audit reported landing 5,862,255 pounds. The audit of their records revealed a harvest of 5,768,534 pounds or a difference of 1.60 percent.

Last year the fishermen selected for audit reported harvesting 770,567 pounds of lobster on their 2004 catch reports. The audit of actual records showed total landings of 736,224 pounds, a difference of 34,343 pounds or 4.46 percent. Six of the randomly selected fishermen have yet to respond to the audit request. Figure 15 shows the distribution of the percent difference between the selected fishermen's reported catch and their audited records. In general, reported landings are very well documented by dealer receipts and/or personal records, especially by the so-called "high-liners" in the fishery. Most of the lobstermen have had licenses for several years and know what is required in terms of report-

ing their fishing activities and have been informed of the value of accurate reporting in the development of management plans. They also know that their reported information is kept strictly confidential and published only in aggregate form. These factors all contribute to a conscientious and responsible reporting constituency.

#### Acknowledgements

This report has been prepared by personnel of the Division of Marine Fisheries MIS and Fisheries Statistics Project, funded jointly by the Commonwealth and the National Marine Fisheries Service under the Interjurisdictional Fisheries Act (Public Law 11-407; Project IJ-NA05NMF4071027). The preparation of this report would not have been possible without the cooperation of licensed lobstermen who provided the information on their annual reports. The authors also wish to acknowledge the efforts of Maryann Fletcher, who helped interpret and keypunch the catch reports, as well as the assistance of Kerry Allard and Cecil French from our permitting office.

**Figure 15**. Frequency distribution of the percent difference between fishermen's reported catch and their audited records for 2004 commercial lobster fishery.

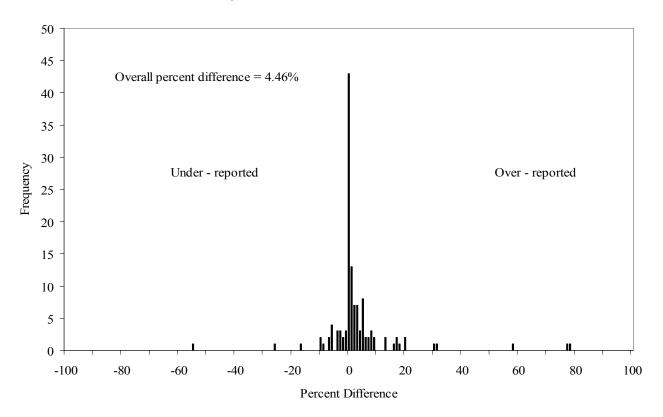
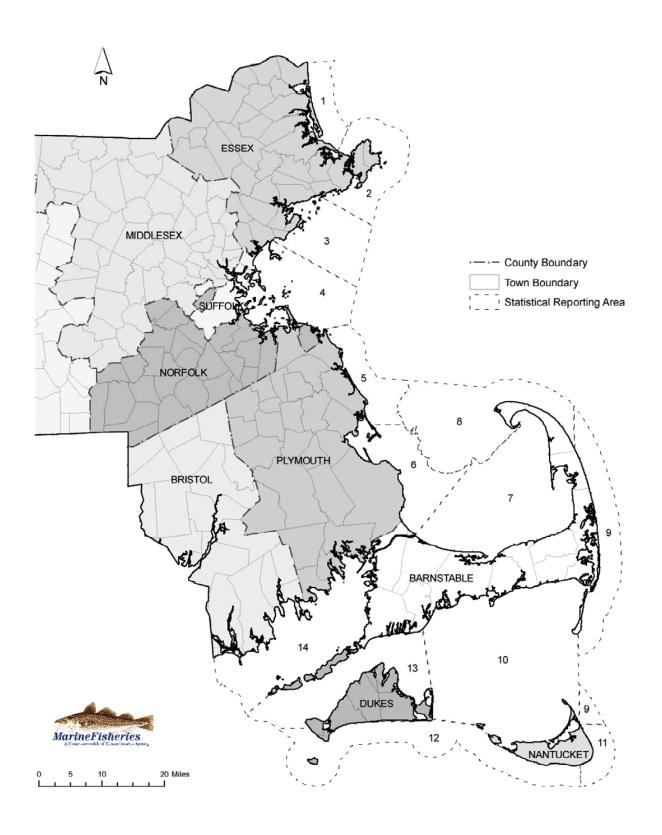


Figure 16. Map of coastal Massachusetts showing county boundaries and statistical reporting areas.



