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Minnesota Sea Grant Extension

University of Minnesota

Western Lake Superior Marinas

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Introduction

New and expanded boating facilities have been developed in western Lake Superior over the last 10 years to accommodate demand. More public and private boating facilities are planned or have been proposed to provide more marinas, harbors of refuge, transient docks, and boat launch facilities on western Lake Superior. This report identifies existing marina facilities and boater use to help determine future facility needs.

The information in this report is based on a study of marinas conducted during the summer of 1984.* Facility managers or owners of marinas in western Lake Superior were interviewed on-site. A total of 18 facilities were identified as commercial marinas, public marinas, or yacht clubs.

The western Lake Superior study region extends from Saxon Harbor, Wisconsin to Grand Portage, Minnesota. The region was subdivided into four areas for analysis: (1) the Duluth-Superior port and St. Louis Bay; (2)

Minnesota's North Shore from the Duluth harbor entrance to Grand Portage; (3) Wisconsin's South Shore from the entry at Superior to Cornucopia and from Ashland to Saxon Harbor; and (4) Wisconsin's Apostle Islands from Red Cliff area to Washburn.

Marina Characteristics

According to a report by the U.S. Corps of Engineers, the study area included an estimated 930 seasonal slips and 10 transients slips at marinas in 1977. Seven years later, this study identified 1,557 seasonal slips and 148 transient slips at marinas in the same area. These slips are concentrated in Duluth-Superior and the Apostle Islands where the average number of seasonal slips per marina (159 and 108, respectively) greatly exceeds the North Shore and South Shore areas (33 and 35, respectively). The number of seasonal and transient boat slips listed in Table 1 does not include dry storage where

Table 1
The Number of Marinas, Boat Slips, and Launching Facilities

		Availabl Slip		Available Launching Facilities		
Area	Number of Marinas	Full Season	Transient	Launch Ramps	Boat Hoists	
Duluth-Sup		636	46	5	3	
North Shore Apostle Isla	ands 6	132 649	33 57	4 8	1 5	
South Shor	re 4	140	12	4	0	
Total	18	1,557	148	21	9	

*A COOPERATIVE EFFORT BY THE MINNESOTA AND WISCONSIN SEA GRANT PROGRAMS

boats are kept on trailers or pulled up on shore at marinas.

The number of launch ramps and boat hoists is greater in the Duluth-Superior and Apostle Islands areas than in other areas (Table 1). The disparity in geographic distribution is greatest for boat hoists and is probably related to the concentration of larger boats in the Duluth-Superior and Apostle Islands areas.

Occupancy Rates

The percentage of rented seasonal slips ranged from 82 percent to 92 percent (Table 2) with some marinas reporting 100 percent occupancy. The variation in occupancy rates was more often related to price or utility/safety considerations than to geographic location.

For example, some slips are too exposed to storm conditions and wave action to be considered desirable locations in a marina. Thus, total occupancy should not be considered the only measure of excess (unmet) demand since other factors like safety, price, and quality affect occupancy at each marina. Seven managers, including five managers who kept boater waiting lists, perceived that excess demand existed and planned to add some new slips to their marinas by 1986.

Historically, marinas in the Apostle Islands area and South Shore reported 80 percent occupancy in 1972-75 studies (no waiting lists needed) and 95 percent occupancy in 1979 (with boater waiting lists). Thus, facility expansion during 1979-84 had somewhat reduced the level of excess boater demand by 1984.

Occupancy rates at transient slips varied substantially by marina, month, and day of the week (Table 2). Some marinas reported only infrequent use of their slips while others reported use beyond the design capacity of the transient facilities. Average weekend day use greatly exceeded weekday use.

Table 2
Full Season and Transient Slip Use

Average Transient Daily Use

Area	Full Season Use	Weekdays	Weekend Days
	% occupancy	% occupancy	% occupancy
Duluth-Superior	90	43	63
North Shore	82	15	48
Apostle Islands	89	23	44
South Shore	92	58	92
Total	89	. 30	55

Type of Boats

The total percentage of motorboats and sailboats using seasonal slips in western Lake Superior marinas is similar (47 percent and 53 percent, respectively). Most motorboats are 16-25 feet in length and most sailboats are 26-39 feet in length (Table 3).

Sailboats are predominantly located in the Apostle Islands and Duluth-Superior marinas. Motorboats are located throughout western Lake Superior with the

Apostle Islands area reporting the smallest percentage of seasonally moored motorboats.

Sales and Services

Most marinas provide gasoline sales, pumpout stations, outdoor winter boat storage, and dockside water and electrical hookups (Table 4). Other profit centers — sales, rentals, and repairs — are generally provided only by the larger marinas in Duluth-Superior and the Apostle Islands.

