

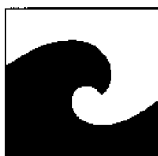
**SELECTED BOAT RAMPS IN THE MARINE
WATERS OF NASSAU AND SUFFOLK
COUNTIES: SUMMER USE
CHARACTERISTICS**

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Purpose and Objectives

This project was originally undertaken to allow a comparison of boat ramp use at all of the state funded marine ramps on Long Island to a group of roughly similar county or local municipality funded sites. New York Sea Grant Extension designed and conducted the survey under contract to the New York State Department of Environmental Conservation. DEC Marine Access Staff sought Sea Grant's survey expertise to help gather information about use and user perceptions at public boating launching facilities. Specifically, information was sought to prove or disprove beliefs that open access facilities are subject to more severe crowding, vandalism or other problems than are residency restricted sites. Such information was seen as useful in future discussions between DEC and municipalities which might wish to explore opportunities for access site development using federal or state monies, in return for local maintenance and open access agreements. Given the difficulty in addressing this issue on a scientific basis, potential differences between these two groups of sites were measured only as a function of user perceptions.

Other objectives of the project included efforts to: 1) quantify seasonal usage levels at the 9 sites; 2) develop estimates of the proportion of use by user groups (i.e. angling, recreational boating); and 3) obtain user group perceptions about the need for additional facilities and if so, where.

It was assumed that the information generated as a result of the survey, though preliminary in nature, would be useful to those agencies and organizations seeking to improve or increase recreational access to marine resources. The resulting data may also be useful to planning agencies who might wish to gather information about current use of these access facilities. Finally, the information may be helpful to marina operators, boat dealers, and other businesses interested in gathering boating market characteristic information.

Introduction and Background

Boating access to the marine environment is an important quality of life issue for residents in New York's marine district. Several state agency reports (NYSDEC, 1993; NYSOPRHP, 1988; Governor's Task Force on Coastal Resources, 1991), have discussed the expected growth in demand for coastal access in general, and boating access specifically. For example,

motorboating activity in New York State is projected to grow eight percent from 1985 to 2010, with an estimated 22,600,000 activity days expected to occur in 2010 (NYSOPRHP, 1988). Even absent any increase, boating is already an economically important and popular recreational activity in the marine region of New York State. In 1991, 103,403 motorboats were registered in the five boroughs of NYC, Rockland, Westchester, Nassau and Suffolk Counties (NYS DMV, unpublished data). Estimates for the number of trailerable boats are not readily available. However, 74 percent (76,613) of these boats are 25 feet or less in length, and are capable of being launched at ramps with modern trailers and tow vehicles.

Data suggesting how or how often recreational boaters utilize New York's marine waterways are not readily available. However, Kahn (1989) estimated that some 574,000 anglers fish primarily aboard private boats, many of which are trailerable.

Much is known about the number and location of launch facilities which serves the boating public discussed above. Estimates of the number of state, county, local municipal, and commercial ramps serving marine waters in Nassau and Suffolk Counties range from 104 (*L.I. Fisherman*, 1992) to 181 (NYSDEC, 1993). Despite the importance of these facilities to recreational and governmental communities, however, no data currently exist that might serve to characterize the reasons for use (i.e. fishing, water skiing, pleasure boating) of any ramps serving marine boaters in New York. Given the fact that these ramps must serve as points of origination for thousands of boating trips, it seems appropriate to develop some understanding of the recreational activity taking place at these sites. This study was undertaken as a first step to characterize recreational boat use for trips originating from and returning to some nine state, county, or local municipal ramps in Nassau and Suffolk Counties. It should be noted that this study was modest in terms of scope, number of ramps investigated, and budget. Although some conclusions are offered, the project was envisioned to be primarily a pilot study for later investigations.

METHODS

During the summer of 1991, a single interview agent employed by the New York Sea Grant Extension Program interviewed boaters at four state funded and five locally funded boat ramp facilities in Nassau and Suffolk Counties (Figure 1). A total of 780 interviews

were conducted during the period June 14 to August 10. All interviews provided usable data, however, some questions were not applicable or not answered for some interviews resulting in less than 780 responses for some questions. A copy of the survey instrument tool is given in Appendix A.

Shore, John J., Kings Park, Peconic, and Wantagh in the figures and tables included in this report.

As indicated in the introduction, this project was designed to gather information at a small number of facilities over a rather brief sampling period. Since the design of the project was not particularly rigorous

