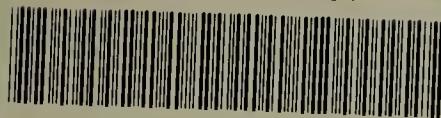


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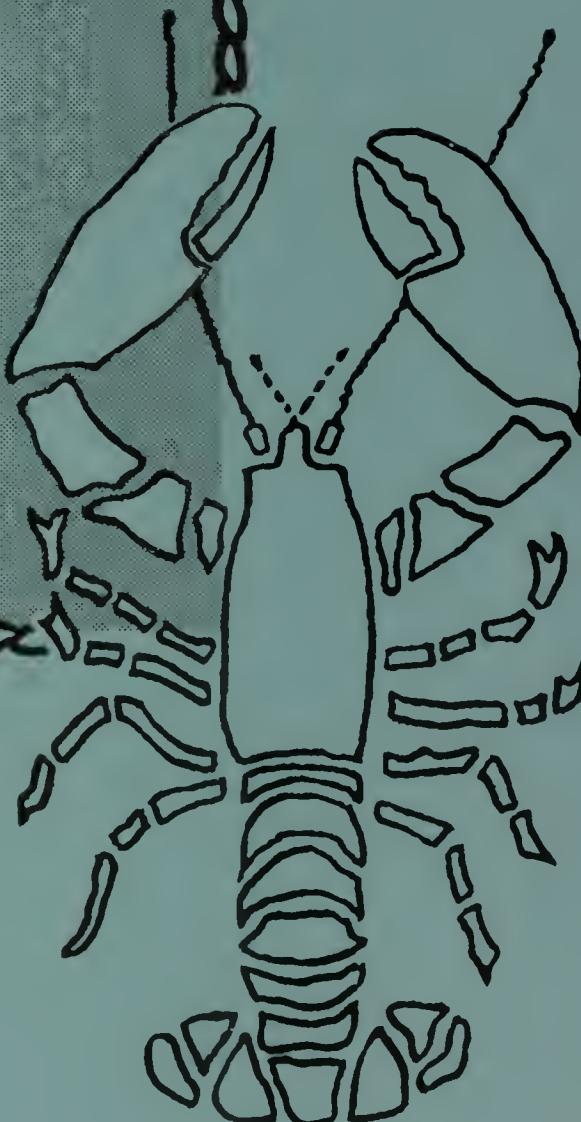
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1984

*Massachusetts  
Lobster Fishery  
Statistics*

Gerald M. Nash



MASSACHUSETTS  
DIVISION OF MARINE FISHERIES



1984  
Massachusetts  
Lobster Fishery  
Statistics

by  
Gerald M. Nash, Statistician

Department of Fisheries, Wildlife and Recreational Vehicles  
Division of Marine Fisheries

Technical Series 19

A contribution of  
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## INTRODUCTION

The commercial lobster fishery of Massachusetts is the most economically important fishery conducted within the territorial waters of the Commonwealth. The overall economic importance of the fishery both in New England and, in recent years, the Mid-Atlantic states, has focused the attention of Federal, Regional and State fishery managers on this species. Initially, in an attempt to standardize management of the fishery, the Federal and State Governments developed an overall lobster fishery management plan under the auspices of the State-Federal Partnership Program. However, with the passage of the Fisheries Management and Conservation Act, the New England Fisheries Management Council, in cooperation with the Mid-Atlantic Council have developed a management plan for the entire east coast lobster fishery. The plan has now been adopted. The basis of any such plan and for monitoring the success of the plan is an accurate statistical data base. The Commonwealth of Massachusetts, with joint funding from the National Marine Fisheries Service, has been collecting annual reports from licensed lobster fishermen for many years. Historically, the data collected was used primarily for descriptive and informational purposes, and occasionally for management. However, with the recent emphasis on Federal management, this data takes on added importance in terms of providing the respective management agencies with adequate information to ensure that the interests of Massachusetts' lobstermen are protected.

During the period 1975 - 1980 the number of coastal commercial lobster permits was limited, by law, to 1300, with an additional 10% issued to proven hardship cases. In 1981, a statutory change provided for the establishment of a permanent waiting list from which 100 new permits were issued, and 20 special additional permits which were awarded to full time commercial fishermen who met certain criteria. In subsequent years 80 list permits and 20 special additional permits have been issued. Permits which are not renewed are retired.