Table 3

The number of Boats, By Type and Size,
Berthed at Seasonal Slips

	Duluth- Superior		North Shore	Apostle Islands		South Shore		Total		
Boat Type/Size	Numbe	r %	Number	%	Number	r %	Number	%	Numb	er %
Motorboats										
Less than 16 ft 16-25 ft 26-39 ft 40-64 ft More than 65 ft	2 198 124 11 0	** 35 22 2 0	8 39 35 2 0	7 36 32 2 0	0 45 44 7 1	0 8 8 1 0	1 54 51 2 0	1 44 42 2 0	11 336 254 22 1	1 25 19 2 **
Subtotal Sailboats	335	59	84	77	97	17	108	89	624	47
Less than 16 ft 16-25 ft 26-39 ft 40-64 ft More than 65 ft	0 87 145 7 0	0 15 25 1 0	0 7 17 0 0	0 7 16, 0	1 38 357 59 0	0 7 65 11 0	0 4 10 0	0 3 8 0	1 136 529 66 0	** 10 39 4 0
Subtotal	239	41	24	23	455	83	14	11	732	53
Total	574	100	108	100	552	100	122	100	1356	100

^{**}Less than 1 percent

Table 4

The Percentage of Marinas Providing
Reating-Related Sales and Services

Sales/Service	Number Marinas	% of all Marinas
Sales		
Motorboats Sailboats Motors Marine Supplies Trailers Gasoline	3 3 4 9 2 15	17 17 22 50 11 83
Rental		
Motorboats Sailboats	4 3	22 17
Repair		
Outboard Engines Inboard Engines Wooden Boats Fiberglass Boats	9 9 7 7	50 50 39 39
Services		
Pumpout Stations	12	67
Dockside Elec. Hookup	14	78
Dockside Water Hookup Winter Boat Storage	14	78
(within building) Winter Boat	2	11

Storage

(open yard)

Slip Rental Rates

Slip rental rate schedules vary substantially between marinas and are calculated on different bases: per foot basis, boat size categories, slip size categories, flat rate, and combinations of two or more different approaches. Some marinas in the Apostle Islands area require membership or financial investment such as slip purchase or long-term lease in addition to seasonal slip rental fees. For the purposes of this study, those marinas are not included in this analysis of regular seasonal and daily rental rates.

Five boat sizes were selected to allow for realistic comparisons of seasonal rates (Table 5). For example, a 20 foot boat had an average seasonal rate of \$349 (\$17.45 per foot) with individual marina rates varying from \$120 to over \$800. A 40 foot boat had an average seasonal rate of \$624 (\$15.60 per foot) with individual marina rates varying from \$150 to over \$1,300. The wide disparity in price is somewhat related to quality, location, and services offered but it also suggests that pricing policies at some marinas have not been carefully set to reflect the costs of operating a marina and the need to maximize revenues generated without adversely affecting demand.

The average rental rate per foot varied from \$14.85/foot to \$17.45/foot in western Lake Superior marinas depending on the boat size (Table 5). Although rental rates are only rarely calculated on a per foot basis, it does offer a means of comparison between regions and

Table 5

The Average Rental Rates of Full Season Boat Slips*

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	Duluth	Duluth-Superior		Shore	Apostle Islands	
Selected Boat Sizes	Number Marinas	Average Rental Rate	Number Marinas	Average Rental Rate	Number Marinas	Average Rental Rate
20 ft	4	\$384	3	\$304	4	\$507
25 ft	4	\$441	3	\$336	4	\$554
30 ft	4	\$521	3	\$392	4	\$643
35 ft	4	\$616	4	\$541	4	\$731
40 ft	4	\$710	4	\$599	3	\$94 3

^{*}Excludes boater-owned berths and dock facilities.

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over time. The average rates in Duluth-Superior and the North Shore were similar to the regional average. The average rates in the Apostle Islands area were from \$20 to \$25 per foot and were significantly greater than the regional average. The average rates along the South Shore were from \$5 to \$10 per foot and were significantly less than the regional average.

Previous marina studies of the Apostle Islands and South Shore areas indicated that seasonal rates averaged \$8.00 per foot in 1975 and \$9.19 per foot in 1979. By 1984, the average seasonal rate ranged from \$13.60 to \$17.40 per foot depending on the boat length. Average seasonal rates increased 15 percent between 1975 and 1979, and increased 70 to 120 percent between 1975 and 1984.

