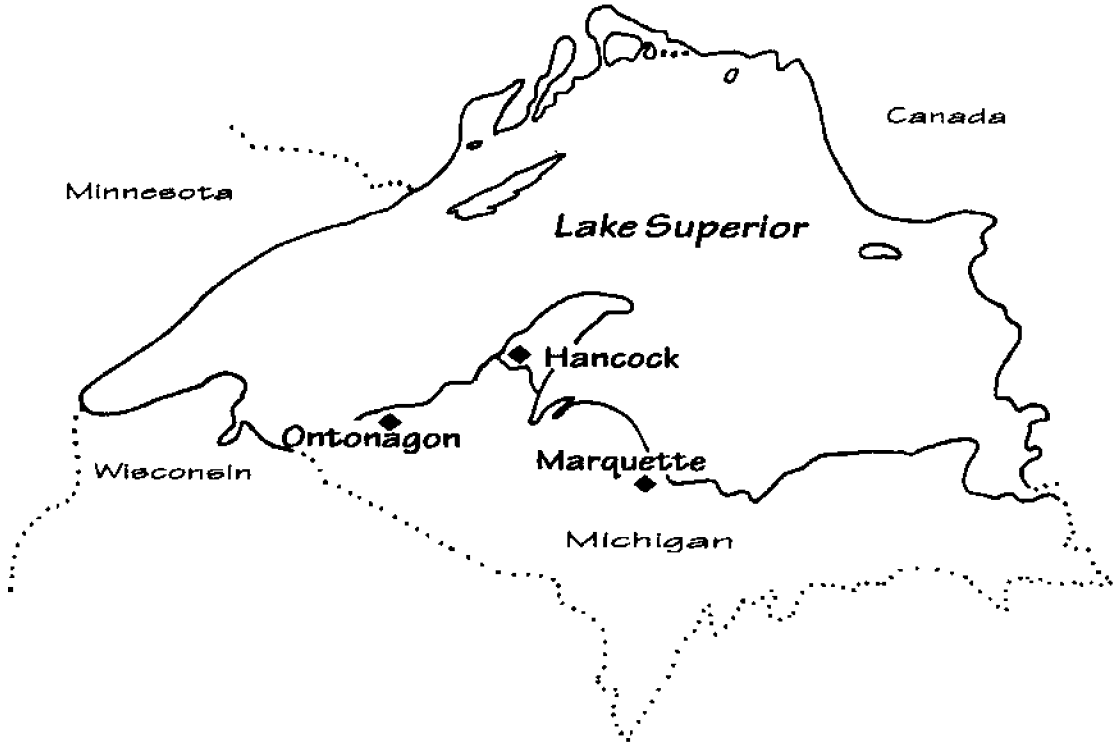
Upper Peninsula of Michigan Lake Superior 1992 Transient Boater Marketing and Economics Survey

Ronald E. Kinnunen and John D. Schwartz



Michigan Sea Grant College Program
MICHU-SG-94-204

UPPER PENINSULA OF MICHIGAN
LAKE SUPERIOR 1992 TRANSIENT BOATER MARKETING AND ECONOMICS SURVEY

by

RONALD E. KINNUNEN
Michigan Sea Grant, U.P. Extension Center
1030 Wright Street
Marquette, MI 49855

and

JOHN D. SCHWARTZ
Michigan Sea Grant College Program
Michigan State University
334 Natural Resources Building
East Lansing, MI 48824

MICHU-SG-94-204

Michigan Sea Grant College Program
The University of Michigan
4107 Institute of Science & Technology
2200 Bonisteel Boulevard
Ann Arbor, MI 48109

September 1994

* *For copies of this publication please contact Ron Kinnunen*

Contents

Upper Peninsula of Michigan Lake Superior

1992 Transient Boater Marketing and Economics Survey

Abstract. A marketing study of transient boaters at three Upper Michigan Lake Superior marinas is described. Survey methods are briefly presented along with findings in five major areas: (1) characteristics of transient boats and boaters, (2) market areas and travel patterns, (3) information sources, (4) boater spending and local economic impact, and (5) boater preferences and evaluation of marina attributes and services. Guidelines and recommendations are given for the use and application of the findings.

INTRODUCTION

Michigan has extensively studied registered boats and boats stored in seasonal slips at marinas. The most recent studies were conducted by Stynes et al. (1982, 1983) in 1980 and 1981 under Michigan Sea Grant Program funding and by Talhelm et al. in 1986 and 1987 with funding from the Michigan Department of Natural Resources and Michigan Boating Industries Association.

While providing excellent information on the boating fleet, these studies have provided little detailed information on the transient boating market. The term "transient" refers to boats or boaters on overnight trips away from their home port. The Michigan Department of Natural Resources in cooperation with coastal communities manages public marinas on the Great Lakes for the purpose of providing shelter and facilities for transient boaters. Private marinas and others like the Huron Clinton Metropolitan Park Authority also provide facilities and services for transient boaters in Michigan.

In 1988 research was initiated to better understand the transient boater market. A survey of transient boaters was carried out at Escanaba, Gladstone, and Fayette State Park during the summer of 1988. The results are presented in Stewart, Stynes and Mahoney (1988). Upon completion of that survey, the study was extended to other marinas in Michigan in order to assemble a more complete statewide profile of the transient boater market.

The Michigan Sea Grant Extension Program and Michigan State University Agricultural Experiment Station assembled funds to conduct a similar survey in 1989 at six different marinas.

These marinas were chosen to represent more of the diversity of Michigan marinas in terms of location, clientele and facilities (Stewart and Stynes, 1990).

The marinas studied in 1988 were all located in the Bay de Noc region of Michigan's Upper Peninsula. They are relatively small marinas drawing over 60 percent of their transient customers from Wisconsin and Illinois. Due to these unique characteristics, the results could not be readily applied to other marinas around the state.

As the budget for the 1989 survey was limited, marina selection also depended heavily on cooperation and interest of the local Sea Grant Advisory agents and the individual marina managers. Marinas participating in the survey in 1989 were Grand Haven, Muskegon, Leland, Sault Ste. Marie, De Tour, and Metro Beach Metropark. Metro Beach is operated by the Huron Clinton Metropolitan Authority and is located within Metro Beach Metropark. Grand Haven, Muskegon, and Leland marinas are operated jointly by Recreation Division, Michigan Department of Natural Resources (MDNR) and the local communities, and the De Tour marina is operated solely by MDNR. Sault Ste. Marie has two facilities, a private marina in town and a city/MDNR marina just outside of town. The majority of questionnaires completed at Sault Ste. Marie were from the private marina.

