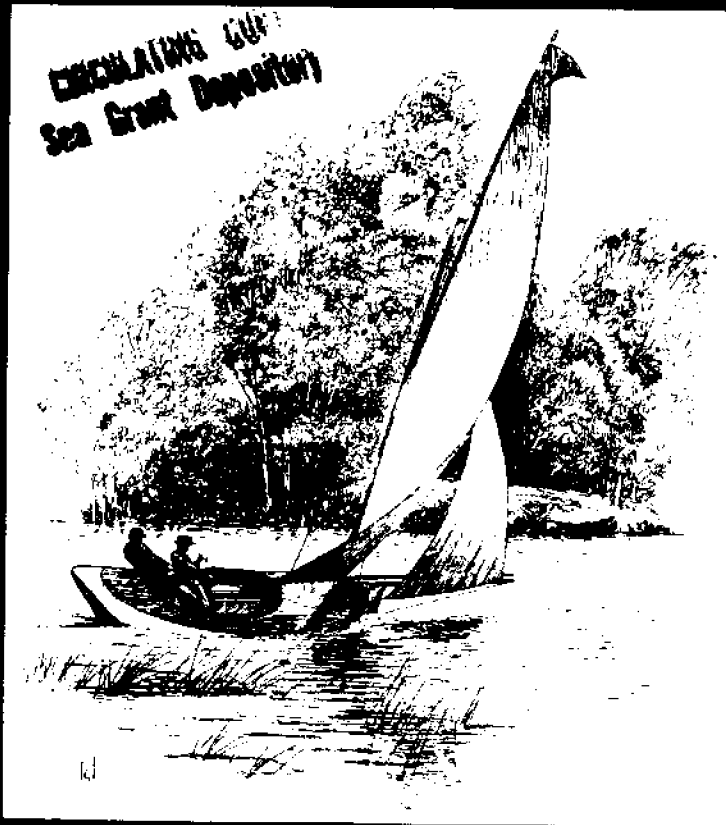


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ECONOMIC CHARACTERISTICS of the MAINE MARINE INDUSTRY

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Introduction

The marine-related industry is an important economic sector in a coastal state such as Maine. The industry provides essential goods and services to other industries and to individuals of the state. For example, it provides goods and services to the commercial fishing industry and to the pleasure boating segment of the Maine tourism industry. The services are also essential to water-borne transportation of the products required or produced by firms in other sectors of the economy.

While its importance is generally recognized by people in the industry, the lack of basic economic information about Maine's marine industry has made it impossible to define the scope and importance of the industry in the state. The purpose of this report is to present the results of the first economic study of the Maine marine industry. While the study was designed to provide only general information, the results provide basic information about the industry that was previously unavailable.

The study was undertaken as a joint effort by several interested groups. The Maine Marine Industries Association and the Sea Grant Marine Advisory Program at the University of Maine at Orono were both interested in obtaining basic information about the industry. Subsequently, personnel

from the Social Science Research Institute (SSRI) and the Department of Agricultural and Resource Economics at the University of Maine at Orono were asked to conduct the study.

A listing of 743 marine-related firms, obtained from Maine telephone directories and other sources, was provided by the Association. This list was edited by SSRI to remove duplications. The survey instrument was constructed by representatives of the interested groups. After pretesting, the questionnaire was mailed on November 1, 1983 to all the firms on the list. Follow-up efforts to elicit responses were made by mail and telephone. Contacts through these efforts led SSRI to estimate that there were 611 firms in the industry as of late 1983. Of these, 355 returned a completed questionnaire within 80 days, yielding a response rate of 58 percent. The industry information presented below is based on the 355 responses (or subsets thereof). It should be noted that no tests for nonresponse bias were conducted. Instead, it is assumed that the 355 responding firms comprise a representative sample of all firms in the industry.

This report is comprised of two sections. The first presents a description of the scope of the industry. It is followed by the presentation of the economic information for the industry.

Description of the Industry

The purpose of this study was to identify and characterize the firms that provide marine-related goods and services utilized for commercial and pleasure boating.¹ To this end, a fairly broad definition of the marine industry was adopted. It includes firms that manufacture and/or sell (at wholesale or retail) marine-related products and services such as boat builders, boatyards, marinas, boat and motor dealers, and marine equipment and supply dealers. It also encompasses more specialized firms including sail makers, sailing instructors, boat rental and charter firms, yacht brokers, and boat transportation/delivery firms. However, commercial fishing businesses are not included in the definition of the marine industry.

The study ultimately identified 611 firms that apparently fit the above definition. Of these, an estimated 57 percent are located on saltwater, 8 percent on fresh water, 3 percent on both, and 33 percent on neither.

Because some firms sell non-marine as well as marine products, firms were asked to indicate the percent of their total sales that were generated from the marine products and

¹ Given this objective, Bath Iron Works was excluded from the survey since it is more oriented toward meeting national defense needs.

services. About 15 percent of the 355 responding firms indicated that marine sales accounted for ten percent or less of their sales. Since marine products and services are not a major source of sales for these firms, they were not asked to provide economic data. Hence, most of the findings presented below generalize to the estimated 518 "core" firms in the industry rather than to all 611 firms.

