

P.252

ST. LAWRENCE ISLANDS
NATIONAL PARK
a visitor use study

1966

LE PARC NATIONAL DES
ÎLES DU SAINT-LAURENT
étude de l'influence des visiteurs



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NATIONAL PARKS SERVICE— PLANNING
DEPARTMENT OF INDIAN AFFAIRS AND
NORTHERN DEVELOPMENT

REPORT No. 30

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G.D. TAYLOR



ST. LAWRENCE ISLANDS NATIONAL PARK
- A VISITOR USE STUDY -

I. INTRODUCTION

St. Lawrence Islands National Park consists of 13 islands in the St. Lawrence River between Kingston and Cornwall, Ontario, and a small parcel of land adjacent to Highway 401 south of Mallorytown, Ontario. The park is located in the southward extension of the Canadian Shield known as the Frontenac Axis. Its main purpose as a National Park is to preserve a representative sample of this physiographic region, and particularly as the phenomenon is illustrated in its island phase.

The Islands have been made available to boaters through the provision of wharves, primitive campgrounds, and picnic areas. The mainland area has been developed as a campground, swimming beach and picnic area. Administrative headquarters for the park are located in the Mallorytown development.

Total use of the mainland section park has fluctuated widely in the last decade although the general trend has been upwards in keeping with nation-wide tendencies. Experience in the campground has shown a similar pattern of use. It appears that the area is operating at or near capacity and that fluctuations from year to year may represent response to particular weather conditions. Use data is not available in any consistent fashion for the islands. As a result it is not possible to comment on trends in that

portion of the parks.

TABLE NO. 1

ST. LAWRENCE ISLANDS NATIONAL PARK
NUMBER OF VISITS
DAY USE AREA - MALLORYTOWN

<u>Year</u> *	<u>No. of Visits</u>
1958	53,573
1959	53,790
1960	61,522
1961	86,150
1962	75,239
1963	74,972
1964	67,065
1965	60,390
1966	98,304

* (6 months - April to September inclusive)

The distribution of use over the season has undergone some noticeable changes in the last four years. One-half of the use usually occurs in July, although in 1964 this share dropped to one-third. August was the second busiest month in 1963 and 1964 but in the last two years June has become more important than August. Use in the other three months, April, May and September, has accounted for a consistent proportion of the total. Distribution of use by months can be shown by use of a visitor load factor. This factor is calculated by dividing the average monthly use into the actual monthly use. If use was evenly distributed over the season the factor for each month would be 1.