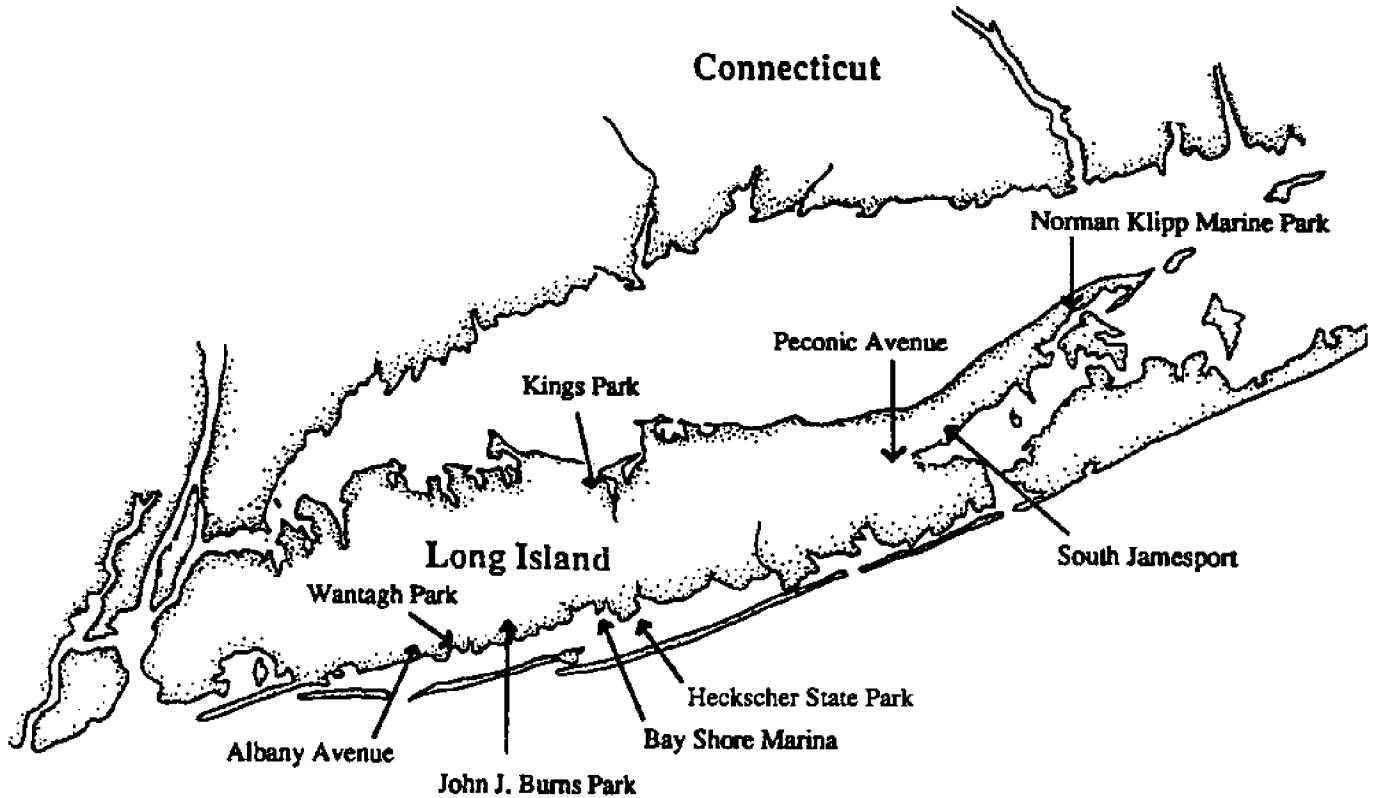


Figure 1. Sampling sites.

The four state funded ramps included in the survey were: Norman Klipp Park in Greenport, the South Jamesport ramp operated by the Town of Riverhead, the Albany Avenue facility maintained by the Village of Freeport, and the ramp located in Heckscher State Park in the Town of Islip. These sites are referred to as Klipp, Jamesport, Freeport, and Heckscher in the various tables and figures that follow.

County or local municipality-funded sites chosen for comparison were: the Town of Islip's Bay Shore Marina ramp, Town of Oyster Bay's John J. Burns facility, Town of Smithtown's Kings Park launch site, and Nassau County's Wantagh Park ramp. Some data dealing primarily with need for access were also collected at the Town of Riverhead's Peconic Avenue ramp. These ramps are denoted as Bay

in its ability to test hypotheses, the collected data were not subjected to statistical analysis. The conclusions presented, therefore, should not be construed to be statistically valid. The summaries presented, however, are suggestive of patterns which can and should be investigated in a later, more in depth analyses.

RESULTS AND DISCUSSION

Boater Opinions

Opinions of boaters about site conditions suggest little dissatisfaction with conditions at both state-funded and town/county-funded sites (Figure 2). However, respondents gave somewhat higher ratings to the state-funded sites, than they did the town/

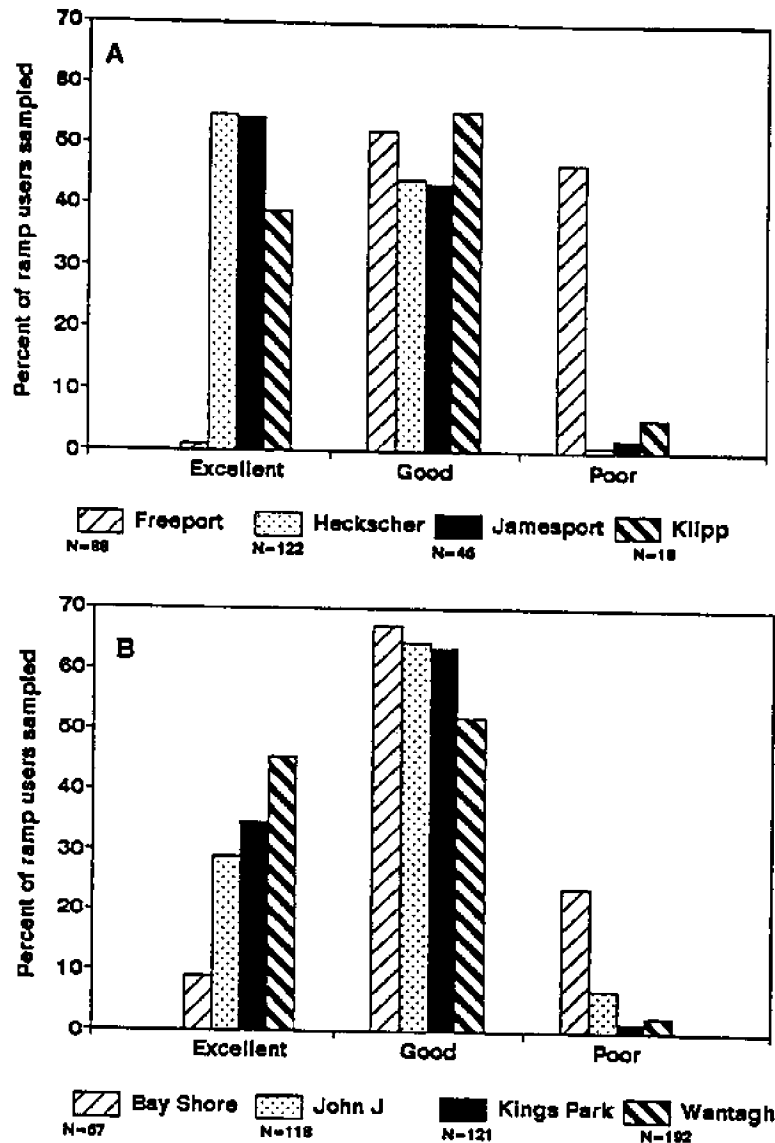


Figure 2. Boater opinions of site conditions based on interviews at: a) state funded sites, and b) town/county funded sites.

county-funded sites. A notable exception to this pattern was the opinions about the Albany Avenue ramp in Freeport, which many boaters rated as poor in terms of site conditions.