Firms were asked to indicate the types of marine business activities in which they were engaged and also to indicate the most important of these activities in terms of sales revenue. The responses were expanded to the 518 core firms and are reported in Table 1.

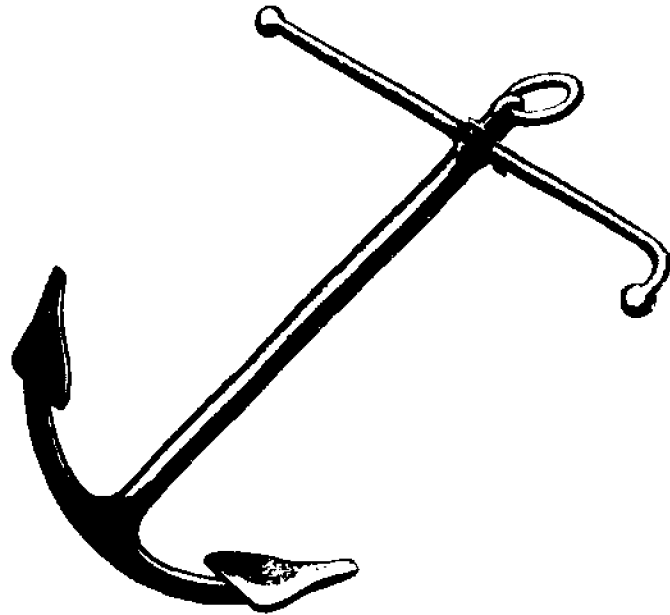


Table 1

Estimated Number of Core Firms in Selected
Marine-Related Business Activities, Maine, 1983

Type of Business Activity	Firms Engaged in Activity		Firms for Which Activity is Most Important	
	#	%	#	%
Boat Builders	158	30.5	123	23.7
Boat Transportation or Delivery	76	14.7	9	1.8
Boat Cruises and Excursions	53	10.2	27	5.2
Boat Rentals and Charters	107	20.7	23	4.4
Boatyard Repairs and/or Storage	204	39.4	88	17.0
Dockage, Moorage, Slips	123	23.7	22	4.2
Boat and/or Motor Sales	156	30.1	69	13.3
Marine Supply and Equipment Sales	261	50.4	43	8.3
Naval Architects and/or Surveyors	42	8.1	29	5.6
Sailing Instruction	15	2.9	5	1.0
Sailmakers	15	2.9	9	1.7
Yacht Brokers	73	14.1	15	2.9
Other Marine Activities	<u>100</u>	<u>19.3</u>	<u>56</u>	<u>10.8</u>
Total	518	267.0*	518	100.0

*Because many firms engage in more than one type of activity, the sum of the percentages in each activity substantially exceeds 100 percent.

The three leading marine activity categories, in terms of number of firms, are 1) marine supply and equipment sales (261 firms), 2) boatyard repairs and/or storage (204), and 3) boat building (158). In terms of importance of the various activities in producing revenue, boat building was the most important source of revenue for 123 firms, followed by boatyard repairs and storage, 88 firms; and boat and/or motor sales, 69 firms. As one would expect, most marine-related firms are involved in several types of business activities. On the average, the typical firm is involved in 2.7 of the types of marine business activities defined in Table 1.

It should be noted that the data in Table 1, like all estimates in this report, are based on the assumption that those firms that did not respond to the survey are identical to the residents in terms of the percentage distribution across the categories. That is, it is assumed that response rate did not vary among firms in accordance with the type of business activity in which they were engaged. If this assumption is not valid, the number of firms reported in some categories could represent an over or under-estimate of the actual number of firms involved in the various business activities.

Among the more important services that the industry provides are moorage, slip spaces, and boat storage for the

boating public. It is estimated that 237 firms provide at least one of these services. About 90 percent of these firms have less than 50 slips and moorings, but some firms provide over 100 slips and moorings. In total, there are about 3,800 mooring spaces and 3,450 slips provided by these firms. About 25-30 percent of the firms had a waiting list for slip and moorage spaces, which suggests that additional slips and moorings may be needed in some areas of the state.

It is estimated that the Maine marine industry has storage capacity for about 12,950 boats. This capacity is equally divided between inside and outside storage. Most firms provide storage for a relatively small number of boats. For example, one-half of the firms offering storage have space for only twelve and ten boats, respectively, for inside and outside storage. However, the average number of boats stored (both inside and outside) by firms that provide storage is 5.5. About two-thirds of the firms reported that they had no unused storage capacity, which suggests that additional storage capacity may be needed in some locations.

Economic Characteristics

This survey concentrated on information related to three economic factors: 1) gross sales, 2) employment and wages, and 3) real and personal property taxes paid by the

firms in the industry. Each of these categories is discussed below.

Sales

Based on the survey responses, it is estimated that the 611 firms in the industry had total marine and boating sales of \$179,108,000, or an average of about \$293,000 per firm in 1982 (Table 2). This figure includes both wholesale and retail sales. The 518 core firms had total wholesale and retail sales estimated at \$172,600,000 in 1982.