ST. LAWRENCE ISLANDS NATIONAL PARK VISITOR ATTENDANCE

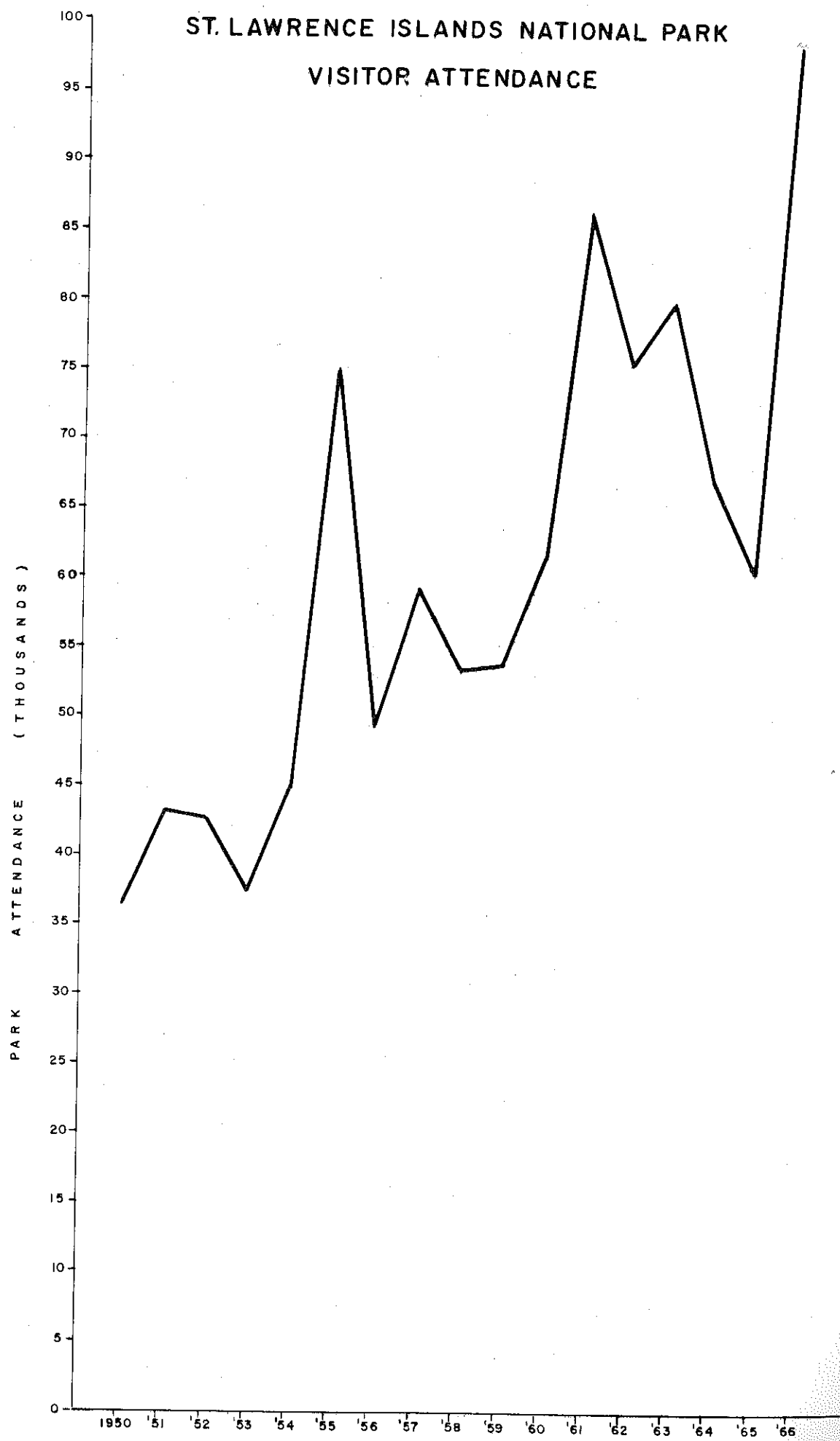


TABLE NO. 2

ST. LAWRENCE ISLANDS NATIONAL PARK
VISITOR LOAD FACTOR
DAY USE AREA - MALLORYTOWN

<u>Year</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>
1963	0.04	0.01	0.57	2.94	2.18	0.43
1964	0.06	0.20	1.03	2.28	2.17	0.23
1965	0.10	0.17	1.30	2.96	1.23	0.20
1966	0.10	0.20	1.23	3.26	0.71	0.56

Campground use as measured in camper days has been reasonably consistent since 1962 with an annual average of 10,700 camper days.

TABLE NO. 3

ST. LAWRENCE ISLAND NATIONAL PARK
CAMPER DAYS - MALLORYTOWN

<u>Year</u> *	<u>Camper Days</u>
1962	10,347
1963	13,010
1964	11,232
1965	9,596
1966	10,670

* (5 month season - May to September inclusive)

Monthly distribution of use over the last two years has been consistent. One-half of the use occurs in July and one-third in August.

TABLE NO. 4

ST. LAWRENCE ISLANDS NATIONAL PARK
VISITOR LOAD FACTOR
CAMPGROUND - MALLORYTOWN

<u>Year</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>
1965	0.05	0.74	2.51	1.52	0.16
1966	0.05	0.64	2.50	1.62	0.16

A study of the visitor use of the Park was carried out during the summer of 1966. Three distinct areas were recognized within the park, the day use area, the campground, and the islands. Within each area the objectives of the study were the same, but the methodology used had to be altered to suit the characteristics of the area.

The objectives outlined for the study were:

- (a) the source of visitors
- (b) the length of trip and the length of stay in the park
- (c) the use made of the park
- (d) characteristics of the visitor.

Observational techniques were used in the day use area to collect the necessary data. On eight days selected at random the following procedures were followed:

- (a) the origin and number of cars within the parking lot were counted hourly,
- (b) the distribution of visitors within recognizable parts of the area were recorded hourly,
- (c) vehicles entering and leaving the area were recorded during all or part of each survey day. The following information was recorded for each vehicle:
 - (i) licence plate details; province or state of issue and number,
 - (ii) time of arrival in the park,
 - (iii) time of departure from the park,
 - (iv) number of people in the vehicle.