There still existed a need for information on transient boaters in Lake Superior. Thus this study was begun in the summer of 1992 to survey transient boaters at the three major full-service marinas on the Michigan Lake Superior Shoreline -- Marquette, Hancock, and Ontonagon.

METHODS

Survey methods closely paralleled the 1988 and 1989 study design, which was reasonably successful. Marina personnel were responsible for distributing a four page self-administered questionnaire to a random sample of skippers of boats registering at their marina for an overnight stay. Questionnaires could be returned to the marina prior to departure or by return mail using a business reply envelope that was provided.

Sample

Sampling procedures were designed to obtain a representative sample of boats registering at each marina for an overnight stay. For the three marinas, boaters were sampled systematically as they registered with the Harbormaster. Transient use statistics from 1991 at each marina were used to calculate a sampling interval to yield approximately 100 surveys distributed at each marina. Marina personnel distributed a questionnaire to every nth boater registering for one or more nights, where n is the sampling interval for the marina. Table 1 reports the sampling intervals by harbor and response rates.

Instrument

The 1989 survey instrument was modified slightly for 1992. The survey in 1992 also requested information from transient boaters on primary destination and the number of nights they stayed at the marina where they filled out the survey.

Study Objectives

(1) To describe the characteristics of transient boats and boating parties.
(2) To measure patterns of transient boating including characteristics of the present trip and general patterns of transient boating last year.
(3) To identify the primary sources of information used by transient boaters to find out about the marina and the local community.
(4) To estimate spending by transient boaters in the marina and the local community.
(5) To measure the importance of marina attributes to transient boaters and to evaluate facilities and services for transients.

RESULTS

We briefly describe the results within five areas defined by our primary objectives: (1) characteristics of boats and boaters, (2) market areas and travel patterns, (3) information sources, (4) boater spending and local economic impact, and (5) boater preferences and evaluation of marina attributes and services. We rely heavily on tables, most of which are self-explanatory. Only highlights are discussed in the text with some comparisons across the three marinas. General guidelines on the implication and application of findings are presented in italics at the end of each section. We do not attempt to make recommendations for individual marinas here.

Response Rate. We received a total of 109 usable questionnaires from the three participating marinas for an overall response rate of 50%. The response rates varied from 29% to 56% across the three marinas (Table 1). The budget did not permit extensive monitoring of distribution procedures or follow-ups to increase the response rate. Sample sizes range from 14 at Ontonagon to 71 at Hancock. Comparisons with harbor statistics indicate the samples are reasonably representative by month, boat type and size. We have not made any adjustments for the different sampling rates, lengths of stay, or frequency of trips. Totals are for the simple aggregation of the samples at the three marinas, representing each of the participating marinas in proportion to their sample size. Totals are not necessarily representative of all transient boaters in Michigan. Nevertheless, a number of findings are quite similar across the three marinas, as well as with the nine marinas studied in 1988 and 1989. Also, variation across the nine facilities surveyed to date provides a good initial picture of differences across the state. Readers familiar with these facilities can identify initial hypotheses about how these characteristics vary with locations and site characteristics.

Table 1. Questionnaire Distribution and Response by Harbor

Harbor	Sampling Interval	Surveys Distributed	Surveys Returned	Response Rate
Marquette	1	45	24	53
Hancock	2	126	71	56
Ontonagon	1	48	14	29

Characteristics of Boaters and Boats. Characteristics of transient boaters and boats are fairly similar across the three marinas. Skippers are almost all male, predominantly 40 to 69 years of age. The average age of the skipper is 52, while the average age of all members of the boating party is 44. The average party size is 2.6 with two thirds of all parties consisting of two people. Three fourths or more of the transient boating parties do not have children (age 19 or under) aboard. Crew members are primarily adults, but represent all ages. Although skippers

are almost all male, crews bring the ratio of men to women on transient boats to one to two (Table 2).

Almost two thirds of the skippers have over 20 years of boating experience, and about half of the crew have more than ten years experience. On a scale of 1 (beginner) to 7 (expert), most skippers rate themselves from 4 to 7 (Table 3).

Well over half the boats surveyed at the three marinas were power boats (Table 4). Most boats used on overnight trips are stored in the water, usually at a seasonal slip in a marina (Table 5).

▸ *The profiles of boats and boaters describe the market you currently serve. Comparisons with the totals of other marinas can reveal market segments you tend to attract more or less than other marinas. These differences may be due to your facilities, promotion/information, or your location. Understanding the boats you are serving can help guide decisions on facilities. Understanding of the people you are serving is important both for designing facilities and services. Skippers are almost all middle aged men, while boating parties represent all ages and are divided among men and women one to two. Age groups prominent among transient boaters will grow substantially during the 1990's, as the leading edge of baby boomers reach age 50 in 1995.*

Table 2. Party Characteristics by Harbor

	HARBOR		
	Marquette	Hancock	Ontonagon
	Party Size (%)		
People			
1	0	1.4	0
2	66.7	62.0	71.4
3	16.7	8.5	7.2
4	8.3	25.4	21.4
5	8.3	1.4	0
6+	0	1.4	0
	Skipper Age (%)		
Years			
<30	0	0	0
30-39	0	8.7	7.2
40-49	43.6	36.2	21.3
50-59	30.5	27.6	57.2
60-69	17.3	18.8	14.3
70+	8.6	8.7	0
	Crew Age (%)		
<10	5.3	2.7	4.8
10-19	23.7	11.6	4.8
20-29	0	1.8	0
30-39	7.9	18.7	23.8
40-49	28.9	25.0	19.0
50-59	13.1	14.3	33.3
60-69	15.8	18.8	0
70+	5.3	7.1	14.3
	Gender (%)		
Skipper			
Male	100.00	98.6	100.0
Female	0	1.4	0
Crew			
Male	28.9	33.0	31.6
Female	71.1	67.0	68.4

Table 3. Boating Experience and Skill

	HARBOR		
	Marquette	Hancock	Ontonagon
	Boating Experience (%)		
Skipper			
0-5 yrs	0	2.9	0
6-10	25.0	14.5	7.1
11-15	0	11.6	0
16-20	4.2	11.6	28.6
21+	70.8	59.4	64.3
Crew			
0-5 yrs	39.5	24.0	23.5
6-10	26.3	15.0	5.9
11-15	2.6	15.0	5.9
16-20	5.3	13.0	35.3
21+	26.3	33.0	29.4
	Skipper's Boating Skill [a] (%)		
1	0	0	0
2	0	0	8.3
3	0	1.5	0
4	26.1	12.1	8.3
5	13.0	18.2	16.8
6	17.4	34.8	33.3
7	43.5	33.3	33.3
TOTAL	100	100	100

[a] Average ratings where 1=Beginner, 7=Expert.