Boaters' views on facility designs largely mirrored opinions about site conditions. In general, most ramp users gave the state-funded sites a rating of "excellent," with most town/county-sites receiving a rating of "good." Again, ratings of the Albany Avenue ramp were atypical for state-funded sites (Figure 3).

A question of dock space adequacy was included in

the survey, assuming this issue would provide some crude measure of the perception of crowding at a given boat ramp. The survey results indicated very little dissatisfaction with this aspect of each facility, regardless of whether the ramps were state or locally funded (Figure 4). It would appear that this issue has been well addressed by facility designers for the sites used in this study.

One goal of this study was to gauge public perception about the need for additional large volume, open access launch ramps in the marine region, and identification of those areas most in need of such

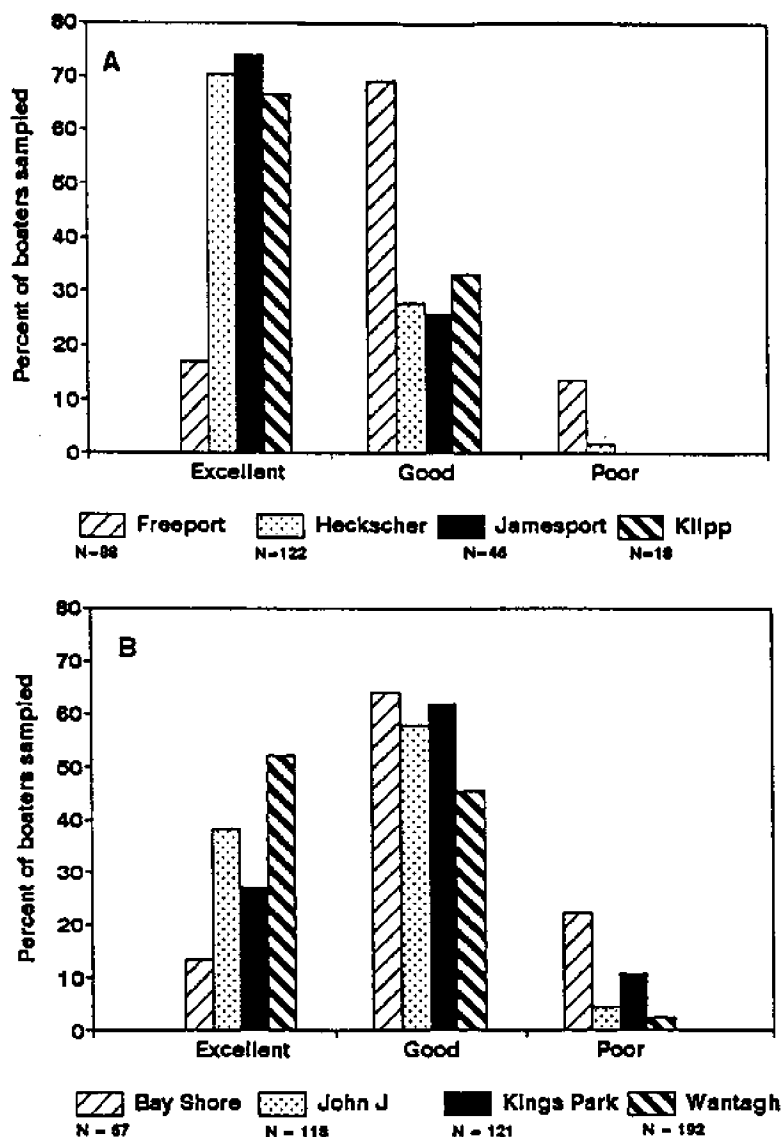


Figure 3. Boater opinions of ramp designs based on interviews at: a) state funded sites, and b) town/county funded sites.

facilities (see Appendix A, first question on page 2, and Appendix B.) The related summarized data (Figures 5 and 6; Tables 1 and 2) suggest two generalizations may be reached as far as boater public perception of these issues. First, little consensus on these questions exists among ramp users. Secondly, identification of areas needing ramps appears to be a function of interview location and respondents' residences.

At Freeport's Albany Avenue site, for example, 38 percent of the boaters interviewed (all boating groups) indicated that their access was restricted by the lack

of open access ramps (Figure 5A). Conversely, 57 percent of the boaters interviewed at Heckscher (all boating groups), answered "yes" to the same question. Patterns in the "anglers only" group were equally diverse, with most anglers at Heckscher responding "yes" to the question, most anglers at Klipp responding "no," and anglers at Freeport and Jamesport nearly equally divided on the issue.

Patterns at the town/county funded sites were also quite site specific (Figure 5B). Most boaters (58%) at the Bay Shore site, for example, indicated access was limiting, and anglers at this site were clearly