This report is the eighteenth annual publication of data summarized from catch reports submitted by licensed lobster fishermen. Data was presented in a standardized format through 1979. For the 1980 report, data presentation was changed to reflect a more thorough collection and evaluation of the data. The new presentation format is continued in this report. It is anticipated that this format will continue until such time as the Division implements computer processing of the data.

This report has been prepared by personnel from the Division of Marine Fisheries Commercial Fisheries Statistics Project, funded jointly by the Commonwealth and the National Marine Fisheries Service under the Commercial Fisheries Research and Development Act (Public Law 88-309). The preparation of this report would not have been possible without

the cooperation of the licensed lobstermen who provided the data on their annual reports. Special thanks also go to Mary Ann Gachignard for her assistance in preliminary processing of the catch reports when they are received from the fishermen.

#### SOURCE OF DATA

No person may fish for or take lobsters in coastal waters or land lobsters in the Commonwealth without a permit issued by the Director of the Division of Marine Fisheries (Chapter 130, Mass. G.L., Section 38). Chapter 130, Mass. G.L., Section 23, requires any person so licensed to file an annual report of their catch by January 31 for the preceding calendar year. In 1980, a dual reporting system was established. Commercial lobstermen (coastal, offshore and seasonal) received a detailed catch report form with their license renewal application. This report requests the following information: method of fishing; number and type of gear used; effort data (set-over day, average number of trips per month, etc.); pounds of lobster taken; areas fished; principal ports of landing; and information relative to the vessels used in the fishery. Recreational fishermen are asked to report only the number of lobsters taken the previous year on their license renewal application form.

Project personnel sort, edit, tabulate and interpret data from all reports received. Data presented in this booklet are based on catch reports actually received and are not expanded to 100 percent levels.

#### EXPLANATION OF TABLES

All data presented in this booklet are broken down into two basic categories: the first is "inshore" which represents all data pertaining to all lobster activity taking place within 69 degrees West Longitude and 41 degrees North Latitude; the "offshore" category refers to all data outside of the given coordinates.

Tables presenting number of fishermen by license type, number of pots fished, number and value of boats used in the fishery and total landings statewide, by county and for each city and town were prepared using the catch reports submitted by all commercial fishermen. In keeping with Division policy, some of the data is masked or combined to protect the confidentiality of the individual submitting the report. Data referring to the number of fishermen, number and value of gear, and number and value of boats are presented by the home port of the licensee filing the report. Pounds of lobsters harvested are presented by the port of landing reported by the fishermen.

Due to limited data storage capacity of the programmable calculator used to calculate percent of catch by area and month fished and catch per unit of effort, only those reports submitted by holders of commercial coastal licenses could be tabulated.

Where tabular materials refers to county, the reader is referred to Figure 1. Fishing areas are delineated in Figure 2.

Vessel and SCUBA gear values were calculated on the basis of the fisherman's estimate of its present value and the percentage of its use specifically for lobstering. Average values were used when the information was omitted from an individual report.

When fishermen reported the number of lobsters taken, rather than poundage, a conversion factor of 1.18 pounds per lobster was used to calculate poundage figures. This factor is based on historical data.

#### 1984 HIGHLIGHTS

1. There were 13,752 lobster licenses of all types issued during 1984: 1,679 coastal commercial; 227 seasonal commercial; 688 offshore and 11,518 non-commercial.

2. A total of 3,544 licensed lobstermen (26 percent) failed to file a catch report with the Division. Of the 10,208 fishermen reporting, 2,074 (20 percent) reported that they did not fish for lobsters during 1984.

3. A total of 12,604,065 pounds of lobsters were reported landed. Of these, recreational fishermen reported taking 344,754 pounds, while commercial fishermen reported taking 12,259,311 pounds. Based on a value of \$2.61 per pound<sup>1</sup>, the commercial catch was valued at \$31,996,802.

4. Commercial fishermen comprised 23 percent of the total number of fishermen reporting and landed 97 percent of the total catch.