Table 4. Transient Boat Characteristics by Harbor

	HARBOR		
	Marquette	Hancock	Ontonagon
	Boat Length (%)		
17-25 ft.	25.1	15.5	14.4
26-30	25.1	29.6	28.5
31-35	16.6	23.9	35.6
36-40	16.6	19.7	14.3
41+	16.6	11.3	7.2
Total	**100**	**100**	**100**
	Boat Draft (%)		
<3 ft.	8.3	5.6	0
3	45.8	33.8	28.6
4	33.3	26.8	28.6
5	12.6	15.5	14.2
6	0	11.3	28.6
7+	0	7.0	0
Total	**100**	**100**	**100**
	Primary Propulsion Type (%)		
Power			
Inboard	50.0	33.8	35.7
I/O	25.0	28.2	21.4
Outboard	0	0	0
Total Power	**75.0**	**62.0**	**57.1**
Sail			
Gas auxiliary	8.3	8.5	14.3
Diesel auxiliary	16.7	29.5	28.6
No auxiliary	0	0	0
Total Sail	**25.0**	**38.0**	**42.9**
All Boats	**100**	**100**	**100**

Table 5. Transient Boat Ownership and Storage by Harbor

	HARBOR		
	Marquette	Hancock	Ontonagon
	Boat Ownership (%)		
Owned	100.0	97.2	100.0
Chartered	0	2.8	0
Borrowed	0	0	0
TOTAL	**100.0**	**100.0**	**100.0**
	Boat Storage During the Boating Season (%)		
In Water	79.2	90.1	64.3
At Marina	62.5	76.1	85.7
Seasonal Slip	58.3	77.5	85.7

Travel Patterns. Travel patterns of transient boaters are captured by examining the boater's permanent residence, where the boat is stored, where the trip began, the previous and next stops, and primary destination on this particular trip. Patterns vary quite a bit with the location of the marina relative to major markets. Northern marinas attract boaters from a wide geographic area. For example, Wisconsin and Minnesota are important markets for Hancock and Ontonagon, while Wisconsin and Lower Michigan are primary origins for Marquette (Tables 6 and 8). Nearly half of the boaters who were interviewed at the three marinas were permanent residents of Wisconsin and Minnesota.

About three fourths of the boaters at all three marinas are either coming from or going to another port. The vast majority of boaters are on extended trips (Table 7). About half of the visits to these three marinas were made during July. The majority of the boaters surveyed arrived at the marina between 11 a.m. and 8 p.m. The average boater spent two nights at the marina and about one third indicated that this was their primary destination.

Tables 8a-8c provide details for each marina on the distribution of visitors by storage location, trip origin, the previous and next stops, and primary destination. Boaters visiting the three marinas surveyed ranged from 40 to 100 percent indicating that a U.P. Lake Superior coastal county was their primary destination.

Transient boaters are active boaters. Almost nine out of ten took an overnight boating trip during the previous year with most reporting several trips. About one third of the trips were less than 50 miles and 40 percent were more than 100 miles. Boaters were away from home port an average of 24 nights with about a third away 29 or more nights (Table 9).

- *Origins of boaters identify key markets in which you may wish to promote. You may also wish to provide information about your marina in harbors that are within a one-day cruise, both to reach short trip boaters and to reach boaters on extended cruises headed in your direction. Needs of boaters on extended trips will vary from those on shorter trips. If you do not get a lot of repeat traffic, you may be doing something wrong. Also, first time visitors will have more basic information needs than repeat visitors.*

Table 6. Boater's Permanent Residence by Three Harbors where Interviewed (%)

Area	Zip Code [a]	Three Harbors Combined
Michigan		
Detroit	480-483	3
Tri-Cities	484-487	6
Lansing/Jackson	488, 489, 492	2
Kalamazoo	490, 491	4
Grand Rapids	493-495	4
Traverse City	496	1
Northern MI	497	2
Western U.P.	498, 499	20
Michigan Subtotal		42
Out of State		
Ohio		1
Indiana		2
Wisconsin		7
Minnesota		40
All Other States		8
Out of State Subtotal		58
GRAND TOTAL		100

[a] Michigan zip code areas are depicted in Figure 1.