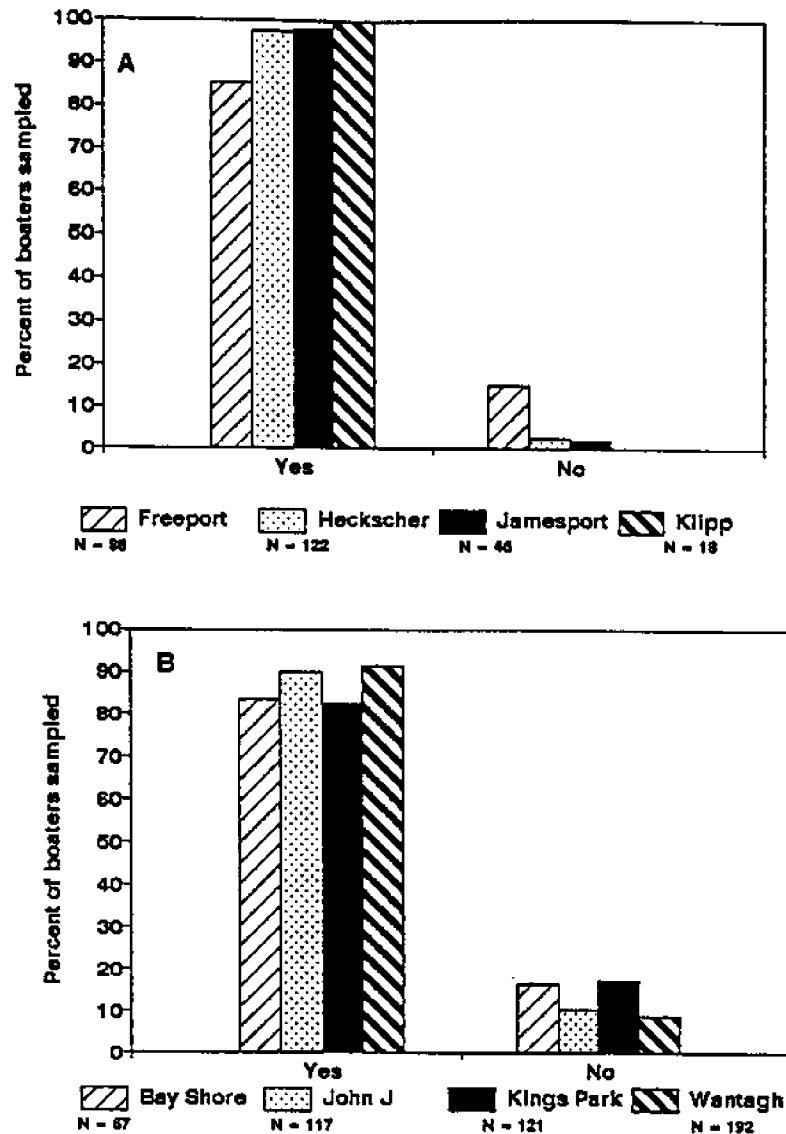


Figure 4. Boater opinions of dock space adequacy based on interviews at: a) state funded sites, and b) town/county funded sites.

(62%) of the opinion that the lack of ramps limited the use of their boats. In contrast, 60 percent of boaters (and 56 percent the angling subset), interviewed at Wantagh indicated that the lack of ramps did not limit the use of their boats (Figure 5B).

Tables 1 and 2 represent an attempt to identify specific towns most lacking in boating access for anglers. Again, little consensus is evident with numbers of boating anglers from the same locale (i.e. Bay Shore, Ronkonkoma, Massapequa, Smithtown) offering conflicting views on the question.

Boater opinions about areas most in need of ramps

is summarized in Figure 6. An obvious pattern is that western Suffolk County's north shore and south shore areas are consistently identified as the most "needy" areas. It is also apparent that those areas in which the interview took place typically predict the areas identified at least on an east-west axis. These results were somewhat unexpected, given the relative abundance of launch ramps in western and central Long Island as compared to the east end. Since most people interviewed reside in Nassau and western Suffolk, the results suggest that the distance from residence to launch site is an important determining factor for the use of trailered boats.

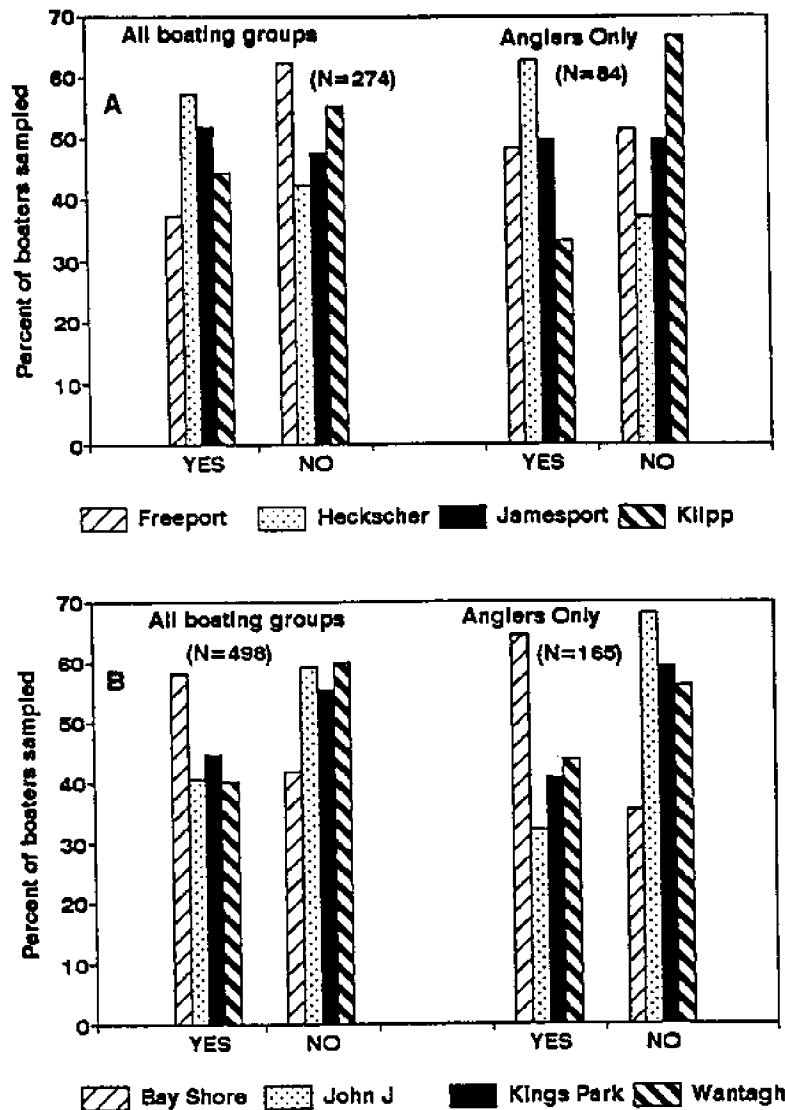


Figure 5. Responses to question, *Does the absence of unrestricted launch ramps on Long Island limit the use of your boat?* Interviews at: a) state funded sites, and b) town/county funded sites.

