

THE ECONOMIC VALUE OF RECREATIONAL BOATING OF LAKE ERIE

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Margaret L. Holland, Communicator/Editor

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THE ECONOMIC VALUE OF RECREATIONAL BOATING OF LAKE ERIE

by

Kenneth A. Wenner
Division of Parks and Recreation Administration
School of Natural Resources
The Ohio State University

In cooperation with
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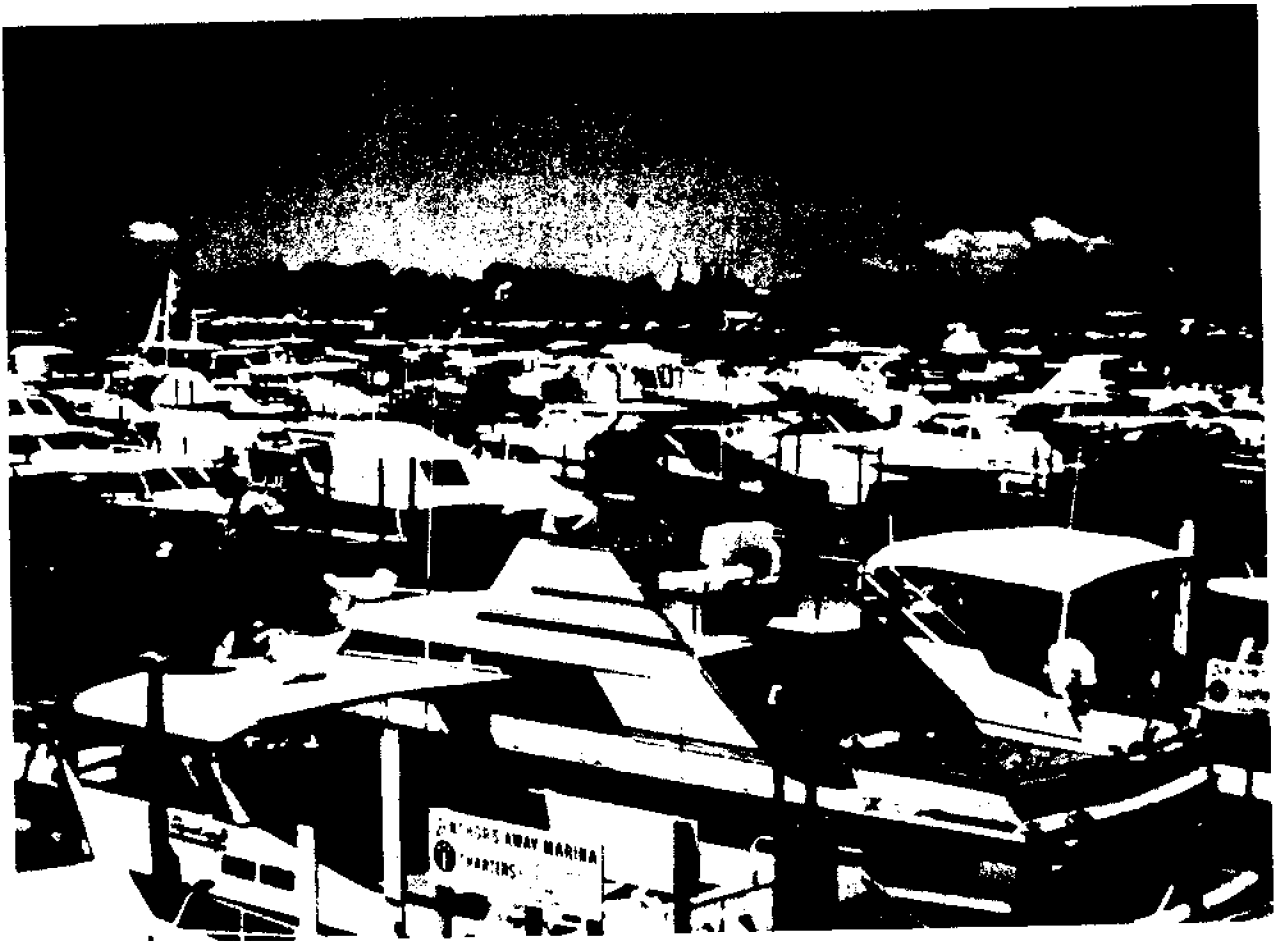
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INTRODUCTION



One of the concerns related to the establishment of a new recreational facility or the expansion of an existing one is the economic importance of that facility to the community. The addition or loss of an existing business can mean a change in the local tax base and payroll. The degree or magnitude of these changes is of vital importance to community planners and developers.