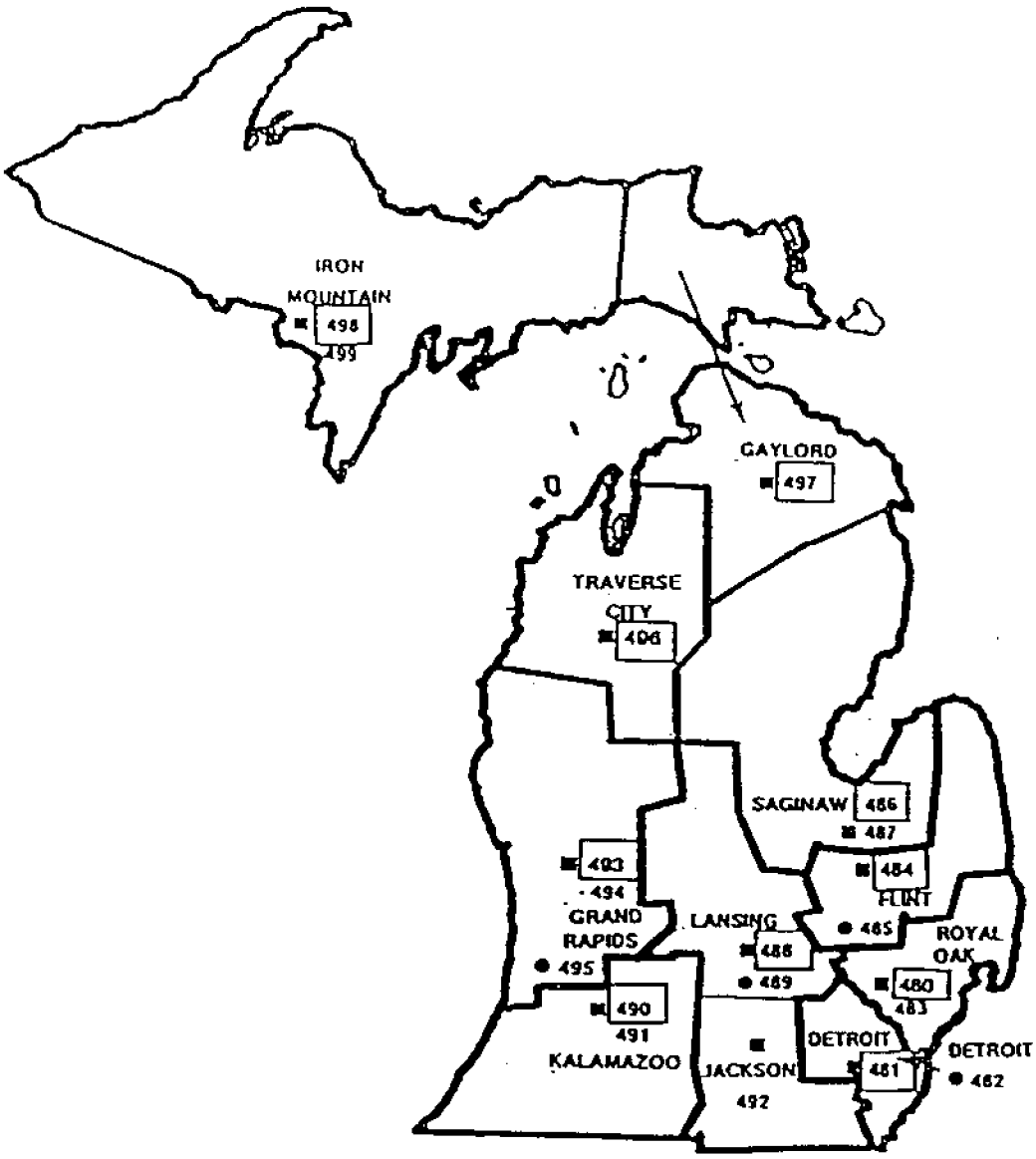


Figure 1. Michigan 3 Digit Zip Codes

Table 7. Travel Patterns on This Trip

	HARBOR		
	Marquette	Hancock	Ontonagon
First Stop (% Yes)	13.0	11.4	14.3
Primary Destination (% Yes)	36.4	30.0	28.6
Next Stop (%)			
Another Port	72.7	66.7	85.8
Home	9.1	11.6	7.1
Don't Know	18.2	21.7	7.1
Number Nights Spent Here	3.8	1.6	1.2
	Arrival at This Marina (%)		
Month			
May	4.3	1.5	7.1
June	8.7	6.0	14.3
July	52.2	65.7	50.0
August	34.8	22.4	28.6
September	0	4.5	0
Total	**100**	**100**	**100**
Time			
9-10 AM	0	5.5	0
11-12	23.5	10.9	23.1
1-2 PM	17.7	18.1	15.4
3-4	17.6	21.9	23.1
5-6	5.9	30.9	23.1
7-8	29.4	7.3	15.4
9-10	0	3.6	0
10 pm-9 AM	5.9	1.8	0
Total	**100**	**100**	**100**

Table 8a. Travel Patterns of Marquette Visitors (Percentages)

County/ State	Storage Location	Trip Origin	Previous Stop	Next Stop	Primary Destination
Alger	0	8.8	50.0	33.2	0
Charlevoix	4.2	4.3	0	0	0
Cheboygan	8.2	8.8	0	0	0
Chippewa	0	0	20.0	0	20.0
Gogebic	0	0	0	6.7	0
Houghton	12.4	13.0	0	20.0	0
Ionia	0	4.3	0	0	0
Iosco	8.3	8.7	0	0	0
Iron	4.2	0	0	0	0
Kalkaska	4.2	0	0	0	0
Keweenaw	4.2	0	10.0	6.7	20.0
Luce	0	0	10.0	6.7	0
Macomb	0	4.3	0	0	0
Marquette	0	4.3	10.0	13.3	0
Monroe	4.2	0	0	0	0
Ontonagon	0	0	0	6.7	0
Ottawa	8.3	8.8	0	0	0
Wayne	4.2	0	0	0	0
Subtotal	**62.4**	**65.3**	**100.0**	**93.3**	**40.0**
Out of state:					
Illinois	0	4.3	0	0	0
Indiana	4.2	0	0	0	0
Minnesota	4.2	0	0	0	0
Wisconsin	25.0	21.7	0	6.7	60.0
Ontario	4.2	8.7	0	0	0
Subtotal	**37.6**	**34.7**	**0**	**6.7**	**60.0**
TOTAL	**100**	**100**	**100**	**100**	**100**

Table 8b. Travel Patterns of Hancock Visitors (Percentages)

County/ State	Storage Location	Trip Origin	Previous Stop	Next Stop	Primary Destination
Alger	4.3	4.4	3.0	0	0
Antrim	0	1.5	0	0	0
Bay	2.9	2.9	0	0	0
Charlevoix	1.4	1.5	0	0	0
Cheboygan	1.4	1.5	0	0	0
Chippewa	0	0	6.1	2.2	7.4
Gogebic	0	0	0	11.1	0
Grand Traverse	0	0	3.0	0	0
Houghton	2.9	2.9	12.2	6.7	7.4
Iosco	1.4	1.5	0	0	0
Kalamazoo	1.4	0	0	0	0
Keweenaw	0	0	30.3	26.6	33.3
Mackinac	0	2.9	0	0	0
Macomb	1.4	1.5	0	0	0
Marquette	12.9	13.2	12.2	15.6	0
Ontonagon	2.9	2.9	18.1	20.0	0
Ottawa	2.9	2.9	0	0	3.7
Wayne	2.9	1.5	0	0	0
Subtotal	**38.7**	**41.2**	**84.9**	**82.2**	**51.8**
Out of state:					
Minnesota	7.1	8.8	3.0	0	7.4
Wisconsin	37.1	35.3	9.1	15.6	29.6
Ohio	1.4	1.5	0	0	0
Other States	4.3	2.9	0	0	0
Ontario	11.4	10.3	3.0	2.2	7.4
Other Countries besides Canada	0	0	0	0	3.7
Subtotal	**61.3**	**58.8**	**15.1**	**17.8**	**48.2**
TOTAL	**100**	**100**	**100**	**100**	**100**

Table 8c. Travel Patterns of Ontonagon Visitors (Percentages)