### APPENDIX A - SUPPLEMENTARY TABLES

Table A1. Number of fishermen, landings (pounds) and value for 2004 Massachusetts commercial lobster fishery.

		GRAND	204 2,165,591 9,745,159	186 1,442,649 6,491,919	39,526 177,867	525 4,275,655 19,240,448	7 57,484 258,678	39 470,744 2,118,350	250 2,288,474 10,298,134	71 886,273 3,988,226	1,309 11,626,396 52,318,781	45 157,714 709,713
		TOTAL OFFSHORE	56 1,043,596 4,696,182	132 + 1,236,257 5,563,154	6 + 15,441 69,485	114 1,172,614 5,276,763	2 + 40,312 181,404	2 + 78,209 351,941	30 + 369,733 1,663,796	24 + 449,191 2,021,360	366 4,405,352 19,824,085	45+ 157,714 709,713
	SEASONAL	Pots									1 + 57 257	
	S	Combined*	3 1,768 7,956			3 9,002 40,509					7 + 16,243 73,094	
OFFSHORE (Areas 15 - 25)	OFFSHORE		36 597 687	108 462,034 2,079,153		72 127,684 574,578			9 7,365 33,143	22 161,435 726,458	249 + 846,145 3,807,653	42 136,917 616,127
	O	Pots	9 724,404 3,259,818	11 634,202 2,853,909		4 234,134 1,053,601			5 58,912 265,104		32 + 1,956,491 8,804,208	
	-	Combined*				4 97,989 440,949					6 + 112,792 507,563	
	COASTAL					7 7,455 33,548					10 + 26,141 117,635	
	ν	Pots	8 ),827 3,722	12 139,964 629,836	3 10,169 45,761	24 696,351 3,133,579			11 264,673 1,191,026		61 + 1,447,484 6,513,677	
		TOTAL INSHORE	148 + 1,121,995 5,048,977	54 + 206,392 928,764	21 24,085 108,382	411 3,103,041 13,963,685	5 17,172 77,274	37 392,535 1,766,409	220 + 1,918,742 8,634,338	47 + 437,082 1,966,867	943 7,221,044 32,494,696	0 0 0
	SEASONAL	Pots	8 1,592 7,162		3 314 1,413	31 5,780 26,010			3 753 3,390		48 + 8,686 39,088	
reas 1 - 14)	S	Combined*				7 62,144 279,648			5 19,848 89,316		13 + 97,061 436,775	
INSHORE (Areas 1 - 14)		wl/ net				5 24,659 110,966					7 + 52,690 237,105	
	COASTAL	Pots	135 1,085,244 4,883,599	53 206,242 928,089	18 23,771 106,968	368 3,010,458 13,547,061	5 17,172 77,274	37 392,535 1,766,409	209 1,869,711 8,413,701	45 436,985 1,966,430	870 7,042,118 31,689,533	
		Dive	4 20,090 90,405								5 + 20,488 92,196	
AREA:	LICENSE TYPE:	GEAR TYPE:	COUNTY BARNSTABLE Fishermen Pounds Value (\$)	BRISTOL Fishermen Pounds Value (\$)	DUKES Fishermen Pounds Value (\$)	ESSEX Fishermen Pounds Value (\$)	NANTUCKET Fishermen Pounds Value (\$)	NORFOLK Fishermen Pounds Value (\$)	PLYMOUTH Fishermen Pounds Value (\$)	SUFFOLK Fishermen Pounds Value (\$)	STATE TOTAL Fishermen Pounds Value (\$)	OUT OF STATE Fishermen Pounds Value (\$)

\* Combined gear type means the use of more than one gear type in a year (i.e. pots & dive) + Row and column totals may not equal the sum of the rows or columns due to masking of the data.

Value is based on an ex-vessel price of \$4.50, per pound see Figure 2.