The purpose of this report is to present in detail the results of a study which sought to determine the economic value of a recreational boating business and identify the major source of gross income and major expenditure items. A recreational boating business was defined as any establishment providing recreational boating supplies and/or services. This study includes both privately and publicly owned facilities,

and private clubs providing services for their members. Sales by department stores and local hardware stores were not included in the study. The data presented are from businesses located in the eight Ohio counties bordering Lake Erie and are compared to independently conducted studies in Wisconsin (Meltz 1979) and Illinois (Espeseth 1980). These data should be indicative of marinas on or near all the Great Lakes, large reservoirs, major rivers and intercoastal waterways and bays.

Information presented in this paper can be utilized by local communities to help weigh the economic advantages of a marina business in a community as compared to the cost of the services needed by that business to satisfy the needs of their customers.

STUDY METHODS

A total of 237 boating businesses were known to exist in the eight Ohio counties bordering Lake Erie in 1980. Questionnaires were mailed to each of these businesses and a total of 99 usable questionnaires was returned. This constitutes a 42 percent return rate.

Each business establishment was assured there were no identification marks on the questionnaire that could identify the business and that all data would be aggregated. Adherence to this "no-identification promise" negated the possibility of following up non-respondents for a complete statistical analysis.

RESULTS

GROSS INCOME

The gross income levels listed in Table 1 indicate that the responding establishments varied considerably in size and gross volume of the business. Twenty-four percent of the establishments grossed under \$25,000. Personal interviews conducted with several low gross volume operations indicate these units, for the most part, represented small family-owned units operated on a part-time basis. The small-establishment owner usually owned another business or was employed in another establishment and only worked the marina evenings and weekends. The services offered by the small establishments generally consisted of a few docks available for rent. Other establishments included in the business volume category under \$25,000 are many of the small clubs. Their "businesses" consisted of a few docks and/or a boat ramp supported in part by dues and volunteer work by members.

In contrast to these small operations are large clubs and incorporated businesses. Large clubs may have had several hundred docks, yearly storage facilities, boating supplies, large hoists, a multi-functional clubhouse and generally had a much higher gross income.

Eighteen percent of the incorporated businesses contacted during this study reported a gross income of over \$1 million while 7 percent of these grossed over \$2 million. These larger establishments represented incorporated businesses which offered a full line of services and supplies, and sold new and used boats.

The wide range in gross income levels from under \$25,000 to over \$1 million creates a high standard deviation when computing averages for the various income and expenditure categories. To reduce the standard deviations listed in several of the following tables the data could be analyzed by gross income classes. However, such an analysis strategy could lead to the possibility of identifying individual business establishments. In order to prevent any such identification, all the data were aggregated and the unusually large standard deviations were listed in parentheses to alert the reader.

TABLE 1

*GROSS INCOME LEVEL FOR 99
LAKE ERIE BOATING BUSINESSES*

Income Level (in dollars)	Percentage of Respondents
0- 25,000	24
25,000- 99,999	22
100,000-299,999	19
300,000-699,999	11
700,000-999,999	4
1,000,000 -	18

Table 2 lists the gross income for all 99 respondents by: (1) ownership type (club or commercial); (2) whether or not the business has direct access to Lake Erie; and (3) whether or not the business bought or sold boats. Included in Table 2 is a list of the major sources of income and the approximate percentage that each source contributed to the total gross income. The data in Table 2 indicate that commercial businesses had an average income of \$650,000 and private clubs averaged \$130,882. Espeseth

TABLE 2

GROSS INCOME FROM 99 LAKE ERIE AREA RECREATIONAL BOATING ESTABLISHMENTS
AND PERCENTAGE OF INCOME CONTRIBUTED BY EACH MAJOR ITEM*