County/ State	Storage Location	Trip Origin	Previous Stop	Next Stop	Primary Destination
Chippewa	0	0	0	0	25.0
Gogebic	7.1	7.1	57.2	25.0	0
Houghton	0	0	28.5	50.0	25.0
Keweenaw	0	0	0	25.0	50.0
Macomb	7.1	7.1	0	0	0
Subtotal	**14.2**	**14.2**	**85.7**	**100**	**100**
Out of State:					
Minnesota	14.4	7.1	0	0	0
Wisconsin	71.4	78.7	14.3	0	0
Subtotal	**85.8**	**85.8**	**14.3**	**0**	**0**
TOTAL	**100**	**100**	**100**	**100**	**100**

Table 9. Previous Year (1991) Travel Patterns

	HARBOR		
	Marquette	Hancock	Ontonagon
Overnight trip in 1991 (% yes)	91.3	88.4	84.6
Number of Overnight Trips on the Great Lakes (%)			
0	9.2	12.3	18.2
1-4	50.0	43.1	9.1
5-9	9.0	13.8	18.2
10-15	9.2	9.3	27.2
16-20	13.6	7.7	9.1
20+	9.0	13.8	18.2
TOTAL	**100**	**100**	**100**
Average Distance of Trips in 1991 (%)			
Miles			
<50	33.3	23.8	30.0
50-99	28.6	35.6	30.0
100-199	9.5	20.3	0
200+	28.6	20.3	40.0
TOTAL	**100**	**100**	**100**
Number of Nights Away From Home Port (%)			
Nights			
0	8.8	11.8	18.2
1-7	17.3	14.7	9.1
8-14	13.1	17.6	0
15-21	17.4	17.7	27.2
22-28	13.0	5.9	9.1
29+	30.4	32.3	36.4
TOTAL	**100**	**100**	**100**

Information Sources. Just over half of the transient boaters at the three marinas were first time visitors, who will usually be less familiar with the harbor, the marina, and what is available in the community. Boaters at Ontonagon commented about the lack of other marina facilities in this area and 93% were not aware of any other transient marinas within an hour (Table 10). Transient boaters use a variety of sources for information about the marinas and community. Government Charts are the most frequently cited source for information on the marinas. Word of mouth, past experience, local publications, and the harbormaster are used for community information (Table 11). Boaters are generally more aware of sources of information about the marina than about the community. Boater access to information about the community could be improved either by additions to the Harbors Guide or by more extensive distribution of local tourist information at the marina.

- *Knowing how boaters obtain information about your facility/community is helpful in designing information or promotion programs. Pay attention to how your marina or community is presented in popular information sources. Make sure your listings in guidebooks are up-to-date and convey the information and image you want. Word of mouth and previous experience are very important. Your customers are your best promoters. Make sure you treat them well and they are passing along positive messages about your facility and staff to other boaters. The Harbormaster and staff should be well informed about facilities and services in the community and about nearby ports, so that they can adequately address the information needs of your customers. We also encourage cooperative efforts with local businesses and tourist organizations to better meet the transient boater's information needs. Communities wishing to attract more transient traffic should promote both their boating facilities and their community's attractions. Promotional information should be distributed in marinas within your primary market area and particularly in nearby ports.*

Table 10. Awareness of Other Marinas and Previous Visits to This Marina

	HARBOR		
	Marquette	Hancock	Ontonagon
Aware of another transient marina within one hour of here % Yes	50.0	43.5	7.1
Visited this marina before % Yes	37.5	47.9	57.1

Table 11. Information Sources by Harbor

	HARBOR		
	Marquette	Hancock	Ontonagon
Marina Information (%)			
Word of mouth	68.2	59.1	77.0
Past experience	68.2	54.6	69.3
DNR Harbors Guide	72.7	68.2	76.9
Government charts	95.5	72.7	92.3
Other charts	54.6	57.6	38.5
Local publications	13.6	13.6	0
G.L. Cruising Club	27.3	28.8	38.5
Harbormaster	18.1	30.3	30.8
Other	23.8	22.7	7.7
Community Information (%)			
Word of mouth	45.5	57.5	53.9
Past experience	45.4	47.0	38.5
Local publications	54.6	47.0	23.1
Harbormaster	45.4	37.8	23.1
DNR Harbors Guide	9.1	12.1	30.8
Other charts	22.7	19.7	7.7
Government charts	9.1	6.0	0
G.L. Cruising Club	0	24.2	7.7
Other	19.1	18.1	15.4

Note: Columns do not sum to 100% because respondents were asked to list all of the information sources they used.

Transient Boater Spending and Economic Impact. Transient boating parties spend an average of $322 in these harbors, divided about one to two between the marina and the local community. Boater spending is divided about equally between boat-related and personal expenses. About three-fourths of the boat-related expenses are made in the marina and almost all of the personal expenses are made in the community. The largest boat-related items are dockage and fuel, while personal expenses are divided primarily between restaurants, groceries, and shopping (Table 12). Details of average spending per party by harbor are presented in Tables 13 through 15.

Tables 12. Average Spending per Party by Category -- All Three Harbors

Spending Category	In Marina $	In Community $	Total $	Percent
Dockage	41.70	2.80	44.50	13.8
Fuel	69.40	1.60	71.00	22.1
Pump out	1.10	0	1.10	0.3
Repair	.40	28.80	29.20	9.1
Supplies	2.60	6.60	9.20	2.9
Boat subtotal	**115.20**	**39.80**	**155.00**	**48.2**
Restaurant	0	46.40	46.40	14.4
Grocery	0	32.30	32.30	10.0
Laundry	.80	1.70	2.50	0.8
Shopping	0	27.90	27.90	8.7
Recreation	0	20.40	20.40	6.3
Other	4.40	32.90	37.30	11.6
Personal subtotal	**5.20**	**161.60**	**166.80**	**51.8**
GRAND TOTAL	**120.40**	**201.40**	**321.80**	**100.00**

Note: Averages in this table reflect how many boaters spent money on an item and how much was spent by spenders in a given category.