5. Non-commercial SCUBA divers represented 19 percent of the fishermen reporting, but landed only 0.5 percent of the total poundage.

6. In total pounds of lobsters landed Essex County ranked first, Plymouth County second and Barnstable County third.

7. In total numbers of commercial fishermen, Essex County ranked first with 657, Plymouth County second with 430, and Barnstable County third with 177.

8. In the commercial fishery, pots were valued at \$12,569,830<sup>2</sup>, diving gear at \$33,964, and power and non-power

boats at \$35,480,274, yielding a total gear value of \$48,084,068. Combined with the value of lobsters sold, \$31,996,802, gives a total fishery value of \$80,080,870.

9. Of the 12,259,311 pounds of lobsters landed commercially, 10,088,499 were reported taken inside of 69 degrees West and 41 degrees North, and of that number, 8,019,727 pounds were estimated to have been taken within the territorial waters of the Commonwealth.

10. More lobsters were landed in Boston, 1,137,676 pounds, than in any other Massachusetts port. Gloucester ranked second with 911,010 pounds followed by Westport with 855,183.

11. Landings by coastal commercial lobstermen rose steadily in the spring, peaked in August and then declined. The least amount of lobsters were landed in February and March.

12. According to coastal fishermen, the greatest number of lobsters taken inside 69 degrees West and 41 degrees North were from Boston Harbor (Area 4) followed by Beverly--Salem--Marblehead (Area 3) and Scituate--Marshfield (Area 5).

13. The average catch per trap haul for coastal fishermen was 0.505 pounds. For traps fished for one set-over day the average was 0.402; for those fished two days 0.497; and for three or more set-over days 0.543.

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<sup>1</sup> Ex-vessel price determined by weighted averages of prices listed in the National Marine Fisheries Service "Blue Sheet".

<sup>2</sup> Based on an average value of \$32.50 per pot, including warp and buoys.

Table I. Reporting Status of 1984 Lobster Licensees

Licenses Issued		
Coastal Commercial (\$200)		1,679
Seasonal Commercial (\$50)		227
Offshore (\$200)		688
Non-commercial (\$30)		<u>11,158</u>
	Total	13,752

Reporting Status			
Type	Not Reporting	Reported "Not Fishing"	Reported "Fishing"
Coastal Commercial	30 (2%)	296 (18%)	1,353 (80%)
Seasonal Commercial	92 (41%)	19 (8%)	116 (51%)
Offshore	159 (23%)	355 (52%)	174 (25%)
Non-commercial	3,263 (29%)	1,404 (13%)	6,491 (58%)

TABLE 2. STATEWIDE TOTALS

1984 MASSACHUSETTS LOBSTER FISHERY  
SUMMARY STATISTICS--COMMERCIAL

LICENSE TYPE	GEAR TYPE AND NUMBER	DIVING GEAR VALUE	POTS FISHED	POWER BOAT	NON- POWER BOAT	BOAT VALUE	POUNDS OF LOBSTER
COASTAL							
Taken Inside 69°W 41°N							
Diver	5	9,650		4	34,250		5,170
Potman	1,298		342,364	1,305	24,919,812	67	30,139
Both	30	24,314	6,172	29	569,878	3	480
Trawl	3			3	33,750		232,143
Potman	116		2,453	109	284,124	6	1,087
Trawl	98				97	1,046,485	22,283
Potman	24		3,899	24	767,216		207,993
TOTAL	1,574	33,964	354,888	1,571	27,655.515	76	31,706
Taken Outside 69°W 41°N							
OFFSHORE							
Trawl	29			29	248,187		126,324
Potman	23		23,231	23	5,490,216		1,601,064
COASTAL							
Trawl	2			2	1,900		1,545
Potman	15		8,645	16	2,052,750		441,879
TOTAL	69		31,876	70	7,793,053		2,170,812
GRAND TOTAL	1,643	33,964	386,764	1,641	35,448,568	76	31,706