	OWNERSHIP TYPE		LAKE ERIE ACCESS		BUY - SELL BOATS	
	Club	Commercial	Yes	No	Yes	No
NUMBER OF RESPONDENTS	17	82	81	18	56	43
GROSS PER BUSINESS (in dollars)	130,882 (228,151)**	650,182 (1,023,104)	518,025 (868,350)	754,444 (1,289,561)	899,375 (1,147,006)	120,349 (223,790)
PERCENTAGE OF INCOME						
ITEMS						
Slip rentals***	46.0	22.0	30.0	10.5	13.5	43.0
Storage	6.5	7.0	7.0	6.5	6.5	7.0
Maintenance & Repair	-	11.0	8.5	11.0	11.0	6.0
Boat Sales	-	30.0	20.0	48.0	44.0	0.0
Titles, etc.	3.5	0.5	1.0	-	1.5	-
Utilities	0.5	-	0.5	0.0	-	1.0
Pumpouts	-	-	-	0.0	-	-
Fuel Sales	5.5	6.0	6.5	2.0	4.5	7.5
Supplies Groc., bar	7.0	12.0	10.5	14.0	11.5	11.0
Other	15.5	6.0	8.0	8.0	1.5	16.0

*Average gross income for all reporting businesses was \$561,010 with a standard deviation of \$955,202.

**Figures in parentheses indicate standard deviations.

***Slip rentals include income from launching and hoisting fees.

- Indicates a value less than 0.5%.

(1980) reported the median gross income for marinas in an Illinois study conducted in 1979 was \$300,000. He reported there was wide range in the gross income and therefore elected to report the median income in lieu of the average income. This study included small inland lakes and river marinas as well as large Great Lake marinas.

The highest average gross income category was attained by the ownership class that bought and sold boats. Businesses in this group had an average gross income seven times greater than businesses which offered only docking, services and supplies. On a national scale, new boat sales dropped from

448,000 in 1973 to a low of 322,000 in 1979 (Sciulla 1981). This drop may be an indication that boaters are keeping their boats longer instead of trading them in every few years. Sciulla reported that large boat owners are increasing the use of their boats as a second home -- a type of vacation cabin -- while the boat is tied to the dock. Less actual running of the boat may increase the overall life of the engine and thereby have a long-run tendency to reduce boat sales. If the decreased boat sales trend continues, businesses that rely heavily on boat sales as their major income source may lose gross income.

INCOME SOURCE

Private clubs received nearly 50 percent of their income from dock or slip rentals and 13.5 percent from selling supplies and providing storage and hoisting. An "other" category accounted for 15.5 percent of the total income. This category consisted mainly of membership dues. Meltz (1979) reported that membership dues accounted for 18-24 percent of the gross income of private clubs surveyed in Wisconsin while slip rentals accounted for up to 30 percent of the gross. These findings seem to indicate that clubs, for the most part, provide a mooring and docking service for their members and rely on membership dues as a major source of income.

Responding commercial boating businesses as a group received 30 percent of their income from boat, trailer, and motor sales, 22 percent from slip rentals and 12 percent from supply sales. Further analyses of the data indicate commercial businesses buying and selling boats received 44 percent of their gross income from boat, trailer and motor sales. This compares to 43 percent of gross income from slip rentals for marinas not selling boats. Meltz (1979) reported that marinas buying and selling boats in Wisconsin received 50 percent of their income from boat sales and those not selling boats received 46 percent of their income from slip rentals. These studies indicate that many marinas rely either on boat sales or slip rentals as a major portion of their income. For those marinas having boat sales and slip rentals, the large volume of money from boat sales overshadows the gross income from slip rentals in terms of percent of gross sales. The data does not imply that the margin of profit is substantially different between marinas that have boat sales and those that have mainly slip or storage rentals, but rather that a larger volume of money is handled in the buying and selling of boats than in the providing of slip or storage rentals.

GROSS EXPENDITURES

Table 3 lists the gross expenditures for all 99 respondents by: (1) ownership type (club or commercial); (2) whether or not the business has direct access to Lake Erie; and (3) whether or not the business buys and sells boats. Also included in Table 3 is a list of major expenditure items and the approximated percentage that each item contributed to the gross.