At the campground a questionnaire similar to ones used in other campground studies in the National Parks of Canada was prepared. The questionnaire was distributed by an attendant to each camping party at the time they registered. Campers completed the form and returned it to the campground office on a voluntary basis.

The survey of island visitors made use of a short questionnaire. A box was located at or near the wharf on each island. The warden service maintained a supply of questionnaires at each box collected completed forms which had been deposited in the box. Suitable signs were erected to ask the visitors to co-operate in the survey.

Throughout the course of the study the Chief Warden and his staff co-operated fully. Without this assistance the work could not have been completed.

II. DAY USE AREA - MALLORYTOWN

A. Introduction

The day use area at Mallorytown is located on a small point of land south of Highway 401. Development has centred on a beach and protected swimming area with an associated changehouse and toilet building. Picnic facilities have been provided to the north and to the east of the beach. One covered picnic shelter has been provided. A play area, a landing dock, boat launching facilities and a parking lot complete the list of facilities provided. Visitors to the day use area are

drawn from three sources; the campground which is located across the highway, residents of nearby towns, and travellers along Highway 401.

Detailed observations of use were carried out on eight days during the summer of 1966. Four week-days and four week-end days were selected. For parts of the study, such as place of residence, size of party and length of stay, only those visitors who arrived by motor vehicle were included. Campers walk between the campground and the day use area. As a result it was impractical to include them in this part of the study. All people in the area were included in those phases of the project that dealt with the total number of visitors and their distribution within the park.

B. Residence of Day Visitors

Residents of Ontario form the largest single group of visitors to the park on all days. They are more important on week-ends than on week-days. Visitors from Quebec constitute the second largest group followed by the State of New York in third place. Canadian visitors make up 67.3% of the total on week-days and 74.5% on week-ends. Differences in the proportions of Canadian and American visitors for these two time periods are statistically significant.