TABLE 3. BARNSTABLE COUNTY

1984 MASSACHUSETTS LOBSTER FISHERY  
SUMMARY STATISTICS--COMMERCIAL

LICENSE TYPE	GEAR TYPE AND NUMBER	DIVING GEAR VALUE	POTS FISHED	POWER BOAT	BOAT VALUE	NON- POWER BOAT	BOAT VALUE	POUNDS OF LOBSTER
Taken Inside 69°W 41°N								
COASTAL								
Diver	3	5,300		3	14,250			3,863
Potman	127		30,203	130	2,276,393	8	6,815	704,465
Both	5	6,000	810	4	95,970	2	280	22,744
Trawl								
Potman	10		216	10	50,988			2,817
Trawl	20			20	236,275			31,569
Potman	5		1,055	5	200,300			123,948
TOTAL	170	11,300	32,284	172	2,874,176	10	7,095	889,406
Taken Outside 69°W 41°N								
OFFSHORE								
OFFSHORE								
COASTAL								
Trawl	3			3	17,535			48,672
Potman								
Trawl	2			2	1,900			1,545
Potman								
TOTAL *	7		1,500	7	459,435			562,518
GRAND TOTAL	177	11,300	33,784	179	3,333,611	10	7,095	1,451,924

\*Totals do not match the sum of the columns due to masking of data to protect the confidentiality of individuals.

TABLE 4. BRISTOL COUNTY

1984 MASSACHUSETTS LOBSTER FISHERY  
SUMMARY STATISTICS--COMMERCIAL

LICENSE TYPE	GEAR TYPE AND NUMBER	DIVING GEAR VALUE	POTS FISHED	POWER BOAT	BOAT VALUE	NON- POWER BOAT	BOAT VALUE	POUNDS OF LOBSTER
COASTAL								
Taken Inside 69°W 41°N								
Diver								
Potman	75		15,693	72	1,341,323			504,201
Both								
SEASONAL								
Trawl								
Potman	7		149	7	43,130			1,122
Trawl	8			8	34,221			10,883
Potman	3		335	3	80,500			20,904
TOTAL	93		16,177	90	1,499,174			537,110
OFFSHORE								
Taken Outside 69°W 41°N								
Offshore								
Trawl	4			4	17,112			4,276
Potman	10		11,530	10	2,516,000			646,720
COASTAL								
TOTAL								
GRAND TOTAL	118		33,727	115	5,278,036			1,459,197

TABLE 5. DUKE'S COUNTY

1984 MASSACHUSETTS LOBSTER FISHERY  
SUMMARY STATISTICS--COMMERCIAL

LICENSE TYPE	GEAR TYPE AND NUMBER	DIVING GEAR VALUE	POTS FISHED	POWER BOAT	BOAT VALUE	NON- POWER BOAT	BOAT VALUE	POUNDS OF LOBSTER
COASTAL								
Taken Inside 69°W 41°N								
Diver								
Potman	28		4,961	29	567,026	1	2,250	101,515
Both								
Trawl								
Potman	4			70	4	3,300		535
Trawl								
Potman	3			682	3	117,500		16,688
TOTAL*	36			5,713	37	688,826	1	2,250
Taken Outside 69°W 41°N								
OFFSHORE								
OFFSHORE								
Trawl								655
Potman								
COASTAL								
TOTAL*								
GRAND TOTAL*	37		6,213	38	741,626	1	2,250	142,295

\*Totals do not match the sum of the columns due to masking of data to protect the confidentiality of individuals.

TABLE 6. ESSEX COUNTY

1984 MASSACHUSETTS LOBSTER FISHERY  
SUMMARY STATISTICS--COMMERCIAL

COASTAL	LICENSE TYPE AND NUMBER	GEAR TYPE AND NUMBER	DIVING GEAR VALUE	POTS FISHED	POWER BOAT	BOAT VALUE	NON- POWER BOAT	BOAT VALUE	POUNDS OF LOBSTER
Taken Inside 69°W 41°N									
Diver									
Potman	544			141,535	541	10,664,002	29	6,500	4,256,091
Both	10	7,289		2,145	11	184,058			137,146
Trawl	2				2	29,500			1,082
Potman	36			791	34	62,786	3	710	6,547
Trawl	40				39	316,183			77,734
Potman	2			480	2	32,000			9,105
TOTAL	634	7,289		144,951	629	11,288,529	32	7,210	4,487,705
Taken Outside 69°W 41°N									
OFFSHORE									
Trawl									
Potman	4				16	145,326			54,257
Potman	3				3,481	4	1,059,333		1,100
Trawl									
Potman	23				2,025	4	517,000		21,320
TOTAL					5,506	24	1,721,659		76,677
GRAND TOTAL	657	7,289		150,457	653	13,010,188	32	7,210	4,564,382