Table A2. Number of fishing vessels and pots fished for 2004 Massachusetts commercial lobster fishery

		GRAND	532 67,401 54 219 8	930 36,708 125 183 0		1,475 4,968 6 28 0 1	1					4
		TOTAL	0 17,832 0 54 0 8	20 18,930 1 125 0 0	0 0		2	7	7	2 1	2 1	8 8
	SEASONAL	* Pots	0 3 3	000	000	>	0 60	0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
5 - 25)	Æ	Combined*	0 32 3	0 0 0	0 - 0		0 0 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	02- 0-0 000			
OFFSHORE (Areas 15 - 25)	OFFSHORE-	Trawl/ s Gillnet	13,072 11 0	11,753 11 0	400 0 1 0		2,934 4 0	2,934 4 4 0 0 0 0	2,934 4 4 4 4 0 0 0 0 0 1,715	2,934 4 4 4 4 4 4 0 0 0 0 0 0 1,715 0 0 1,609	2,934 4 4 4 4 4 4 0 0 0 0 0 0 0 0 0 0 1,715 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
OFF		Combined* Pots	0 0 0	000	0 0 0	_	3,200					
	COASTAL	Trawl/ Gillnet Com	0 0 0	000	0 - 0		0 7 0	0 0 0 0 0	000 000 070	070 000 070	000 000 000 070	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	Ω	Pots	4,760 8 5	7,157 13 0	1,075 3 0		17,410 25 4	17,410 25 4 4 800 2 0	17,410 25 4 4 800 2 2 0 0 800 1 1	17,410 25 4 4 800 800 800 8,000 18 18	17,410 25 4 4 800 800 8,000 1,800 1,800	17,410 25 4 4 800 800 8,000 1,800 1,800 1,800 1,900 1,
		TOTAL INSHORE	49,569	17,778 58 1	3,493 22 1		154,609 440 109	154,609 440 109 881 7	154,609 440 109 881 7 7 17,535	154,609 440 109 881 7 7 17,535 17,535 100,338 266 51	154,609 440 109 881 7 7 11,535 16 100,338 266 51 51	154,609 140 109 881 7 7 17,535 17,535 100,338 266 51 51 9 9 1,051 1,051 1,051
	SEASONAL	Pots	178 8 1	25	3 3		661	33.1.0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	00 0 0 57 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1,020 1,020 1,020 1,020 1,020
(Areas 1 - 14)		Combined*	50 1 0	0 0 0	000	_	2,911	2,911	2, 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2,911 8 2 2 2 0 0 0 0 1,765	2,911 8 2 0 0 0 0 0 0 1,765 0 0	2,911 8 2 8 2 0 0 0 0 1,765 4,726 4,726 13
INSHORE(Areas 1	TAL	Trawl/ Gillnet	0	0 0 0	0 0 0		0 0	0 % 0 0 0 0	0 % 0 0 0 0 0 0	000 000 000		
		Pots	49,341 151 39	17,753 57 1	3,434 19 0		151,037 396 105	151,	151	151.	151.	
	ļ	Dive	0 5	0 0 0	0 0 0		0 0 0	000 000	000 000 000	000 000 000 0-0	000 000 000 0-0 000	000 000 000 0-0 000 <b>e 6 -</b>
AREA:	LICENSE TYPE:	GEAR TYPE:	COUNTY BARNSTABLE Pots Fished Power Boat Non Power Boat	BRISTOL Pots Fished Power Boat Non Power Boat	DUKES Pots Fished Power Boat Non Power Boat		ESSEX Pots Fished Power Boat Non Power Boat	ESSEX Pots Fished Power Boat Non Power Boat NANTUCKET Pots Fished Power Boat Non Power Boat	ESSEX Pots Fished Power Boat Non Power Boat NANTUCKET Pots Fished Power Boat Non Power Boat NORFOLK Pots Fished Power Boat NORFOLK Pots Fished Power Boat NORFOLK Pots Fished Power Boat Non Power Boat	ESSEX Pots Fished Power Boat Non Power Boat NANTUCKET Pots Fished Power Boat Non Power Boat NORFOLK Pots Fished Power Boat Non Power Boat PLYMOUTH Pots Fished PLYMOUTH Pots Fished POWER Boat Non Power Boat Non Power Boat	ESSEX Pots Fished Power Boat Non Power Boat NANTUCKET Pots Fished Power Boat Non Power Boat NORFOLK Pots Fished Power Boat Non Power Boat PLYMOUTH Pots Fished Power Boat Non Power Boat	ESSEX Pots Fished Power Boat Non Power Boat NANTUCKET Pots Fished Power Boat Non Power Boat Non Power Boat Non Power Boat Non Power Boat PLYMOUTH Pots Fished Power Boat Non Power Boat Non Power Boat Non Power Boat Non Power Boat SUJFFOLK Pots Fished Power Boat Non Power Boat SUFFOLK Pots Fished Power Boat Non Power Boat

\* Combined gear type means the use of nore than one gear type in a year (i.e. pots & dive)

Table A3. Value of fishing vessels and diving gear for 2004 Massachusetts commercial lobster fishery.