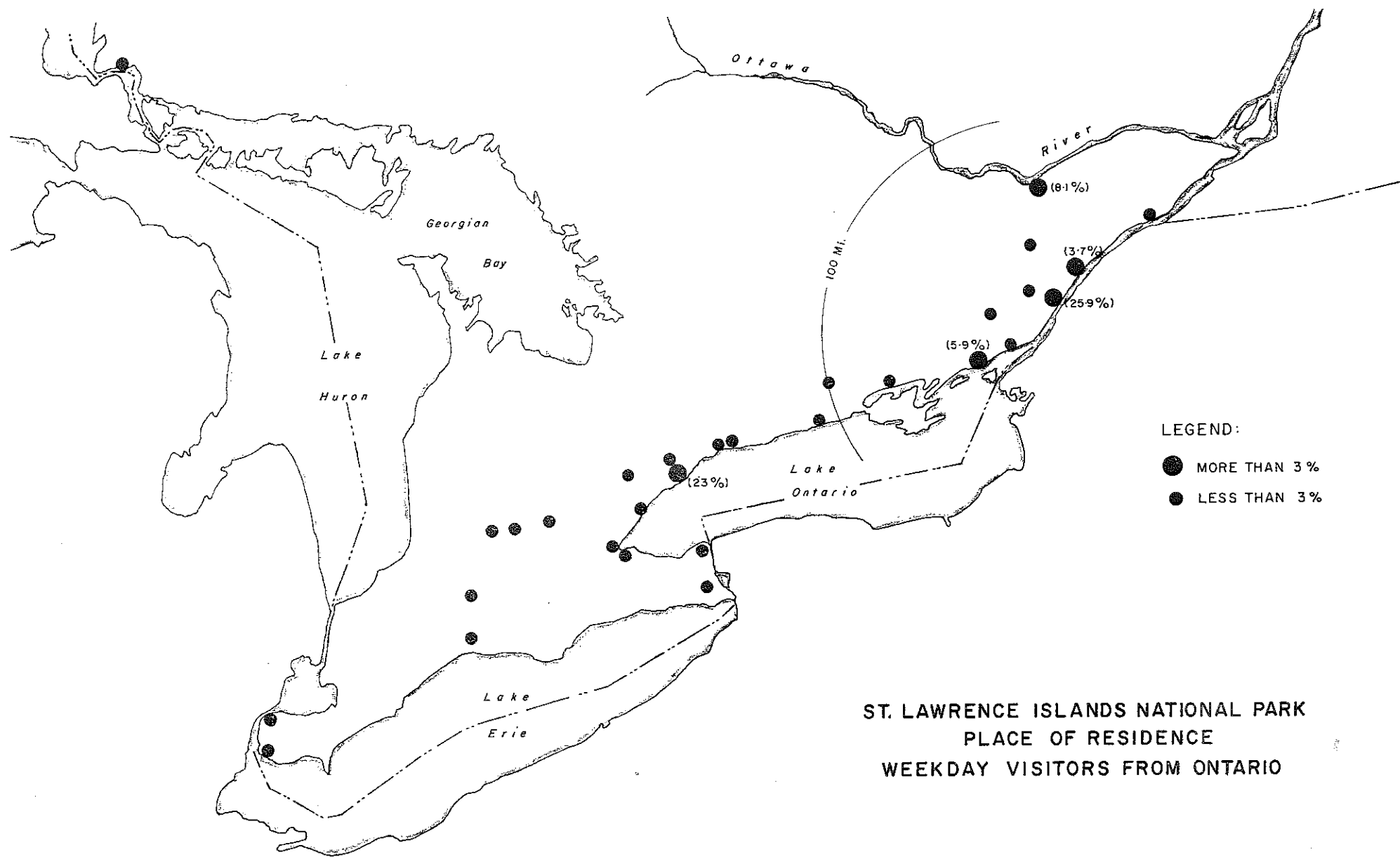
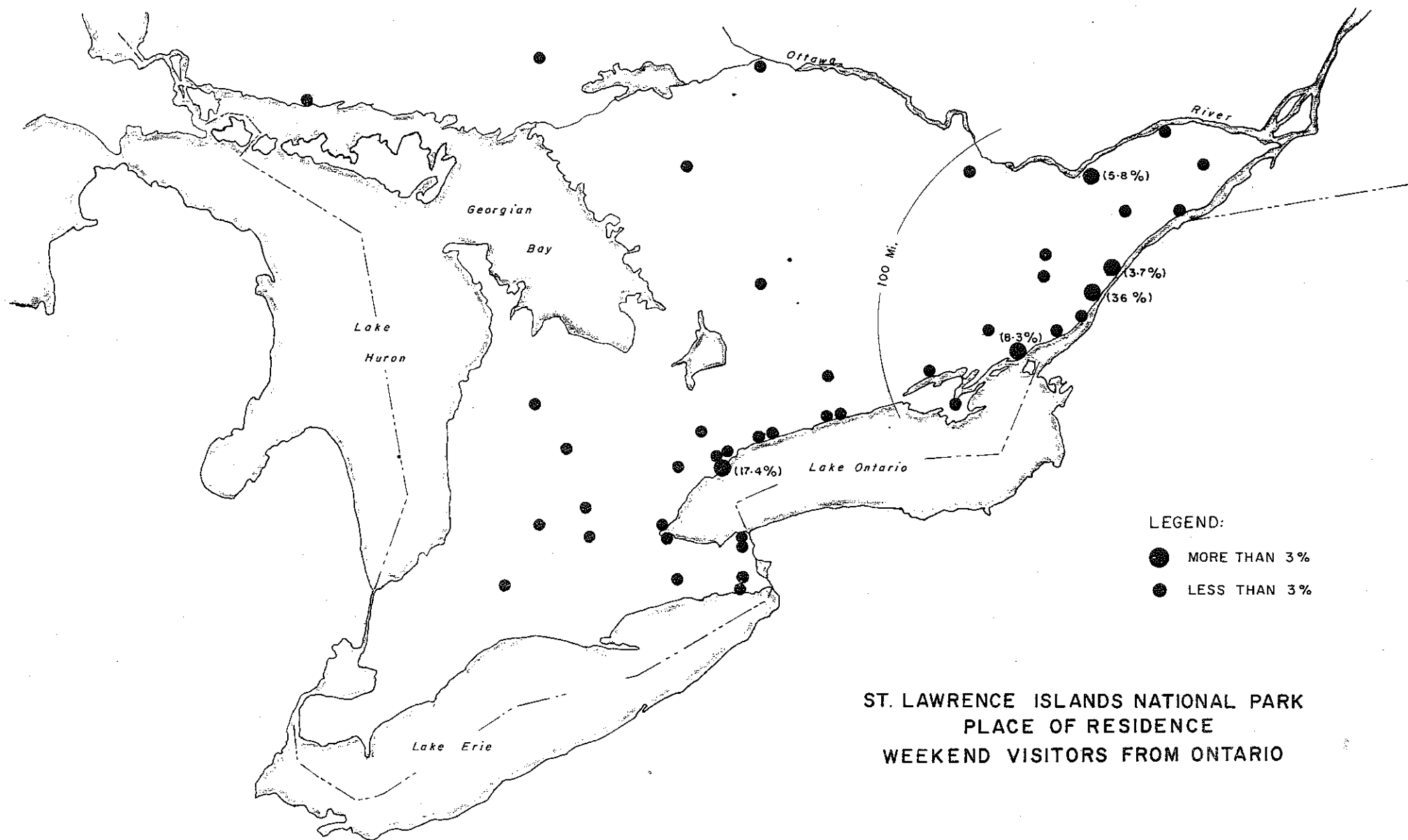