TABLE 8. NANTUCKET COUNTY

**1984 MASSACHUSETTS LOBSTER FISHERY  
SUMMARY STATISTICS--COMMERCIAL**

\*Totals do not match the sum of the columns due to masking of data to protect the confidentiality of individuals.

TABLE 9. NORFOLK COUNTY

1984 MASSACHUSETTS LOBSTER FISHERY  
SUMMARY STATISTICS--COMMERCIAL

LICENSE TYPE	GEAR TYPE AND NUMBER	DIVING GEAR VALUE	POTS FISHED	POWER BOAT	BOAT VALUE	NON- POWER BOAT	BOAT VALUE	POUNDS OF LOBSTER
COASTAL								
Taken Inside 69°W 41°N								
Diver								
Potman	66		19,087	66	1,503,088	3	1,300	590,315
Both	5	3,575	660	4	38,500	1	200	18,415
SEASONAL								
Trawl								
Potman	7		125	5	17,175	2	175	1,889
OFFSHORE								
Trawl								
Potman								
TOTAL*	79	7,575	19,872	76	1,578,763	6	1,675	611,919
Taken Outside 69°W 41°N								
OFFSHORE								
COASTAL								
Trawl								
Potman								
TOTAL								
GRAND TOTAL	79	7,575	19,872	76	1,578,763	6	1,675	614,488

\*Totals do not match the sum of the columns due to masking of data to protect the confidentiality of individuals.

TABLE 10. PLYMOUTH COUNTY

1984 MASSACHUSETTS LOBSTER FISHERY  
SUMMARY STATISTICS--COMMERCIAL

LICENSE TYPE	GEAR TYPE AND NUMBER	DIVING GEAR VALUE	POTS FISHED	POWER BOAT	BOAT VALUE	NON- POWER BOAT	BOAT VALUE	POUNDS OF LOBSTER
Taken Inside 69°W 41°N								
COASTAL								
Diver								
Potman	345		87,576	355	6,168,940	25	12,974	2,007,545
Both	6	4,050	1,620	6	113,750			32,687
SEASONAL								
Trawl								
Potman	48		1,012	45	92,595	1	202	8,667
Trawl	17			17	154,700			60,890
Potman	9		1,147	9	322,916			12,232
TOTAL*	427	4,400	91,355	433	6,857,151	26	13,176	2,126,462
Taken Outside 69°W 41°N								
OFFSHORE								
Trawl								
Potman	3		2,750	3	902,083			144,656
COASTAL								
Trawl								
Potman								2,033
TOTAL	3		2,750	3	902,083			147,437
GRAND TOTAL	430	4,400	94,105	436	7,759,234	26	13,176	2,273,899

\*Totals do not match the sum of the columns due to masking of data to protect the confidentiality of individuals.

TABLE II. SUFFOLK COUNTY

1984 MASSACHUSETTS LOBSTER FISHERY  
SUMMARY STATISTICS--COMMERCIAL

LICENSE TYPE	GEAR TYPE AND NUMBER	DIVING GEAR VALUE	POTS FISHED	POWER BOAT	BOAT VALUE	NON- POWER BOAT	BOAT VALUE	POUNDS OF LOBSTER
COASTAL								
Taken Inside 69°W 41°N								
Diver								
Potman	105		42,136	104	2,305,840	1	300	1,220,831
Both	4	3,400	937	4	137,600			21,151
Trawl								
Potman	4		90	4	14,150			706
Trawl	10			10	223,106			19,377
Potman								-
TOTAL*	124	3,400	43,263	123	2,690,696	1	300	1,277,375
OFFSHORE								
Taken Outside 69°W 41°N								
Trawl	2			2	58,464			7,435
Potman	3		3,200	3	610,000			20,000
COASTAL								
Potman								70,671
TOTAL	5		3,200	5	668,464			98,106
GRAND TOTAL	129	3,400	46,463	128	3,359,160	1	300	1,375,481

\*Totals do not match the sum of the columns due to masking of data to protect the confidentiality of individuals.