		GRAND		38,300 12,078,455 20,176	0 11,563,605 100	0 886,150 100	27,500 20,408,107 50,972	6,500 372,350 600	3,000 2,215,450 7,950	13,350 12,777,805 40,535	0 5,677,405 7,600	88,650 65,979,327 128,033	0 3 3 5 0
		TOTAL OFFS HORE		2,500 6,366,400 1,228	0 9,061,610 0	0 245,750 0	1,000 4,790,575 1,350	0 171,600	0 502,000 0	600 2,572,300 2,560	0 3,529,000	4,100 27,239,235 5,138	0
	SEASONAL	Pots		000	20,000	000	000	000	000	000	000	0 20,000 0	0 0
		Combined*		207,000	000	000	0 10,000	0 0 0	0 0 0	000,000	0 0 0	0 277,000 0	0 878 350
OFFSHORE (Areas 15 - 25)	OFFSHORE	Trawl/ Gillnet		0 1,581,900 0	0 3,890,260 0	0 2,000 0	0 564,975 0	0 50,000 0	0 0 0	0 141,900 0	0 2,479,000 0	0 8,710,035 0	0 225 000
OFFSHORE (		Pots		3,705,000 0	0 4,028,500 0	0 23,750 0	0 708,000 0	0 0 0	000,000	0 682,500 2,560	000,008	0 10,447,750 2,560	0 0
		Combined*		000	000	000	0 487,500 0	0 0 0	000	000,59	0 0 0	0 552,500 0	0 0
	COASTAL	Trawl/ Gilhet		000	0 0 0	0 10,000	0 93,000 500	0 0 0	0 0 0	0 112,500 0	0 0 0	0 215,500 500	0
		Pots		2,500 872,500 1,228	0 1,122,850 0	0 210,000 0	1,000 2,927,100 850	0 121,600 0	0 2,000 0	600 1,510,400 0	250,000	4,100 7,016,450 2,078	0 0
		TOTAL		35,800 5,712,055 18,949	$0 \\ 2,501,995 \\ 100$	0 640,400 100	26,500 15,617,532 49,622	6,500 200,750 600	3,000 1,713,450 7,950	12,750 10,205,505 37,975	0 2,148,405 7,600	84,550 38,740,092 122,896	•
0	SEA SONA!	Pots		0 248,000 4,000	0 12,500 0	0 60,200 100	0 127,275 150	0 0 0	0 0 0	0 17,900	5,250	0 471,125 4,250	0 0
INSHORE (Areas 1 - 14)		Combined*		5,000	000	0 0 0	2,000 1,007,480 1,100	0 0 0	000	4,000 123,750 500	0 0 0	11,000 1,171,230 1,600	0
INSHORE (	A I	wl/		000	0 0 0	0 0 0	0 45,000 0	0 0 0	0 0 0	0 130,000 0	0 0 0	0 175,000 0	0 0
- 1	COASTAL	Pots		17,900 5,400,915 14,774	0 2,489,495 100	0 580,200 0	24,500 14,437,777 48,372	6,500 200,750 600	3,000 1,713,450 7,950	5,750 9,917,855 37,475	0 2,143,155 7,600	57,650 36,883,597 116,871	0 0
		Dive		12,900 23,140 175	000	000	000	0 0 0	0 0 0	3,000 16,000 0	0 0 0	15,900 39,140 175	0 (
AREA:	I ICENSE TYPE:	GEAR TYPE	COUNTY BARNSTABLE	Diving Gear Power Boat Non Power Boat	BRISTOL Diving Cear Power Boat Non Power Boat	DUKES Diving Gear Power Boat Non Power Boat	ESSEX Diving Cear Power Boat Non Power Boat	NANTUCKET Diving Cear Power Boat Non Power Boat	NORFOLK Diving Gear Power Boat Non Power Boat	PLYMOUTH Diving Cear Power Boat Non Power Boat	SUFFOLK Diving Cear Power Boat Non Power Boat	STATE TOTAL Diving Gear Power Boat Non Power Boat	OUT OF STATE Diving Gear