TABLE NO. 5

ST. LAWRENCE ISLANDS NATIONAL PARK
 DAY USE AREA - MALLORYTOWN
 RESIDENCE OF VISITORS

<u>Province or Region</u>	<u>Percent of Parties</u>	
	<u>Weekdays</u>	<u>Week-ends</u>
Ontario	53.0	59.5
Quebec	11.3	13.2
Atlantic Province	1.9	1.5
Western Canada	1.1	0.3
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Canada	67.3	74.5
Mid-Atlantic States	16.2	13.6
East North Central States	9.8	6.4
New England States	4.1	2.5
Other U.S.A.	2.6	3.0
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U.S.A.	32.7	25.5

Brockville is the most important source of Ontario visitors on week-days and on week-ends. On week-days 25.9% of the Ontario visitors are from Brockville, while on week-ends the proportion rises to 36%. Toronto is next in importance with 23.0% and 17.4% respectively. Visitors to the park come from many places in Ontario and the distribution of these places reflects the convenience of the park for local residents and its strategic location to serve the travelling public. Maps have been prepared to indicate the location of home residences of the Ontario visitor.



LEGEND:

- MORE THAN 3%
- LESS THAN 3%

ST. LAWRENCE ISLANDS NATIONAL PARK
 PLACE OF RESIDENCE
 WEEKEND VISITORS FROM ONTARIO

TABLE NO. 6

ST. LAWRENCE ISLANDS NATIONAL PARK
 DAY USE AREA - MALLORYTOWN
 RESIDENCE OF ONTARIO VISITORS

A. <u>Place of Residence</u>	<u>Percent of Parties</u>	
	<u>Week-days</u>	<u>Week-ends</u>
Brockville	25.9	36.0
Toronto	23.0	17.4
Ottawa	8.1	5.8
Kingston	5.9	8.3
Prescott	3.7	3.7
Other towns within 100 miles	10.5	5.4
Other towns beyond 100 miles	22.9	23.4
B. <u>Distance from Residence</u>		
Within 100 miles	54.1	59.2
More than 100 miles	45.9	40.8

Although the majority of Ontario visitors come from within a radius of 100 miles, an important segment came from greater distances. On the basis of the evidence, the original assertion that the park serves nearby towns and travellers along Highway 401 can be accepted as correct.

C. Size of Party

Details of party size are available for 266 week-day parties and 464 week-end parties. Average party size is 3.39 on week-days and 3.46 on week-ends with a range from one to nine on week-days and one to 11 on week-ends. On week-ends the true mean lies between 3.31 and 3.61 at the 95% level of probability; at the same level the true mean for week-days is between 3.22 and 3.55. It is probable that there is no significant difference in the means by day of week.

There are indications that the weather on a particular day has more effect on party size than does the day itself. Mean party size on two wet week-end days was 3.30 while on two warm week-end days the mean was 3.5. Hence on poor days the mean falls outside the confidence limits for the true mean while on good days it is within the limits. Poor weather would seem to have the effect of discouraging use by family groups.