TABLE 12. OUT-OF-STATE

1984 MASSACHUSETTS LOBSTER FISHERY  
SUMMARY STATISTICS--COMMERCIAL

LICENSE TYPE	GEAR TYPE AND NUMBER	DIVING GEAR VALUE	POTS FISHED	POWER BOAT	NON- POWER BOAT	BOAT VALUE	POUNDS OF LOBSTER
Taken Inside 69°W 41°N							
COASTAL	Diver						
	Potman						
	Both						
SEASONAL	Trawl						
	Potman						
OFFSHORE	Trawl						
	Potman						
	TOTAL*	3		270	3	17,000	9,197
Taken Outside 69°W 41°N							
OFFSHORE	Trawl	4			4	9,750	5,418
	Potman						
COASTAL	Trawl						
	Potman						
	TOTAL*	5		870	5	209,750	5,689
	GRAND TOTAL	8		1,140	8	226,750	325,245
							334,442

\*Totals do not match the sum of the columns due to masking of data to protect the confidentiality of individuals.

Table 13. Pounds of lobsters landed by commercial fishermen (except seasonal) by city or town of landing in 1984.

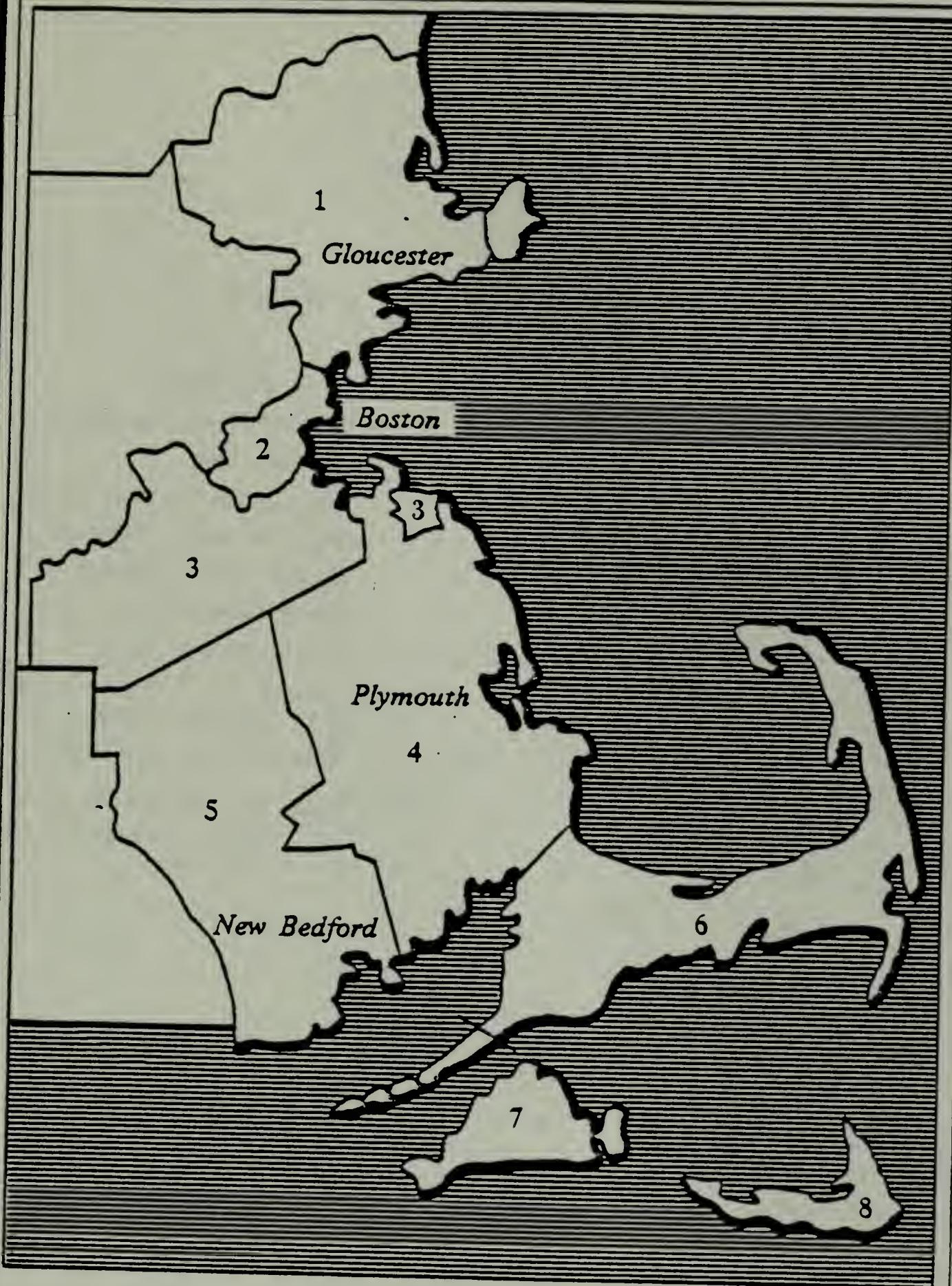
City/Town	Inside 69°W 41°N	Outside 61°W 41°N	Total
Barnstable	75,630	312,575	388,205
Beverly	595,462		595,462
Boston	1,039,570	98,106	1,137,676
Bourne	43,504		43,504
Chatham	128,194	2,943	131,137
Chilmark	88,198	18,954	107,152
Cohasset	458,242	2,569	460,811
Danvers	53,840	1,690	55,530
Dartmouth	14,496		14,496
Dennis--Yarmouth	40,675		40,675
Duxbury	39,893		39,893
Eastham	13,895		13,895
Essex	31,100		31,100
Fairhaven	91,929	233,800	325,729
Falmouth	31,864	466	32,330
Gloucester	854,166	56,844	911,010
Gosnold	13,061		13,061
Harwich	180,959	29,851	210,810
Hingham	287,676		287,676