While the above conclusions suggest that little consensus among the boat trailering public exists with regard to access limitations, it is important to consider the inherent non-response bias (Warwick and Lininger, 1975) built into the methodology at hand. The methods employed in this study produced opinion summaries only from those boat owners who were "successful" in their search for adequate and legally available access. No information was collected from individuals who might wish to have utilized a given ramp but did not for reasons which included; residency requirements, distance from home to the nearest available launch ramp, proximity of the available ramp to fishing grounds, and perceptions of

overcrowding. The conclusions above, therefore, must be viewed as conservative to the degree with which they estimated the need for additional launch sites. If half of those boaters who already have access identify a need for additional access sites, then an important coastal issue for the boating public has been clearly documented.

Reasons for Boating

One objective of the study was the characterization of the types of trips (and their relative proportions) originating from public boat ramps. During the course

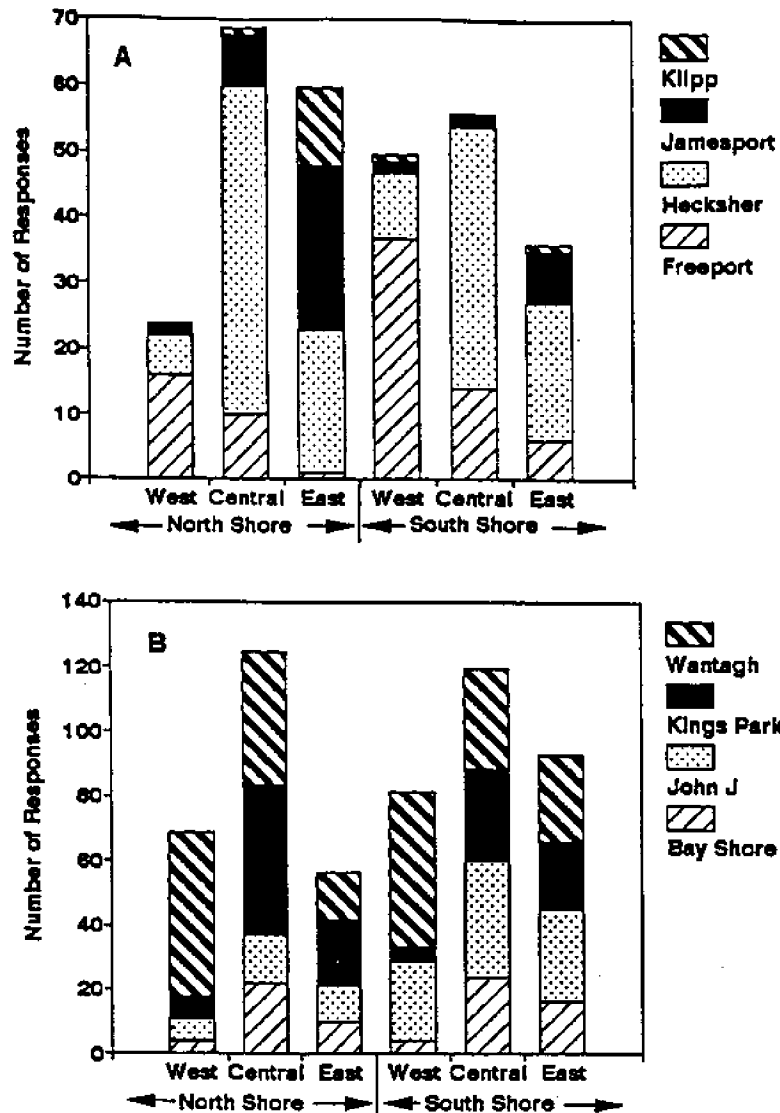


Figure 6. Opinions about which areas of Long Island are most in need of additional open access, large capacity ramps. Interviews at: a) state funded sites, and b) town/county funded sites.

of the interview, respondents' trip descriptions were categorized as either fishing, recreational boating including fishing, or recreational boating excluding fishing. The first two categories were designed to separate those boaters whose vessel served primarily as a fishing platform from those boaters whose trips were more multipurpose (i.e. fishing/swimming/picnicking). None of these three categories, therefore, are cumulative. A fourth category was added after the survey began, primarily to account for people found to be testing boat motors or moving a boat to a seasonal mooring.

The summary results indicate that while percentages vary between sites (Table 3), about half of all boaters intercepted were using the boat for general recreational purposes (Figure 7). Fishing trips were the second most common purpose, averaging 32 percent across all sites.

These results, however, should be interpreted within the limitations of the survey. As noted in the methodology, the scope of this study necessitated a sampling schedule which would likely underestimate the number of angling trips, due to a lack of early

Table 1. Towns or villages from which three or more angling parties said "yes" when asked if the absence of unrestricted ramps limited the use of their boat.

RAMP NAME	RESIDENCE	NUMBER OF RESPONSES
Bay Shore	Bay Shore	7
Bay Shore	Brentwood	6
Freeport	Merrick	4
Heckscher	Ronkonkoma	4
Heckscher	Sayville	3
John J	Massapequa	8
Kings Park	Commack	4
Kings Park	Kings Park	5
Kings Park	Smithtown	8
Wantagh	Hicksville	3
Wantagh	Levittown	7
Wantagh	Seaford	3

Table 2. Towns or villages from which three or more angling parties said "no" when asked if the absence of unrestricted boat ramps limited the use of their boat.

RAMP NAME	RESIDENCE	NUMBER OF RESPONSES
Bay Shore	Bay Shore	7
Freeport	Freeport	6
Freeport	Merrick	3
Heckscher	East Islip	3
Heckscher	Holbrook	3
Heckscher	Ronkonkoma	3
John J	Massapequa	15
Kings Park	Commack	4
Kings Park	Kings Park	13
Kings Park	Smithtown	9
Wantagh	Bellmore	5
Wantagh	Hicksville	3
Wantagh	Levittown	7
Wantagh	Wantagh	4

morning sampling, and no sampling during spring and fall. Much of the sampling effort coincided with a period of peak swimming, picnicking, and sight-seeing as well as a somewhat reduced fishing effort. Were such a survey to include spring and fall trip information, one would expect to find fewer general recreational trips and more angling trips. This usage pattern is well documented in a more detailed statewide study of freshwater access sites recently conducted by New York State's Department of Environmental

Conservation and the Office of Park, Recreation, and Historic Preservation (Major, et al. 1992). The percentage of boating trips for fishing purposes shown therefore, is probably a minimum estimate for the spring, summer, and fall boating season as a whole.