A 1975 study of 3 marinas in Duluth-Superior and the North Shore reported average seasonal rates ranging from \$7.40 to \$8.90 per foot. Those same 3 marinas in 1984 reported average seasonal rates ranging from \$15.70 to \$18.40 per foot, an increase of approximately 110 percent over the 9 year period.

The average daily rental rates for transient boat slips ranged from \$6.80 for a 20 foot boat to \$12.60 for a 40 foot boat (Table 6).

Table 6

The Average Daily Rental Rates for Transient Boat Slips

Selected Boat Sizes	Number Marinas	Average Rental Rate	Range of Rental Rates
20 ft	17	\$6.80	\$2.50-11.00
25 ft	17	\$8.00	\$4.00-12.50
30 ft	17	\$9.70	\$4.00-15.40
35 ft	17	\$11.20	\$4.00-19.00
40 ft	17	\$12.60	\$4.00-25.00

South Shore

TOTAL

Number Marinas	Average Rental Rate	Number Marinas	Average Rental Rate	Range of Rental Rates	Ave. Rental Rate per ft. (\$/ft)
4	\$189	15	\$349	\$120-820	\$17.45
4	\$194	15	\$384	\$150-820	\$15.35
4	\$213	15	\$445	\$150-980	\$14.85
4	\$219	16	\$527	\$150-1,140	\$15.05
3	\$225	14	\$624	\$150-1,310	\$15.60
3	\$225	14	\$624	\$150-1,310	\$15.60

Table 7

The Average Rental Rates
of Launch Ramps and Boat Hoists

		Launch Ramp			Boat Hoist Use	
Selected Boat Sizes	Number Marinas	Average Rate	Range of Rates	Number Marinas	Average Rate	Range of Rates
20 ft 25 ft	11 11	\$2.80 \$2.80	\$1.00-5.00 \$1.00-5.00	9	\$53 \$61	\$30-80 \$38-90
30 ft	11	\$2.80	\$1.00-5.00	9	\$6 8	\$45-105
35 ft 40 ft	*	*	*	9 9	\$77 \$85	\$53-140 \$55-160

^{*}Not suitable for boats of this length.

Boat Launching and Storage Rates

Launching at marina boat ramps generally cost a flat rate of \$1 to \$5 per boat regardless of boat length (Table 7). Marinas without launch ramps or where use was free were excluded during the calculation of the average launch ramp fee. Although some marina launch ramps generate minimal revenues directly, ramp use increases business in related profit centers, such as gasoline sales.

For those marinas with boat hoist facilities, the average rate per launching ranged from \$53 for a 20 foot boat to \$85 for a 40 foot boat (Table 7). Many marinas offered special rates when use of the boat hoist was associated with other profit centers at the marina such as boat or engine repairs, winterizing services, or winter storage.

Twelve marinas offered winter boat storage in open yards for a fee and 2 marinas offered indoor winter boat storage. For those marinas offering outdoor storage, many were calculated on a flat fee basis with little consideration of boat length since available space for storage generally exceeds demand. Winter boat storage rates were widely divergent between marinas with average outdoor rates ranging from \$302 for a 20 foot boat to \$507 for a 40 foot boat (Table 8).

Table 8

The Average Rental Rates for Outdoor Winter Boat Storage

Selected Boat Sizes	Number Marinas	Average Rate	Range of Rates
20 ft 25 ft	12 12	\$302 \$342	\$100-600 \$100-600
30 ft	12	\$394	\$100-600
35 ft	12	\$448	\$100-630
40 ft	12	\$ 507	\$100-750

Discussion

Previous studies of marina management on western Lake Superior have suggested that one means to improve profitability is through an annual review of pricing policies. The wide disparity in slip rental pricing schemes between marinas (such as flat rate versus a per foot rate) makes comparative analysis difficult for managers. The variations in price for each rental or service offered reflect, to some extent, differences in quality, location, and other services available. However, these price variations also indicate that pricing decisions may contribute to low profitability at some marinas. For example, some marinas reported 1984 seasonal slip rental rates that were less than the 1975 rates of other marinas. More standardized approaches to pricing slip rentals would provide the potential for a comparative analysis for marina managers and boaters.

Since 1978-79, the increased number of available slips in western Lake Superior has somewhat decreased the overall occupancy rates at marinas. Some marina managers are planning to expand the number of seasonal slips available by 1986 and several new marinas/harbors of refuge are proposed for development in western Lake Superior in the near future. There are indications that excess (unmet) demand exists depending on the price, quality, location, related services available, and safety from adverse wave action and storms. For further information on boater needs and levels of demand for new facilities, see *Recreational Boating on Western Lake Superior During 1984*, Note No. 18 in this series.

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