Hull	148,936		148,936
Ipswich	52,404		52,404
Kingston	19,984		19,984
Lynn	196,638	5,032	201,670
Manchester	244,786		244,786
Marblehead	552,559	371	552,930
Marion	4,302		4,302
Marshfield	518,583		518,583
Mattapoisett	44,964	2,033	46,997
Nahant	305,466	5,178	310,644
Nantucket	28,780	13,709	42,489
New Bedford	126,396	136,271	262,667
Newburyport--Newbury--Rowley	56,707		56,707
Orleans	55,633		55,633
Plymouth	646,991	144,680	791,671
Provincetown	104,715	3,717	108,432
Quincy	34,367		34,367
Revere	93,310		93,310
Rockport	341,995	661	342,656
Salem	69,419		69,419
Salisbury	3,126		3,126
Sandwich	198,793	212,966	411,759
Saugus	646,090	6,901	652,991
Scituate	385,967	724	386,691
Swampscott	477,400		477,400
Tisbury--Oak Bluffs	18,037	3,510	21,547
Wareham	20,499		20,499
Wellfleet--Truro	12,727		12,727
Westport	303,167	552,016	855,183
Weymouth	117,421		117,421
Winthrop	144,503		144,503
Out-of-State	9,197	325,245	334,442

Table 14. Massachusetts commercial lobster landings inside 69°W and 41°N by month and area as reported by coastal commercial fishermen in 1984.

Month	Percent	Area	Percent
January	0.5	1	1.5
February	0.2	2	11.4
March	0.2	3	17.9
April	0.9	4	27.4
May	3.4	5	12.1
June	5.9	6	6.7
July	12.5	7	1.8
August	22.9	8	6.9
September	19.1	9	0.9
October	18.9	10	3.8
November	11.1	11	3.5
December	<u>4.4</u>	12	<u>6.0</u>
	100.0		99.9*

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\*Total does not equal 100 percent due to rounding of numbers.