Table 13. Average Spending per Party by Category -- Marquette

Spending Category	In Marina $	In Community $	Total $	Percent
Dockage	47.50	13.00	60.50	16.5
Fuel	63.20	4.30	67.50	18.5
Pump out	1.40	0	1.40	0.4
Repair	0	50.70	50.70	13.9
Supplies	1.80	25.60	27.40	7.5
Boat subtotal	**113.90**	**93.60**	**207.50**	**56.8**
Restaurant	0	41.00	41.00	11.2
Grocery	0	32.80	32.80	9.0
Laundry	0	4.10	4.10	1.1
Shopping	0	31.90	31.90	8.7
Recreation	0	15.30	15.30	4.2
Other	0	32.90	32.90	9.0
Personal subtotal	**0**	**158.00**	**158.00**	**43.2**
GRAND TOTAL	**113.90**	**251.60**	**365.50**	**100.00**

Note: Averages in this table reflect how many boaters spent money on an item and how much was spent by spenders in a given category.

Table 14. Average Spending per Party by Category -- Hancock

Spending Category	In Marina $	In Community $	Total $	Percent
Dockage	45.30	0	45.30	14.8
Fuel	76.50	1.00	77.50	25.4
Pump out	1.10	0	1.10	0.4
Repair	0.70	20.70	21.40	7.0
Supplies	3.40	1.00	4.40	1.4
Boat subtotal	**127.00**	**22.70**	**149.70**	**49.0**
Restaurant	0	53.30	53.30	17.4
Grocery	0	37.00	37.00	12.1
Laundry	1.20	1.20	2.40	0.8
Shopping	0	32.00	32.00	10.5
Recreation	0	24.60	24.60	8.0
Other	6.60	0	6.60	2.2
Personal subtotal	**7.80**	**148.10**	**155.90**	**51.0**
GRAND TOTAL	**134.80**	**170.80**	**305.60**	**100.00**

Note: Averages in this table reflect how many boaters spent money on an item and how much was spent by spenders in a given category.

Table 15. Average Spending per Party by Category -- Ontonagon

Spending Category	In Marina $	In Community $	Total $	Percent
Dockage	12.60	0	12.60	14.2
Fuel	42.40	0	42.40	48.0
Pump out	0.30	0	0.30	0.3
Repair	0	0	0	0
Supplies	0	2.10	2.10	2.4
Boat subtotal	**55.30**	**2.10**	**57.40**	**64.9**
Restaurant	0	21.40	21.40	24.2
Grocery	0	8.10	8.10	9.2
Laundry	0	0.40	0.40	0.5
Shopping	0	1.10	1.10	1.2
Recreation	0	0	0	0
Other	0	0	0	0
Personal subtotal	**0**	**31.00**	**31.00**	**35.1**
GRAND TOTAL	**55.30**	**33.10**	**88.40**	**100.00**

Note: Averages in this table reflect how many boaters spent money on an item and how much was spent by spenders in a given category.

Spending in these three harbors is just over 50 percent more than the spending measured in 1989 at six Michigan sites. Spending patterns varied somewhat across the three marinas, with Marquette and Hancock generating the most per boat spending and Ontonagon the least. Differences in the total spending as well as the allocation of spending between the marina and the community and between personal expenses and boat-related expenses seem to be related first to availability of products and services to spend money on, and secondarily to trip characteristics such as length of stay in the marina.

If we multiply the estimates of spending per boat in Table 16 by the numbers of boats served in each harbor, we get an estimate of the total spending generated each year by transient boaters in these three communities. We estimate these three marinas generated nearly 80 thousand dollars in spending by transient boaters in 1992, split about 60 and 40 percent between the community and the marina respectively (Table 17). More detailed itemization of spending can be obtained by multiplying the traffic counts from column two of Table 17 times the average spending by sector reported in Table 12 (or Tables 13 through 15 for each individual marina). Of particular note is the broad impact that transient boaters have on the community and their potential contribution to non-boating sectors of the local economy. Transient boaters spend somewhat more than the typical tourist and therefore represent a potentially lucrative tourist market segment for coastal communities.

- *It is important to understand the economic impact that transient boaters have on your marina and your community. The marina itself captures only about 40 percent of the boater's spending in the harbor. Transient boaters are tourists who are travelling by boat. In addition to their spending in the marina, they have similar impacts as other tourists in the community. In order to spend money in the community, transient boaters need information and possibly local transportation. Communities with business districts near the marina will reap more income from transients. Individual businesses can profit by catering to the special needs of transient boaters. Careful attention to transient boater needs can increase local sales and revenue. Marina operators can enhance their role in the community by clarifying their contribution to the local economy and working cooperatively with local businesses and tourist organizations to better serve transient boaters.*

Table 16. Average Spending per Party by Harbor, Type, and Location

Harbor	Spending in Dollars			Percent of Spending		
	In Marina	In Community	Total	In Marina	In Community	Total
	Boat Related Spending					
Marquette	113.90	93.60	207.50	31.2	25.6	56.8
Hancock	127.00	22.70	149.70	41.6	7.4	49.0
Ontonagon	55.30	2.10	57.40	62.5	2.4	64.9
Three Marina Avg.	**115.20**	**39.80**	**155.00**	**35.8**	**12.4**	**48.2**
	Personal Spending					
Marquette	0	158.00	158.00	0	43.2	43.2
Hancock	7.80	148.10	155.90	2.6	48.4	51.0
Ontonagon	0	31.00	31.00	0	35.1	35.1
Three Marina Avg.	**5.20**	**161.60**	**166.80**	**1.6**	**50.2**	**51.8**
	All spending					
Marquette	113.90	251.60	365.50	31.0	69.0	100.0
Hancock	134.80	170.80	305.60	44.1	55.9	100.0
Ontonagon	55.30	33.10	88.40	62.6	37.4	100.0
Three Marina Avg.	**120.40**	**201.40**	**321.80**	**37.4**	**62.6**	**100.0**

Table 17. Total Transient Boater Spending, 1992 by Harbor

Harbor	Boat Traffic 1992	Marina $	Community $	Total $
	Boat-Related Spending			
Marquette	57	6492	5335	11827
Hancock	165	20955	3745	24700
Ontonagon	87	4811	183	4994
Three Marina Totals	**309**	**32258**	**9263**	**41521**
	Personal Spending			
Marquette	57	0	9006	9006
Hancock	165	1287	24437	25724
Ontonagon	87	0	2697	2697
Three Marina Totals	**309**	**1287**	**36140**	**37427**
	All Spending			
Marquette	57	6492	14341	20833
Hancock	165	22242	28182	50424
Ontonagon	87	4811	2880	7691
Three Marina Totals	**309**	**33545**	**45403**	**78948**

Preferences and Evaluations. The most important reason for stopping in the harbor was to find a place to spend the night. This was particularly true at Ontonagon where 93 percent of the boaters were unaware of another marina with transient facilities within an hour. Next in importance was shelter and fuel. Visiting friends, special events, and fishing were not important reasons for boaters to visit these harbors (Table 18).