\* Combined gear type means the use of more than one gear type in a year (i.e. pots & dive)

### APPENDIX B - COMMERCIAL CATCH REPORTS

## 2004 COASTAL LOBSTER CATCH REPORT

COMMONWEALTH OF MASSACHUSETTS
DIVISION OF MARINE FISHERIES
251 CAUSEWAY STREET, SUITE 101, BOSTON, MA 02114-2153

# CATCH REPORT DUE DATE: JANUARY 31, 2005 PRINT IN INK ONLY PLEASE REFER TO INSTRUCTIONS ON BACK PAGE WHILE COMPLETING THIS LOBSTER CATCH REPORT

\*\*IMPORTANT\*\* THIS REPORT IS SUBJECT TO A RANDOM STATISTICAL AUDIT BY THE DIVISION, YOU SHOULD MAINTAIN ALL RECEIPTS, DEALER SLIPS, PERSONAL RECORDS, ETC. USED TO COMPLETE THIS REPORT FOR AT LEAST ONE YEAR FOLLOWING THE DATE OF SUBMISSION IN CASE YOU ARE CHOSEN.

#### PLEASE PRINT IN INK ONLY

IDENTIFICATION:	DMF ID No:		P	Permit No:	
Name as it appears					
Name as it appears on permit application: _	(Last)	(First)		(MI)	
Address:(No.)	(Street)		(City/Town)	(Zip Code)	
	(		,	(	
. –					
CATCH STATUS & PART	NERSHIP INFORMATION:				
A. If you <b>DID NOT CAT</b> AND <u>sign your name</u>	CH any lobster during 2004 and date the report at botto	, check the box om of this page and return it	to the Division.	<b>→</b> □	
				accurately as possible. All lobster tak another report via a partnership.	<u>en</u>
C. Did you fish in a Par	tnership during 2004?	→ YES (If yes	, complete D & E)	NO (If no, go to GEAR section	on)
D. Check the box which	matches how you and your	partner are reporting (check	c one box only):		
I am reporting fo	r both me and my partner: —			-▶ □	
<ol><li>My partner is rep</li></ol>	orting for both of us:			-▶ □	
3. My partner and I	are reporting separate catch	nes even though we fished t	ogether: ———	-▶ □	
E. PARTNERS NAME:		DMF I.D	. No:	PERMIT No:	
GEAR:					
A) Circle one or more of	the following gear types use	ed to catch lobster: TRA	PS/POTS DIVIN	IG GEAR TRAWL/DREDGES G	SILLNET
B) If you fished traps in	2004, estimate the average	value of one trap including v	varp and buoy: \$  _		
C) Indicate the type of to	raps by completing the perce	ent of total that were fished i	n 2004:		
1. Wood Framed	% 2. Wire Framed  _	% 3. Other		%	
D) If you dove for lobste	er in 2004, estimate the value	e of your diving gear and the	percent used for ca	atching lobsters:	
Estimated Value of D	iving Gear: \$	Percent Used for Catching	Lobsters:	%	
PORT(S) OF LANDING:					
PLEASE FILL OUT THIS	SECTION WHETHER OR N	OT YOU USED A BOAT TO	LAND YOUR LOB	STER.	
Indicate the port(s) w you landed your catch landed your catch in than one port, estima percent of lobster lan each port listed.	here  n. If you  1.    more  te the  2.	T NAME PERCENT			
SIGNATURE:			Date:		

Knowingly falsifying any information contained within this report constitutes the act of perjury and may result in a fine, imprisonment or loss of license (MGL, Chapter 130, Sections 2, 21, 33).

# 2004 COASTAL LOBSTER CATCH REPORT

#### **VESSELS**:

THIS SECTION SHOULD BE COMPLETED BY VESSEL	OWNED OF PRINCIPAL LISER ONLY	BE SLIDE TO INCLUDE TENDEDS LISED

<u>Power Boat(s) Used For Lobstering</u> - (Any vessel with inboard or outboard engine)	
1) Boat Name: Length (ft):    Home Port:	_
Estimated Dollar Value of Vessel: \$    Percent Used for Lobstering:	
2) Boat Name: Length (ft):    Home Port:	_
Estimated Dollar Value of Vessel: \$     Percent Used for Lobstering:	
Non-Power Boat(s) Used For Lobstering - (Any vessel without engine, including tenders/dinghies)	
1) Length (ft):     Home Port:	
Estimated Dollar Value of Vessel: \$    Percent Used for Lobstering:	
2) Length (ft):     Home Port:	
Estimated Dollar Value of Vessel: \$    Percent Used for Lobstering:	
EL:	
Total gallons of fuel used for the year to catch lobster: Gasoline:	
Diesel:	
TAL EMPLOYMENT:	
Counting yourself, what was the maximum number of people fishing for lobster on your vessel at any one time in 2004?	l
* For example, if you employed one sternman, you would answer two (2).	