Gross expenditures totaled \$44,715,024 and averaged \$451,667 per reporting business. These figures do not include taxes and payroll amounts. A comparison of the commercial and the club facilities indicates the margin between gross expenditure and gross income allowed for an average of 24 to 25 percent from which to pay taxes and employees, and for a margin of profit for the commercial facilities.

EXPENDITURE ITEMS

Both facilities which have direct access to Lake Erie and those which do not spent approximately 15 percent of their total expenditures on maintenance of various types. Those facilities having direct access to Lake Erie spent approximately two percent more on site maintenance but two percent less for general maintenance than facilities not having direct access. Increased site maintenance costs may be the result of maintaining docks which incur ice or wave damage.

Private clubs spent 26.5 percent or more than one-fourth of all their expenditures on various types of maintenance. This compares to an average commercial expenditure of 12.5 percent. In Wisconsin, Meltz (1979) reported clubs spent up to 22.5 percent of their gross expenses on maintenance while commercial marinas spent up to 10.8 percent. Variability within the data could account for the small percentage difference between the two states.

TABLE 3

GROSS EXPENDITURES FOR 99 LAKE ERIE RECREATIONAL BOATING ESTABLISHMENTS
AND AVERAGE PERCENTAGE OF EACH MAJOR EXPENDITURE ITEM*

	OWNERSHIP TYPE		LAKE ERIE ACCESS		BUY - SELL BOATS	
	Club	Commercial	Yes	No	Yes	No
NUMBER OF RESPONDENTS	17	82	81	18	56	43
GROSS EXPENDITURES (in dollars)	120,588 (207,098)	520,305 (971,650)	409,753 (818,399)	640,278 (1,213,735)	644,445 (985,993)	200,581 (709,554)
PERCENTAGE OF GROSS EXPENDITURES						
ITEMS						
Rent/Mortgage	6.5	10.0	10.0	6.5	7.5	12.0
Boat Sales	4.5	21.5	16.0	28.5	32.5	-
Advertisements	-	3.0	2.5	1.5	4.0	0.5
Equipment Maintenance	15.5	7.5	8.5	10.5	6.5	12.0
Insurance	2.0	3.5	3.5	3.5	3.0	3.5
New Construction	7.5	4.0	4.5	5.0	3.0	7.0
Site Maintenance	11.0	5.0	6.5	4.5	4.5	8.5
Fuel	8.5	4.5	5.5	4.0	3.0	8.0
Supplies	6.5	7.5	8.0	3.5	6.5	8.5
Utilities	5.5	4.0	4.0	4.0	3.0	5.5
Other	7.0	4.4	5.0	5.5	2.0	8.5
TAXES (in dollars)	4,560 (7,819)	17,781 (51,425)	NA	NA	NA	NA

Average Gross per Business = \$451,667 (\$900,161). Average Employee Payroll per Business = \$68,513 (\$145,762). Average Taxes Paid per Business = \$15,551 (\$47,127).

*All figures in parentheses are standard deviations.

**All figures are averages per business.

- Indicates value less than 0.5%.

The difference in maintenance expenditures between clubs and commercial marinas may be due to the higher percentage of total club business involved in docking, mooring and hoisting. Facilities which accommodate these types of services require a high level of maintenance.

Approximately 32.5 percent or nearly one-third of the gross expenditures of commercial facilities that buy and sell boats are involved in boat, motor and trailer purchases. These same type of facilities receive 44 percent of their gross income (Table 2) from the sale of those items. This indicates an average margin of profit of approximately 11 to 12 percent for this activity. Rent, mortgage and new construction accounted for 14 percent of total expenditures for

both club and commercially owned facilities.