Table 18. Importance of Factors for Stopping in This Harbor

Attribute	Marquette	Hancock	Ontonagon
Place to spend night	1.6	2.3	1.6
Shelter	2.5	2.7	2.0
Fuel	2.8	2.6	3.1
Groceries	3.8	3.6	3.7
Local attractions	3.6	3.9	4.6
Recreation facilities	3.7	4.4	4.8
Visit friends	3.9	4.6	4.9
Special event	4.6	4.8	4.9
Fishing	4.5	4.9	4.6

1=crucial, 2=very important, 3=important, 4=somewhat important, 5=not important

Boaters were asked to rate the importance of marina attributes in choosing a marina on an overnight trip. Transient boaters' primary concerns are with the physical facilities (protection from rough weather, dock structures, utilities, showers) and the social atmosphere in the marina (security, hospitality, noise). Recreation ranked last in importance out of 13 attributes (Table 19).

Boaters were also asked to evaluate the marina on this same list of attributes. The evaluations of each marina's facilities are reported in Tables 20-22. The averages across all three marinas are provided here as a general indication of boater evaluations (see Table 19). It should be noted that evaluations varied widely across the three marinas. Boaters rated the performance of the marina on each attribute as *excellent* (1), *good* (2), *fair* (3), *poor* (4), or *not available* (5). Marina performance was quite high for Marquette and Hancock, indicating that in general these two marinas are concentrating on the attributes of most importance to boaters. Ontonagon shows some important discrepancies between the marina's performance and what is important to the boater, helping to pinpoint areas on which the marina should concentrate (i.e., cleanliness, water depth, noise, and showers).

Table 19. Importance-Performance Comparison (All Harbors, Averages)

Attribute	Importance	Performance
Protection	1.6	1.8
Cleanliness	2.0	1.4
Water depth	2.0	1.7
Security	2.2	1.7
Dock structures	2.3	1.5
Hospitality	2.3	1.2
Showers	2.3	1.5
Utilities	2.6	1.8
Noise	2.6	2.3
Marine radio	2.7	1.7
Easy to find	2.8	1.3
Near stores/restaurants	2.9	2.3
Recreation	3.9	2.7

Importance Rating: 1=crucial, 2=very important, 3-important
4=somewhat important, 5=not important.
Performance Rating: 1=excellent, 2=good, 3=fair, 4=poor, 5=not available

Table 20. Importance-Performance Comparison (Marquette)

Attribute	Importance	Performance
Protection	1.7	1.6
Cleanliness	1.8	1.2
Security	2.0	1.3
Hospitality	2.1	1.2
Water depth	2.2	2.0
Showers	2.2	1.2
Dock structures	2.3	1.2
Marine radio	2.3	1.3
Utilities	2.6	1.9
Noise	2.6	2.1
Easy to find	2.8	1.5
Near stores/restaurants	3.3	3.1
Recreation	3.5	1.7

Importance Rating: 1=crucial, 2=very important, 3-important
4=somewhat important, 5=not important.
Performance Rating: 1=excellent, 2=good, 3=fair, 4=poor, 5=not available

Table 21. Importance-Performance Comparison (Hancock)

Attribute	Importance	Performance
Protection	1.6	1.6
Water depth	1.9	1.4
Cleanliness	2.0	1.2
Security	2.2	1.8
Dock structures	2.3	1.5
Hospitality	2.4	1.1
Showers	2.4	1.4
Noise	2.5	2.2
Utilities	2.6	1.8
Easy to find	2.8	1.1
Near stores/restaurants	2.8	1.9
Marine radio	2.9	1.6
Recreation	4.0	2.7

Importance Rating: 1=crucial, 2=very important, 3-important
4=somewhat important, 5=not important.
Performance Rating: 1=excellent, 2=good, 3=fair, 4=poor, 5=not available

Table 22. Importance-Performance Comparison (Ontonagon)

Attribute	Importance	Performance
Protection	1.6	1.3
Cleanliness	2.1	2.8
Water depth	2.1	2.4
Showers	2.1	2.7
Dock structures	2.4	2.1
Security	2.5	2.1
Hospitality	2.6	2.1
Marine radio	2.7	2.8
Noise	2.8	3.0
Near stores/restaurants	2.8	2.6
Utilities	2.9	1.9
Easy to find	2.9	1.6
Recreation	4.3	3.6

Importance Rating: 1=crucial, 2=very important, 3-important
4=somewhat important, 5=not important.
Performance Rating: 1=excellent, 2=good, 3=fair, 4=poor, 5=not available

Boaters were also given the opportunity to suggest improvements to the marina. These were classified into categories and are summarized in Table 23. Boaters requested a wide range of additional or improved services.

It should be noted that preferences and evaluations may vary between different members of the boating party. Results reflect the viewpoints of the skippers, who may assign greater importance to boat-related facilities and services as compared with community facilities and personal services. The latter may be more important to other members of the crew.

Unsolicited positive comments are given in Table 24. It is very apparent that boaters are extremely pleased with Hancock's marina and staff.

- *Understanding your customers' needs and preferences is essential to serving their needs. Almost all effective organizations periodically evaluate their performance. For customer-oriented organizations there is no good substitute for having the customer evaluate your performance. Marinas should compare their performance on each attribute with the average for the three marinas to identify areas that may need improvement. Particular attention should be paid to attributes your customers rate as important, but for which they evaluate your performance below average. The open ended comments and suggestions tend to support the quantitative evaluations, while raising many topics for consideration by each marina.*

Table 23. Suggestion for Improvement by Harbor

	Marquette	Hancock	Ontonagon
Lower height of docks	0	1	0
Add ladders	0	1	0
Larger gas dock	0	1	0
Better docks	0	1	0
Put power and water at end of docks	0	1	0
Better landing (i.e., not level)	1	0	0
Better marking of transient docks	0	1	1
Dredge to greater depth	3	1	3
Need deeper wider channel entering marina	0	0	2
Put "probable" water depth in Harbor Guide Book	0	1	0
Need breakwater to prevent wake rock	0	3	0
Wake speed control	0	9	0
Cable T.V. for boaters who wish it	2	0	0
More shower facilities	0	2	0
Put restroom at other end of marina with access gate	0	1	0
Put slats on floor of shower change room	0	1	0
Shelf near sink for shaving gear	0	1	0
Clean restroom	1	0	7
Provide clean showers	0	0	7
Insufficient hot water	1	0	0
Provide locked restroom facilities	0	0	1
Remodel showers and bathroom	0	0	1
Laundry facility	1	0	0
Closer availability of stores and restaurants	3	2	0
Need rent-a-car or courtesy shuttle van into town	3	0	0
Need newspaper rack	0	1	0

Table 23. Suggestions for Improvement by Harbor (Cont.)