#### HARVEST TABLE:

### \*\*\*\*\* IMPORTANT \*\*\*\*\*

# REFER TO MAP OF STATISTICAL REPORTING AREAS ON NEXT PAGE TO COMPLETE THE AREA(S) FISHED PORTION OF HARVEST TABLE

DO NOT INDICATE LMA'S (Lobster Management Areas) IN AREA(S) FISHED IN TABLE BELOW

	FILL IN SHADED AREA ONLY IF YOU USED TRAPS AS YOUR GEAR							REFER TO MAP OF STASTICAL REPORTING AREAS ON NEXT PAGE $\rightarrow \rightarrow \rightarrow \rightarrow \rightarrow \rightarrow \rightarrow \rightarrow$					
	GEAR USED TO HARVEST LOBSTER	MAX TRAPS FISHING	SET OVER DAYS	AVERAGE TRAPS HAULED PER TRIP WHEN FISHING	TOTAL TRIPS WHEN TRAPS HAULED	POU HARVI LOBSTER	ESTED	FIRST AREA FISHED	% OF CATCH	SECOND AREA FISHED	% OF CATCH	THIRD AREA FISHED	% OF CATCH
EX.	TRAPS	400	2	200	28	2240	0	5	75	7	25		
JAN													
FEB													
MAR													
APR													
MAY													
JUN													
JUL													
AUG													
SEP													
OCT													
NOV													
DEC													
	ı			TOTAL ·									

## 2004 OFFSHORE LOBSTER CATCH REPORT

COMMONWEALTH OF MASSACHUSETTS
DIVISION OF MARINE FISHERIES
251 CAUSEWAY STREET, SUITE 101, BOSTON, MA 02114-2153

# CATCH REPORT DUE DATE: JANUARY 31, 2005 PRINT IN INK ONLY PLEASE REFER TO INSTRUCTIONS ON BACK PAGE WHILE COMPLETING THIS LOBSTER CATCH REPORT

IDENTIFICATION:	DMF ID:		Permit No:
Name as it appears on license application: (Last)			
	(Fi	rst)	(MI)
Address:(No.) (Stree	et)	(City/Town)	(Zip Code)
Telephone Number:	,		(=:p =====)
Tolophone Hambol.			<del></del>
CATCH STATUS & PARTNERSHIP	INFORMATION:		
A. If you <b>DID NOT CATCH</b> any lo AND <u>sign your name and date</u>	obster during 2004, check the better the post at bottom of this page	oxge and return it to the Division.	<b></b> ▶ □
•	• .	ES of this report as completely and en incidentally, unless reported on	d accurately as possible. <u>All lobster taken</u> another report via a partnership.
C. Did you fish in a Partnership d	luring 2004? —	YES (If yes, complete D & E)	NO (If no, go to GEAR section)
D. Check the box which matches	how you and your partner are	reporting (check one box only):	
2. My partner is reporting for	both of us:		<b>-▶</b> □
3. My partner and I are repor	ting separate catches even tho	ugh we fished together:	<b>-▶</b> □
E. PARTNERS NAME:		DMF I.D. No:	PERMIT No:
			<del></del>
GEAR:		haten TDADC/DOTC DIVI	NO OFAR TRANSFORMS OF A SILVET
A) Circle one or more of the follow  B) If you fished traps in 2004, ast		bster: <u>TRAPS/POTS</u> <u>DIVI</u> trap including warp and buoy: \$	NG GEAR TRAWL/DREDGES GILLNET
C) Indicate the type of traps by co	· ·		<u> </u>
		3. Other	1 10/
	-	ng gear and the percent used for c	
Estimated Value of Diving Gea	r: \$    Percent Use	ed for Catching Lobsters:	%
PORT(S) OF LANDING:			
PLEASE FILL OUT THIS SECTION	WHETHER OR NOT YOU US		BSTER.
Indicate the port(s) where	PORT NAME	PERCENT	
you landed your catch. If you landed your catch in more	1.	_	
than one port, estimate the percent of lobster landed at	2.	_    _    %	
each port listed.	3.	_     %	
OLOMATURE			
SIGNATURE:		Date	:

Knowingly falsifying any information contained within this report constitutes the act of perjury and may result in a fine, imprisonment or loss of license (MGL, Chapter 130, Sections 2, 21, 33).