Over one-half (54%) of the core firms had sales of less than \$100,000; 30 percent had sales between \$100,000 and \$500,000. Seven percent of the firms had sales of more than \$1,000,000. Retail sales totaled about \$94,000,000 in 1982. Forty-three percent of the core firms received over 80 percent of their total revenue from retail sales. Retailers estimated that about 58 percent of their retail sales were made to Maine residents while 23 percent were made to residents of other states in New England. The remaining 19 percent of sales were to people who reside outside New England.

Table 2

Selected Economic Characteristics of
the Maine Marine Industry, 1982

Characteristic	Unit
<u>Marine and Boating Sales:</u>	
Total sales (all firms)	\$179,108,000
Total sales (core firms)	172,500,000
Retail sales (core firms)	94,093,000
<u>Employment:</u>	
Total full-time employees (core firms)	3,440
Full-time employees in marine activities (core firms)	2,900
Total part-time employees (core firms)	1,500
Part-time employees in marine activities (core firms)	1,276
Full time equivalents of part-time employees (core firms)	600
Full-time equivalents of part-time employees in marine activities (core firms)	510
Total full-time and part-time employees in marine activities (core firms)	4,176
Total full-time and full-time equivalents of part-time employees in marine activities (core firms)	3,410
<u>Wages:</u>	
Total wages paid (core firms)	\$54,144,000
Wages paid to employees in marine activities (core firms)	44,761,000
<u>Property Taxes:</u>	
Total property taxes paid (core firms)	\$ 1,559,000

Firms whose principal activity was boat building accounted for 35 percent of the wholesale and retail sales of the core firms in the industry. Boat yards accounted for 14 percent of total sales followed by marine dealers and supply and equipment firms which accounted for 13 and 12 percent, respectively, of total core firm sales. In total, these four categories of firms accounted for 51 percent of the core firms and 74 percent of the core industry total marine sales. None of the other business activity categories accounted for more than 10 percent of the total sales of the industry.

Employment and Wages

Employment data were estimated for the 518 core firms that received more than 10 percent of their sales from marine-related business activities. These firms employed an estimated 3,440 people on a full-time basis in 1982 (table 2). This represents an average of 6.64 employees per firm. About 85 percent of the full-time employees' time was devoted to marine business activities, which represent about 2,900 full-time employees.

In addition, the industry also hired 1,500 part-time employees in 1982 or about 2.9 part-time employees per firm. These 1,500 part-time or temporary jobs were equivalent to 600 full-time jobs. In total, 510, or 85 percent, of the

full-time equivalent (FTE) jobs were associated with the marine and boating phases of the firms' business activity. Hence, the marine-related phases of the firms in the industry accounted for a total of 3,410 full-time equivalent jobs in 1982 (2,900 full-time employees and 510 FTE part-time jobs).

In total, the "core" firms in the industry paid wages, salaries, and commissions of \$54.1 million in 1982, or an average of about \$104,500 per firm (Table 2). It should be noted that over three-fourths of the firms had wage and salary costs below the average of the industry. On the other hand, over 13 percent of the firms paid wages and salaries of over \$200,000, which increased the average wages for the industry as a whole.

Based on the information provided, \$44.8 million was paid to employees and owners as compensation for the marine-related phases of the firms' business activity. About 83 percent of all wages paid by the firms were related to marine business activities. The average wage per FTE employee was about \$13,100 in 1982.

Property Taxes

The 518 core firms paid an average of \$3,010 in property taxes in 1982 (Table 2). This figure includes property taxes paid on both real and personal property

(boats, inventory of equipment, etc.). Thus, the core firms paid a total of about \$1.5 million in property taxes in 1982 (table 2).

Summary

The data acquired through the survey and reported above indicate that the marine industry in Maine is an important segment of the economy. It not only provides essential goods and services to commercial fishing, other business sectors, and the pleasure boating public, it also makes an important contribution to the economy of the state. The jobs provided and the wages paid attest to its significance. This information is helpful in defining the size and scope of the industry.

A final word of caution about the study, should be noted. All of the estimates presented above for the industry were calculated on the assumption that the firms that responded to the survey were representative of the estimated 611 firms in the industry. In other words, it is assumed that, on the average, the nonresponding firms are identical to responding firms with respect to business activity categories, volume of sales, employment, wages paid, and property taxes. Some error may exist in the industry estimates if this assumption is not valid. For

example, if large firms (in terms of sales and/or employment) responded to the survey in higher proportions than did small firms, the estimates presented for total sales and/or employment would be too large. On the other hand, the estimates derived for the industry as a whole would be low if a higher proportion of small rather than large firms responded to the survey. Since no data are available for firms that did not respond to the original survey, to a second mailing, or to a "reminder" telephone call, it is impossible to compare the characteristics of responding and nonresponding firms. This increase the uncertainty associated with the estimates presented above; those uncertainties should be kept in mind in evaluating the results.



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