	Marquette	Hancock	Ontonagon
Need local tourism literature on restaurants, stores, and current activities (i.e., bulletin board)	0	5	0
Need dock cart	0	1	0
Need better marine radio reception off Lake Superior	0	1	0
Set marine radio to monitor channels 16 and 68	1	0	0
Michigan DNR harbor fee schedule is not geared to facilities available (i.e., dock with no facilities costs same as full-service marina)	0	2	0
Should have option to anchor or tie up without full service and fees	0	1	0
Fendered docking	0	1	0
Keep local children from area	0	1	0
Lower docking fee	0	1	0
Increase docking fee	0	0	1
Stop charging road tax on boat fuel	0	1	0
Make a dog run	1	0	0
Reduce industrial dirt	1	0	0
Reduce industrial noise	0	0	1
Better directions to marina from highway	1	0	0
Get new harbormaster	0	0	1
Need marina staff that are hospitable and available	0	0	1
Marina staff appear to be doing little or nothing	0	0	1

Table 24. Unsolicited Positive Comments

	Marquette	Hancock	Ontonagon
Excellent management and service	1	6	0
Well-operated marina	2	8	0
Clean marina	0	2	0
Michigan's marinas are the greatest	0	2	0

SUMMARY AND CONCLUSIONS

The 1992 Michigan Lake Superior transient boater survey was designed to extend information about Michigan's transient boating market in Lake Superior and to provide practical marketing and economic information for the cooperating marinas and communities. Data from three marinas in 1988, six marinas in 1989, and the three marinas in 1992 document some general characteristics of the transient boater market, while also illustrating many unique characteristics of the market in different harbors. While caution must be used in drawing general conclusions from the sample of twelve marinas, we can begin to identify some common patterns and some hypotheses that may explain differences among the marinas.

Boats taken on overnight trips on Lake Superior outside of their home port tend to be larger craft piloted by quite experienced skippers. The most common party is two adults, usually between the ages of 40 and 60. These boats tend to be stored in the water at marinas in seasonal slips and are away from home port an average of 24 nights a year divided among several trips. About two thirds of the trips are 50 miles or longer. About 60 percent of the transient boaters in the marinas studied were from out-of-state, principally Michigan's neighboring states of Wisconsin and Minnesota.

Transient boaters should be seen both as boaters and as tourists. As boaters, they are concerned with the safety and security of their craft, and the availability of necessary marine services such as dockage, navigational aids, fuel, and dockside utilities. After the basic needs for dockage and utilities, cleanliness (particularly bathrooms and showers), security and hospitality are the three most important marina features for transient boaters.

As tourists, transient boaters generally want or need food, local transportation, recreation, and information. Increasing access to local information and transportation can help to better serve the boaters' needs, and to generate additional sales for local businesses. These are particularly important if the marina is not located near commercial facilities. Communities such as Marquette that are now in the process of locating a transient marina near local businesses and attractions (or vice versa) can benefit the marina, the businesses, and transient boaters.

Cooperation between marinas, local visitor bureaus and businesses in the community can likewise benefit all concerned.

Our survey uncovered a great deal of variation across the harbors. Most of the major differences seem to be related to the location of the harbor relative to concentrations of seasonal slips, and the marina location relative to the community. Harbors close to large markets tend to attract more repeat traffic and boaters on shorter trips. By contrast, Lake Superior marinas serve boaters on more extended trips and therefore draw larger craft with more experienced skippers from a broader range of trip origins.

Spending in a given harbor seems to depend most upon opportunities to spend money in the marina and the community and secondarily upon trip and party characteristics. Transient boater economic impacts on the community also depend upon the volume of traffic.

Differences across the twelve marinas begin to illustrate how the general location of a transient facility as well as the specific location of the marina relative to the community influence the kinds of boats and boaters that are attracted, and the impacts those boaters will have on the community.

The 1992 boating season on Lake Superior was one of the worst on record because of below normal summer temperatures and a higher frequency of extremely windy days. Harbormasters at all three marinas reported that their 1992 transient boater traffic was down significantly. Thus the economic impacts of transient boaters are probably underestimated in this report.

ACKNOWLEDGEMENTS

We would like to acknowledge Norma Matteson who entered the data from the surveys into the statistical template and for her efforts with the layout and typing of the manuscript. Joe Chause (Marquette Harbormaster), John Turausky (Marquette Parks and Recreation Director), Brach Schnaubel (Hancock Marina Manager), Glenn Anderson (Ontonagon Village Manager) and Hector Landree (Ontonagon Harbormaster) are to be thanked for their efforts on coordinating transient boater surveys at their respective marinas. Millie Flory designed the cover for this publication. Finally, we would like to thank Sue Stewart, Dan Stynes, and Ed Mahoney who developed the survey and report format for the 1988 and 1989 transient boater studies from whose work this study borrowed .

REFERENCES

Stewart, S.I., D.J. Stynes, and E. Mahoney. 1989. Transient boater marketing and economics. In N. Ross, (Ed.) Proceedings of the 1st Annual Marina Research Conference (pp 307-330). Wickford, RI: International Marina Institute.

Stewart, S.I. and D.J. Stynes, 1990. 1989 Transient Boater Marketing and Economics Survey. East Lansing: Dept. of Park and Recreation Resources, Michigan State University.

Stynes, D.J., G.L. Brothers, D.F. Holecek, and D. Verbyla. 1983. Spending patterns and economic impacts of Michigan registered boat owners. Ann Arbor: Michigan Sea Grant Program Technical Report MICHU-SG-83-210.

Stynes, D.J. and D. Safronoff. 1982. 1980 Michigan Recreational Boating Survey. Ann Arbor: Michigan Sea Grant Program Technical Report MICHU-SG-82-202.

Talhelm, D.R., S.W. Jordan, and D.F. Holecek, 1988. 1986 Michigan recreational boating survey. Lansing: MI Dept. of Natural Resources and East Lansing: Travel, Tourism, & Recreation Resource Ctr., Michigan State University.