# 2004 OFFSHORE LOBSTER CATCH REPORT

#### **VESSELS:**

THIS SECTION SHOULD BE COMPLETED BY VESSEL OWNER OR PRINCIPAL USER ONLY. BE SURE TO INC	CLUDE TENDERS LISED

Power Boat(s) Used For Lob	ostering - (Any vessel with inboard or outboard engine)
1) Boat Name:	Length (ft):     Home Port:
Estimated Dollar Value	of Vessel: \$    Percent Used for Lobstering:
2) Boat Name:	Length (ft):     Home Port:
Estimated Dollar Value	of Vessel: \$    Percent Used for Lobstering:
Non-Power Boat(s) Used Fo	<u>r Lobstering</u> - (Any vessel without engine, including tenders/dinghies)
1) Length (ft):    Home	Port:
Estimated Dollar Value	of Vessel: \$    Percent Used for Lobstering:
2) Length (ft):    Home	Port:
Estimated Dollar Value	of Vessel: \$    Percent Used for Lobstering:
EL:	
Total gallons of fuel used f	or the year to catch lobster: Gasoline:
	Diesel:
TAL EMPLOYMENT:	
Counting yourself, what wa	s the <b>maximum</b> number of people fishing for lobster on your vessel at any one time in 2004?>
* For exa	mple, if you employed one sternman, you would answer two (2).
RVEST TABLE:	

#### \*\*\*\*\* IMPORTANT \*\*\*\*\*

# REFER TO MAP OF STATISTICAL REPORTING AREAS ON NEXT PAGE TO COMPLETE THE AREA(S) FISHED PORTION OF HARVEST TABLE

DO NOT INDICATE LMA'S (Lobster Management Areas) IN AREA(S) FISHED IN TABLE BELOW

		FILL IN SHADED AREA ONLY IF YOU USED TRAPS AS YOUR GEAR						REFER TO MAP OF STASTICAL REPORTING AREAS ON NEXT PAGE $\rightarrow \rightarrow \rightarrow \rightarrow \rightarrow \rightarrow \rightarrow$					i
	GEAR USED TO HARVEST LOBSTER	MAX TRAPS FISHING	SET OVER DAYS	AVERAGE TRAPS HAULED PER TRIP WHEN FISHING	TOTAL TRIPS WHEN TRAPS HAULED	POU HARVI LOBSTER	ESTED	FIRST AREA FISHED	% OF CATCH	SECOND AREA FISHED	% OF CATCH	THIRD AREA FISHED	% OF CATCH
EX.	TRAPS	400	2	200	28	2240	1200	19	75	18	25		
JAN													
FEB													
MAR													
APR													
MAY													
JUN													
JUL													
AUG													
SEP													
OCT													
NOV													
DEC													
				TOTAL:									

## 2004 SEASONAL LOBSTER CATCH REPORT

COMMONWEALTH OF MASSACHUSETTS
DIVISION OF MARINE FISHERIES
251 CAUSEWAY STREET, SUITE 101, BOSTON, MA 02114-2153

# CATCH REPORT DUE DATE: JANUARY 31, 2005 PRINT IN INK ONLY PLEASE REFER TO INSTRUCTIONS ON BACK PAGE WHILE COMPLETING THIS LOBSTER CATCH REPORT