The percentage of trips for the purpose of angling is likely also as a function of geography and the particular sites chosen. For example, 50 percent of the trips originating at the Town of Islip's Bay Shore ramp were

Table 3. Responses (totaled by site and category) given as explanations for the boating trips. Values in parentheses are percentages.

RAMP NAME	FISHING	PLEASURE BOATING W/FISHING	PLEASURE BOATING W/O FISHING	MISCELLANEOUS OR NON-RESPONSE	TOTAL
Bay Shore	31 (50)	14 (23)	17 (27)	5 (8)	62
Freeport	31 (36)	6 (7)	48 (56)	4 (5)	85
Heckscher	43 (36)	18 (15)	60 (50)	1 (1)	121
Jamesport	4 (11)	3 (8)	29 (78)	10 (27)	37
John J	28 (25)	12 (11)	69 (61)	8 (7)	113
Kings Park	49 (41)	22 (18)	48 (40)	2 (2)	119
Klipp	6 (50)	1 (8)	5 (42)	6 (50)	12
Peconic	1 (14)	0 (0)	6 (86)	1 (14)	7
Wantagh	57 (30)	22 (11)	110 (57)	3 (2)	192
Total	250 (33)	98 (13)	392 (52)	40 (5)	748

fishing trips (Table 3). This reinforces the importance boating anglers place on fishery resources in Great South Bay and Fire Island Inlet. Conversely, only about 11 percent of the trips originating at Riverhead Town's state funded ramp in South Jamesport were

Vessel characteristics, group size, usage estimates, and fishery

Outboard engines represented the most popular type (67.2%) of boat propulsion, encountered during the

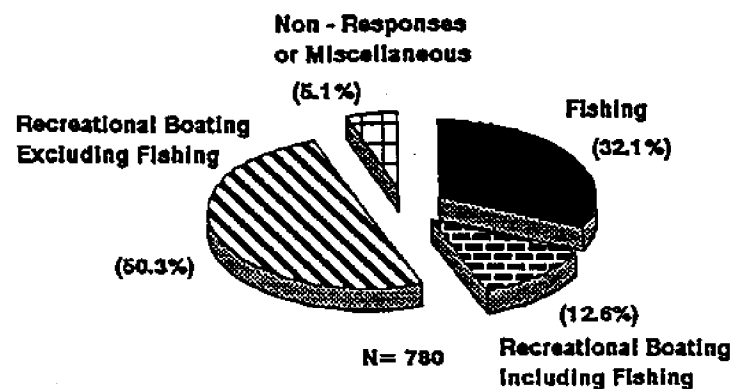


Figure 7. Primary reasons for use of launch ramp based on interviews at all nine sampling sites.

fishing trips. Conversations with bait and tackle, and sportfishing charter business operators, suggest that this is to be expected, given the lack of summer angling opportunities in the area of Peconic Bay served by this ramp.

survey with sterndrive systems accounting for slightly less than one-third (29.3 percent) of the total (Figure 8). These data are in agreement with New York State as a whole, where outboards represent 64.5 percent, and sterndrive systems account for 21.6 percent of the boats registered (Kuehn, 1991).

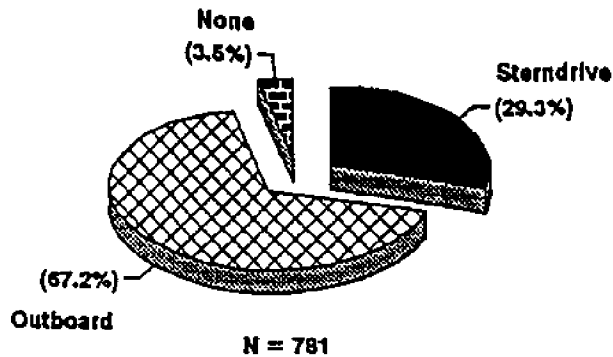


Figure 8. Propulsion of trailer boats based on observations at all nine sampling sites.

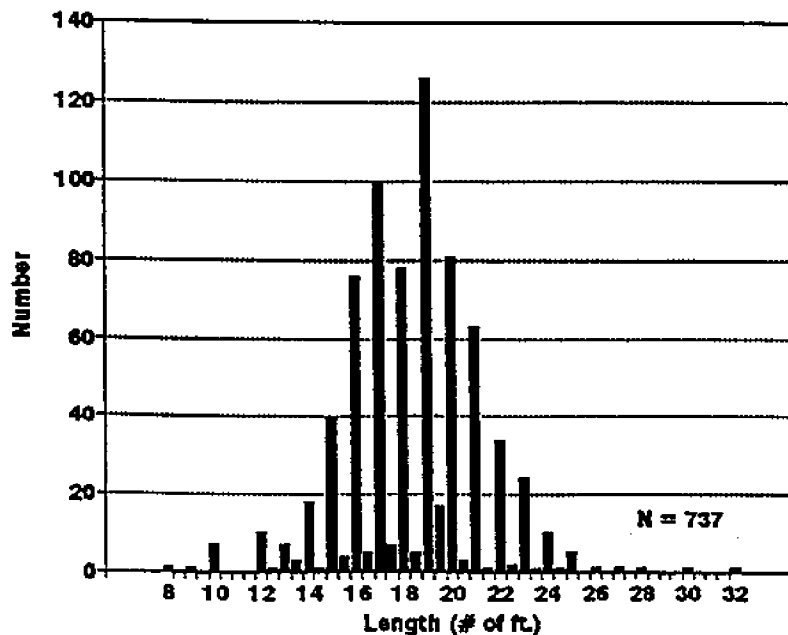


Figure 9. Distribution of trailered boat lengths observed at all nine sampling sites.

These results are also quite similar to those found in a statewide survey of freshwater ramps, where a ratio of 57 percent outboard boats to 22 percent sterndrive was found (Major et al., 1992). In the U.S., outboard boats make up 81 percent of all pleasure craft with unpowered sailboats and inboard/outboard boats

accounting for 14 percent and 5 percent, respectively. (Anonymous, 1993). These data suggest that the type of propulsion system of the vessels intercepted during this survey are representative of larger fleets, with perhaps a greater representation of sterndrive systems than that found in the U.S. as a whole.