COASTAL MAP of MASSACHUSETTS  
SHOWING STATISTICAL REPORTING AREAS (Counties)

- |            |             |               |              |
|------------|-------------|---------------|--------------|
| 1. Essex   | 3. Norfolk  | 5. Bristol    | 7. Dukes     |
| 2. Suffolk | 4. Plymouth | 6. Barnstable | 8. Nantucket |

### LOBSTERING AREAS

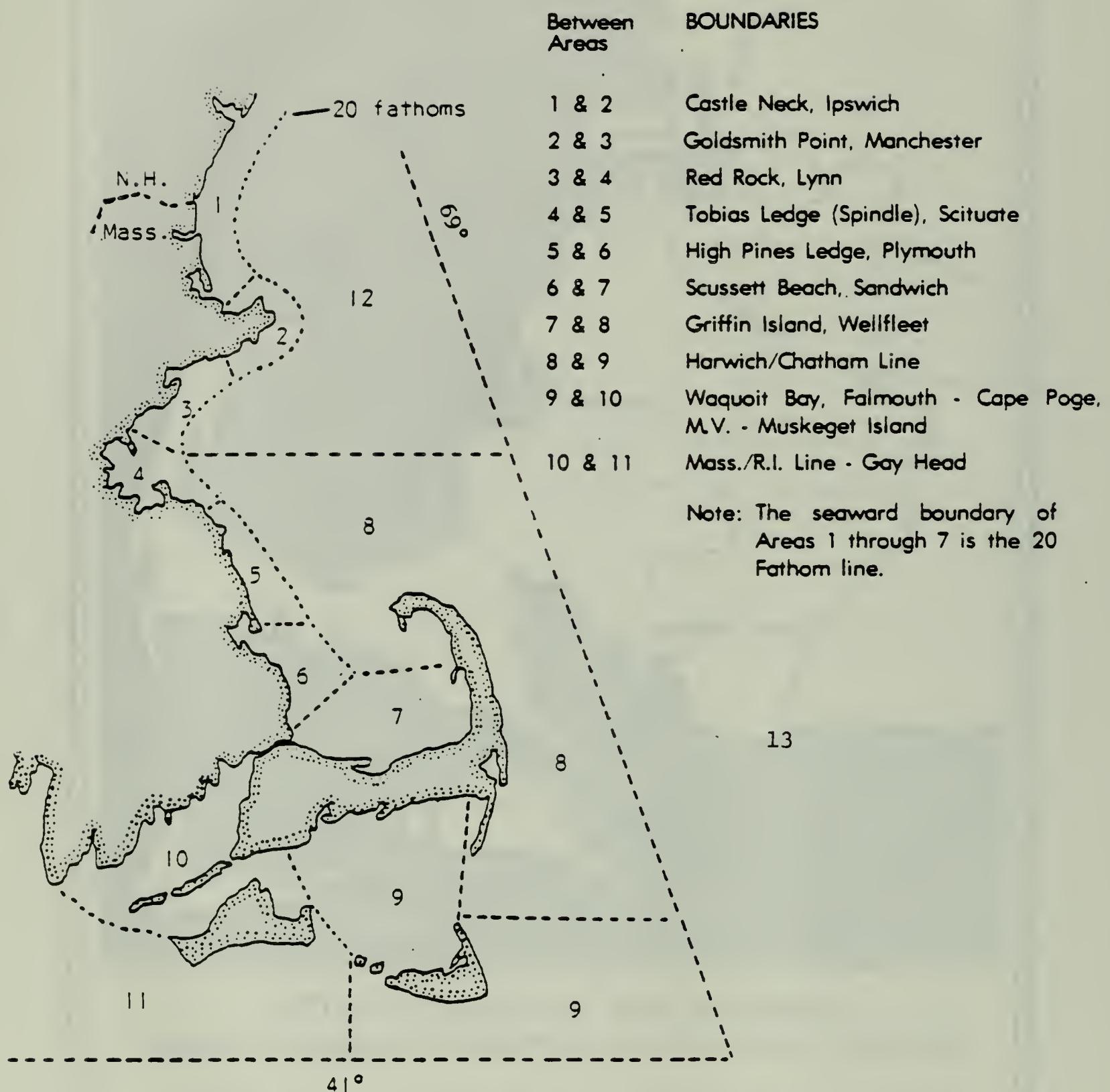


Figure 2. Location and description of coastal lobster fishing areas in Massachusetts.