IDENTIFICATION:	DMF ID:		Permit No:	
Name as it appears on license application: _				
	(Last)	(First)		(MI)
Address: (No.)	(Street)	(City/T	(own)	(Zip Code)
	(Guost)	` ,	•	(2.0 0000)
relephone Number.				
CATCH STATUS & PARTN	IERSHIP INFORMATION:			
A. If you <b>DID NOT CATO</b> AND <u>sign your name</u>	CH any lobster during 2004 and date the report at botto	, check the box m of this page and return it to the	Division.	<b></b> ▶ □
•	• .	BOTH SIDES of this report as co t, even if taken incidentally, unless	. ,	•
C. Did you fish in a Parti	nership during 2004?	—► YES (If yes, comp	olete D & E)	NO (If no, go to GEAR section)
	, ,	partner are reporting (check one b	box only):	
	both me and my partner: -		<b></b> ▶ □	
<ol><li>My partner is report</li></ol>	orting for both of us:		<b></b> ▶ □	
3. My partner and I	are reporting separate catch	nes even though we fished togethe	er:	
E. PARTNERS NAME:		DMF I.D. No:		PERMIT No:
GEAR:				
A) Circle one or more of	the following gear types use	ed to catch lobster: TRAPS/PO	OTS DIVING GEAR	TRAWL/DREDGES GILLNET
B) If you fished traps in 2	2004, estimate the average	value of one trap including warp a	and buoy: \$	
C) Indicate the type of tra	aps by completing the perce	ent of total that were fished in 2004	4:	
		% 3. Other		%
		e of your diving gear and the perce		
		Percent Used for Catching Lobsto	_	
PORT(S) OF LANDING:				
PLEASE FILL OUT THIS S	ECTION WHETHER OR N	OT YOU USED A BOAT TO LAND	D YOUR LOBSTER.	
		T NAME PERCENT		
Indicate the port(s) wh you landed your catch	. If you 1.	%		
landed your catch in methan one port, estimate	nore e the 2.	%		
percent of lobster land each port listed.	led at			
odon port notod.		I   / V		
SICNATUDE:			Date	
SIGNATURE:		·	Date:	

Knowingly falsifying any information contained within this report constitutes the act of perjury and may result in a fine, imprisonment or loss of license (MGL, Chapter 130, Sections 2, 21, 33).

# 2004 SEASONAL LOBSTER CATCH REPORT

#### **VESSELS**:

THIS SECTION	SHOULD BE COMPLETE	D RY VESSEL OWNER	OR PRINCIPAL LISER	ONLY BESURETO	INCLUDE TENDERS USED

Power Boat(s) Used For Lobstering - (Any ves	sel with inboard or outboard engine)
1) Boat Name:	_ Length (ft):     Home Port:
Estimated Dollar Value of Vessel: \$	Percent Used for Lobstering:
2) Boat Name:	_ Length (ft):     Home Port:
Estimated Dollar Value of Vessel: \$	Percent Used for Lobstering:
Non-Power Boat(s) Used For Lobstering - (An	y vessel without engine, including tenders/dinghies)
1) Length (ft):     Home Port:	<del></del>
Estimated Dollar Value of Vessel: \$	Percent Used for Lobstering:
2) Length (ft):     Home Port:	<del></del>
Estimated Dollar Value of Vessel: \$	Percent Used for Lobstering:
EL:	
Total gallons of fuel used for the year to cate	ch lobster: Gasoline:
	Diesel:
TAL EMPLOYMENT:	
Counting yourself, what was the maximum nu	umber of people fishing for lobster on your vessel at any one time in 2004?>
* For example, if you employ	yed one sternman, you would answer two (2).
RVEST TABLE:	

#### \*\*\*\*\* IMPORTANT \*\*\*\*\*

# REFER TO MAP OF STATISTICAL REPORTING AREAS ON NEXT PAGE TO COMPLETE THE AREA(S) FISHED PORTION OF HARVEST TABLE

DO NOT INDICATE LMA'S (Lobster Management Areas) IN AREA(S) FISHED IN TABLE BELOW

		FILL IN SHADED AREA ONLY IF YOU USED TRAPS AS YOUR GEAR						REFER TO MAP OF STASTICAL REPORTING AREAS ON NEXT PAGE >>>>>>					<b>3</b>
	GEAR USED TO HARVEST LOBSTER	MAX TRAPS FISHING	SET OVER DAYS	AVERAGE TRAPS HAULED PER TRIP WHEN FISHING	TOTAL TRIPS WHEN TRAPS HAULED	POU HARVE LOBSTER	ESTED	FIRST AREA FISHED	% OF CATCH	SECOND AREA FISHED	% OF CATCH	THIRD AREA FISHED	% OF CATCH
EX.	TRAPS	25	2	12	30	95	10	5	75	6	25		
JUN													
JUL													
AUG													
SEP													
				TOTAL ·									