Vessels launched at the interview sites ranged in length from 8 feet to 32 feet, with the most common boat length equal to 19 feet (Figure 9). Of the 737 boats intercepted, 12 percent were under 16 feet, 86 percent were 16 to 25 feet, and 0.7 percent were greater than 26 feet. For the entire population of registered boats in the Marine District, the percentages were 27 percent, 58 percent, and 14 percent in the same respective length categories (Kuehn, 1991). In a study of 107 boat launch sites across the state, (Major et al., 1992) reported a mean length of intercepted vessels of 16.8 feet. However, for ramps serving lakes greater than 25,000 acres the mean length was 18.0 feet. The large concentration of vessels 16 to 25 feet found in this study, suggests that public ramps "select for" vessels large enough to navigate the more severe marine environment, relative to upstate lakes, yet still small enough to trailer with appropriate trailer and tow vehicle packages.

Information on boating group size is given in figure 10. This information may be a useful reference for future site planning studies or for research dealing with boating and/or fishing participation. The small yet noticeable number of responses indicating groups of six or seven people suggests that vessel overcrowding is infrequent, but perhaps not inconsequential.

The contribution these ramps make to the boating community is underscored in Figure 11 and Table 4. Although not surprising given the size of Long Island's population, it is evident that thousands of boaters are served by these ramps. The estimated number of trips originating at Nassau County's Wantagh ramp, Oyster Bay's John Jay Burns site, and Smithtown's Kings Park facility are especially impressive. A comparison of usage data at 74 freshwater launch sites (Major et al., 1992) suggests that the Wantagh ramp may be the most heavily used public boat ramp in New York State. Usage at John J. Burns, and Kings Park is nearly comparable to the two most heavily used sites (Lower Saranac and Canandaigua Lake - North End) in upstate New York.

The data summarized in figure 12 briefly characterize the nature of the summer fishery served by the launch ramps in this study. The popularity of fluke and bluefish is not surprising given the seasonality of the study, the traditional popularity of these fish, and previous research on Long Island's marine recreational fishery (Kahn, 1989).

Acknowledgements

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Finally, I wish to thank all the state, county, and town facility administrators who graciously extended permission to conduct interviews at the nine ramps listed in the report.

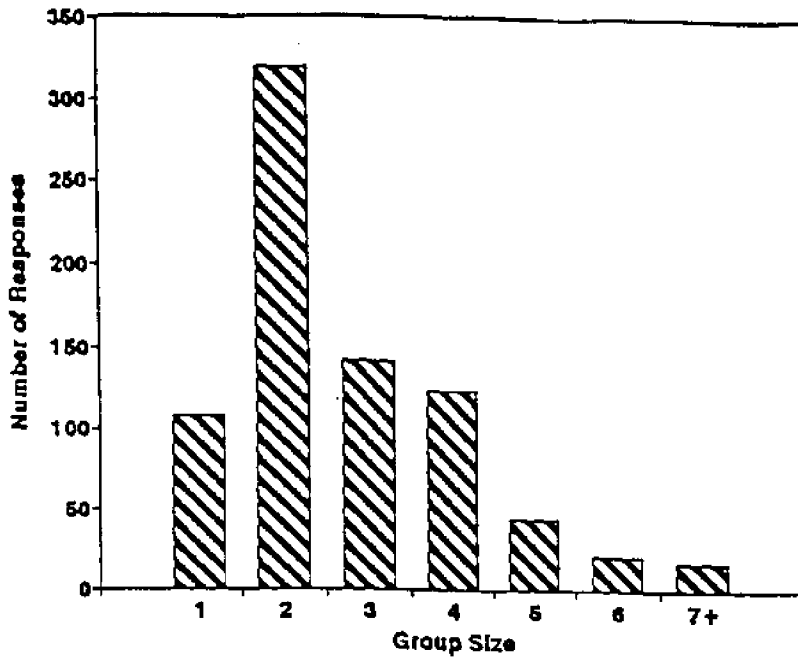


Figure 10. Participants per boat trip - all sites.

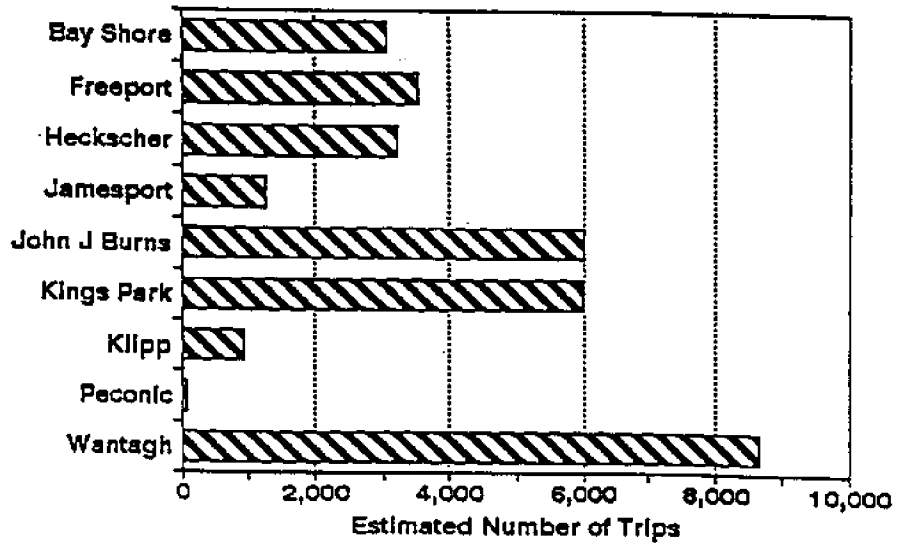


Figure 11. Estimated number of boating trips June 1 to August 31, 1991.

Table 4. Estimated number of boating trips for the period June 1 through August 31, 1991.