PAYROLL

The responding businesses reported they had a total payroll of \$6,782,788 in 1979. This averages to \$68,513 per business. The payroll included 833 full-time and 28 part-time employees. Espeseth (1980) reported that marinas in Illinois spent an average of 19 percent of their gross income for payroll as compared to an average of 12 percent found in this study. The figures reported in the Lake Erie study include both club and commercial facilities which could account for the six to eight percent difference between the two

TABLE 4

*AVERAGE CITY, COUNTY, STATE, AND FEDERAL TAXES
PAID BY THE RESPONDING BOATING BUSINESSES IN 1979*

	CLUB		COMMERCIAL	
	Sum	Average	Sum	Average
Number of Respondents	17		82	
City Taxes*	5,987	352 (1,013)	298,428	3,639 (22,432)
County Taxes	33,171	1,951 (3,457)	163,441	1,993 (4,427)
State Taxes	23,961	1,409 (4,378)	451,737	5,509 (18,819)
Federal Taxes	14,405	847 (2,223)	544,444	6,640 (28,332)

**All taxes are shown in dollars.*

***Figures in parentheses indicate standard deviations.*

studies. Many small clubs reported very few or no full-time employees. A few clubs indicated they relied on volunteer work from their members in order to keep their overall club costs to a minimum. Small businesses (under \$25,000) did not report a payroll; apparently the small business entrepreneurs did not consider their personal labors as a cost.

TAXES

The 99 recreational boating businesses responding to this study indicated they spent between 3.5 and 4.5 percent of their total gross income on taxes. This compares very favorably with the 3.6 percent as reported by Espeseth (1980) in Illinois. The percent figures for this Lake Erie study were approximately the same for club-owned and commercially owned facilities. The

total amount of taxes reported in 1979 was \$1,535,565. This averages to \$15,511 per facility.

Table 4 shows the amount of different types of taxes paid by boating businesses according to club or commercial ownership. Commercial businesses made higher average tax payments to all four levels of government than did clubs. This is consistent with the volume of business conducted by clubs versus commercial establishments.

The very high standard deviations for commercial facilities are probably due to several reasons. One is the range in total volume of business conducted by commercial facilities. Another is the geographic location and corresponding tax rate. The highest deviation occurs in the amount of city taxes paid; several respondent facilities are located in unincorporated areas and do not pay city taxes.

CONCLUSION

The boating businesses that were surveyed, both clubs and commercial establishments, indicated they had a combined average gross income of \$561,000, paid a total of \$15,511 in taxes, and had a payroll of \$68,513 per business. Assuming these figures were representative of all 237 known recreational boating businesses in the eight Ohio county Lake Erie area in 1979, the projected figures for the region would be:

total gross income to the area..\$132,959,393
total payroll for the area.....\$ 16,237,581
total taxes paid in the area....\$ 3,676,107

The above projected payroll and employee data indicate a total employment of approximately 1,994 full-time employees and 67 part-time employees.

The average income and expenditures data presented in the tables have very high standard deviations and for that reason the figures should not be utilized to say that a marina in an area will account for a given amount of money being added to the area. A suggested procedure for estimating the value of a proposed marina would be to estimate the anticipated gross income of the marina and multiply the gross by the expenditure item percent. For example, if a marina

anticipated a gross income of \$500,000 then the projected total taxes to be collected could be anticipated to be three to four percent of the gross or between \$15,000 and \$20,000 per year. It must be remembered that these figures represent estimates and are appropriate only for approximation purposes.

These results should benefit community planning and development in the vicinity of large lakes or reservoirs. State and local officials can use the data to evaluate the cost of services to businesses versus their return to the community. Marina owners and managers can use the data to help make decisions regarding their business expansion.

It is apparent that the Lake Erie boating business has an important economic value and economic impact on the local economy. The boating industry has a large gross income and contributes substantially to both the tax base and the labor force in the eight county area in Ohio. Both local and state public officials and citizens should work cooperatively to insure the continued existence of this vital industry.

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OHIO SEA GRANT AREA EXTENSION AGENTS

Fred L. Snyder
Area Extension Agent -- Sea Grant
Ohio Cooperative Extension Service
Fremont Area Extension Center
1401 Walter Avenue
Fremont, Ohio 43420
(419) 332-1594

David O. Kelch
Area Extension Agent -- Sea Grant
Ohio Cooperative Extension Service
Lorain County Extension Center
1575 Lowell Street
Elyria, Ohio 44035
(216) 322-0127
(216) 233-5259

Frank R. Lichtkoppler
Area Extension Agent -- Sea Grant
Ohio Cooperative Extension Service
Lake County Extension Office
99 East Erie Street
Painesville, Ohio 44077
(216) 354-3554
(216) 946-2829 ext. 205
(216) 428-1194 ext. 205

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