SITE	WEEKDAY	+/- 95%CI	WEEKEND/ HOLIDAY	+/- 95%CI	TOTAL
Wantagh	4446	1539	4210	66	8656
Peconic	46	53	33	12	79
Klipp	399	95	541	42	940
Kings Park	4004	861	1982	*	5986
John J Burns	2581	904	3440	60	6021
Jamesport	721	232	557	203	1278
Heckscher	2133	643	1081	*	3214
Freeport	1519	224	2015	30	3534
Bay Shore	1666	424	1392	280	3058

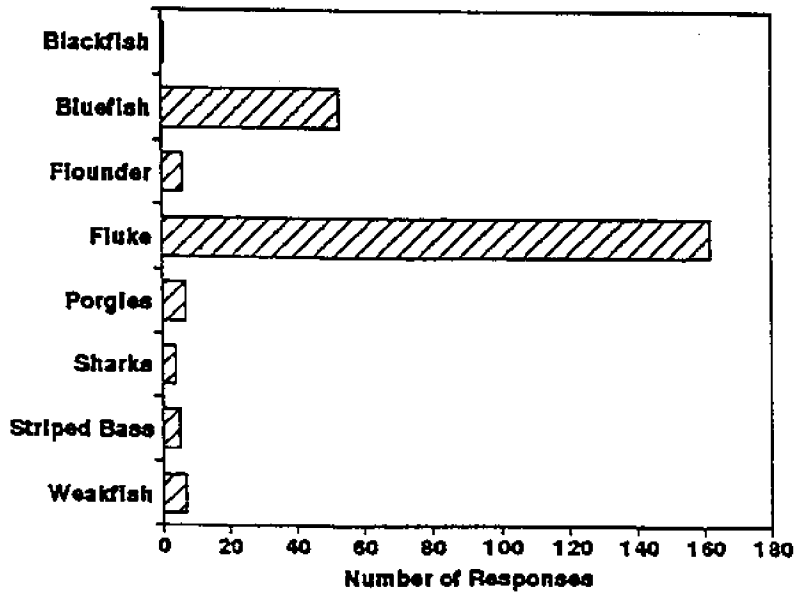


Figure 12. Fish species targeted by anglers using launch ramps.

References

Anonymous. 1993. *The Boating Business 1992 Annual Industry Review*. Boating Industry Vol. 56(1) 13pp.

The L. I. Fisherman. Long Island, Metropolitan New York Edition. 1992. Vol. 27, No. 19.

Kahn, James. 1989. *The Economic Value of Long Island Recreational Saltwater Fishing*. New York Sea Grant Institute.

Now and for the future: A vision for New York's Coast. 1991. The Governors' Task Force on Coastal Resources. Stan Lundine, Lt. Governor, Chair. State of New York, Office of the Lieutenant Governor, Albany, New York, 12224

Major, J.T., M. C. Gann, R. W. Reinhardt, W. Bartlett, and G. Solomon. 1992. *1990 Statewide Survey of Boating Use at Public Waterway Access Sites in New York State*. New York State Department of Environmental Conservation, the Office of Parks, Recreation, and Historic Preservation.

New York State Department of Environmental Conservation. 1993. *Final Marine Recreational Fishing Access Plan and Generic Environmental Impact Statement*.

Office of Parks, Recreation, and Historic Preservation. 1989. *Statewide Comprehensive Outdoor Recreation Plan and Generic Environmental Impact Statement*. OPRHP, Albany.

Warwick, D.P. and C.A. Lininger. 1975. *The Sample Survey: Theory and Practice*. McGraw Hill, N.Y.

Ramp Name and/or Location _____

SUMMER INTERN INTERVIEW

The following is intended to represent the standard interview protocol to be followed when conducting an interview.

“Good morning/afternoon/evening. I’m conducting a survey for the New York Sea Grant Program and the Department of Environmental Conservation. I would like to get your opinions about the availability of boat launch sites on Long Island, and about aspects of this launch site specifically. I would also like to ask you a few questions concerning your boating activity today. My questions will take about 7 minutes of your time.”

BACKGROUND INFORMATION SECTION

1) How long have you been on the water today? _____
or
How long do you anticipate being on the water today? _____

2) What is/was the purpose of your trip today? (check one)
a) ___ fishing only
b) ___ general recreation including fishing
c) ___ general recreation excluding fishing

(If the answer to #2 was c, skip to 5)

3) If fishing, what is/was your trip destination today? _____

4a) If fishing, do you have a target species? Yes ___ No ___

b) If yes, what are/were your target species in descending order of importance? _____

5) Boat owner's city/village or residence
City/village Number in Party

[This should complete Section 1. Note: answers to some of these questions may be obvious - modify protocol accordingly.]

OPINIONS AND PREFERENCES SECTION

- 1) Does the absence of unrestricted launch ramps on Long Island limit the use of your boat?
Yes ___ No ___

- 2) Currently, the Department of Environmental Conservation is investigating ways to increase the number of state funded boat access facilities in the marine district. In which areas would you most want a well designed, large capacity open access ramp:
 - a. Area 1 _____
 - b. Area 2 _____
 - c. Area 3 _____
 - d. Area 4 _____
 - e. Area 5 _____
 - f. Area 6 _____

SITE SPECIFIC QUESTIONS

The following questions relate to certain physical aspects of this launch site. Some questions require that you indicate the appropriate rating (excellent, adequate, poor, or undecided) - others require a yes/no answer.

- 1) How would you rate the launch ramp at this site, considering pitch, number of lanes, and tide range capability?
Excellent _____ Good _____ Poor _____ Undecided _____

- 2) How would you rate site conditions considering such factors as litter, maintenance and vandalism?
Excellent _____ Good _____ Poor _____ Undecided _____

- 3) Is the dock space adequate for loading and unloading, and for temporary tie up which is necessary when parking and retrieving a vehicle? Yes ___ No ___

- 4) Are there any other comments you would like to make or needs you would like to point out with respect to this launch site?

Comments: _____

BOAT AND TOW VEHICLE QUESTIONS

[Again, some answers may be inapplicable/obvious. Modify protocol accordingly.]

- 1) Boat type: _____ canoe or kayak _____ rowboat _____ sailboat _____ powerboat _____ inflatable _____
personal watercraft _____

- 2) What is the length of your boat? _____ ft.

- 3) What is the horsepower of your engine? _____ (if applicable)

- 4) Motor type: (Check one) outboard _____
sterndrive _____
inboard _____

Appendix B