D. Length of Stay

Many factors appear to influence the length of time that visitors remain in the park. Three of these factors have been isolated; day of week, place of residence and weather. On week-days the average stay is 24.5 minutes compared to a stay of 44.1 minutes on week-ends. Ontario residents stay significantly longer than non-residents on both week-days and week-ends. The week-day figures are 30.2 minutes for Ontario visitors and 19.1 minutes for all others. Comparable figures for week-ends are 59.2 and 30.9 minutes. On week-ends the length of stay is twice as long on good weather days as on poor days, 54.2 minutes and 27.6 minutes. The average stay by Ontario visitors reaches 78.4 minutes on good days, while the figure for non-residents is 32.2 minutes. When poor weather prevails place of residence has little effect on length of stay.

Residents of Ontario stay in the park significantly longer than do non-residents. This situation applies on week-days, week-ends, and during periods of good weather. Poor weather

seems to influence all visitors in the same way. In the case of local residents the visit will likely not take place at all, and in the case of the transient visitor; the visit is curtailed.

E. Park Use

Public use of the area was examined in terms of three main activities, beach use and swimming, picnicking, and all others. Use was measured by counting hourly all people in the area by activity locations.

TABLE NO. 7

ST. LAWRENCE ISLANDS NATIONAL PARK
DAY USE AREA - MALLORYTOWN
PROPORTIONAL USE BY ACTIVITIES - ALL DAYS

Time	Picnicking	Percent of Parties	
		Beach and Swimming	All Others
10:30	12.0	74.5	14.5
11:30	25.1	59.7	15.2
12:30	46.1	32.4	21.5
1:30	37.8	41.7	20.5
2:30	22.1	59.4	23.5
3:30	14.5	60.4	25.1
4:30	24.3	56.2	19.5

The porportion of visitors who are picnicking reaches a park at 12:30. After this time the proportion declines until 3:30 when it starts to grow again. The demand placed upon the picnic area appears to be related to normal meal hours. Beach use and swimming have a reverse pattern. From an early morning high the proportion wanes until 12:30 and then starts to climb again until 3:30. Other uses of the park are relatively consistent in their share of the visitors with the highest proportion registered at 3:30.

Total use of the area on week-days reaches a peak of 3:30. On days with good weather this pattern is particularly clear. On days with poor weather use is much lighter and the peak occurs at 1:30. Use of the park on poor days is about 5% of the use on good days.

Use on week-ends exhibits a slightly different pattern. On good days the peak use period occurs at 2:30 while on poor days it occurs at 1:30. Hence the main difference between the two types of day, week-day or week-end, is the earlier peaking on week-ends. There is also a tendency for a second peak to occur on week-ends at 12:30. This second peak was not apparent on week-days. Poor weather has less effect on total use on week-ends than on week-days. The greatest effect noticed was when attendance on a poor day fell to 20% of that on a good day.

Time of day and weather seem to be two main factors in determining the total use of the area, and of the distribution of the visitors' activity interests.

F. Parking

Counts of the number of vehicles parked in the area were carried out hourly. On good week-days parking peaked at 4:00 when there was an average of 60 vehicles in the lot. On poor days the peak occurred at 1:00 with an average of 12.5 vehicles. Parking also peaked at 4:00 on week-ends with nearly 130 vehicles parked. On all days a single parking peak was observed.

G. Summary

The day use area serves the park campground, residents of local towns and highway travellers. The nature of the use of the area is strongly affected by weather. Of all the factors studied it was clear that weather was most important and four typical use conditions may prevail, week-days with good and poor weather, and week-end days with similar weather conditions.

III CAMPGROUND VISITORS

A. Introduction

The main campground is located in an open field north of Highway 401 and immediately across the road from the day use area. Individual sites have not been laid out with the result that campers tend to distribute themselves haphazardly over the 4 to 5 acre lot. Average use of the site appears to be 15 parties a night in July and 10 a night in August. There appear to be wide daily fluctuations in the use of the campground.

Visitors entering the campground were handed a questionnaire at the time of registration with a request that it be completed and returned. This part of the survey was handled by the park staff and no record was kept of the number of forms actually distributed. Returns totalled 112 usable forms which represent 11% of the total number of parties who camped at the site.

The comments in this section of the report are based on a very small sample and an apparent low response rate. There is now no way of knowing the biases that the procedure followed introduced into the study. As a result, some caution should be used in interpreting the results.

B. Residence of Campers

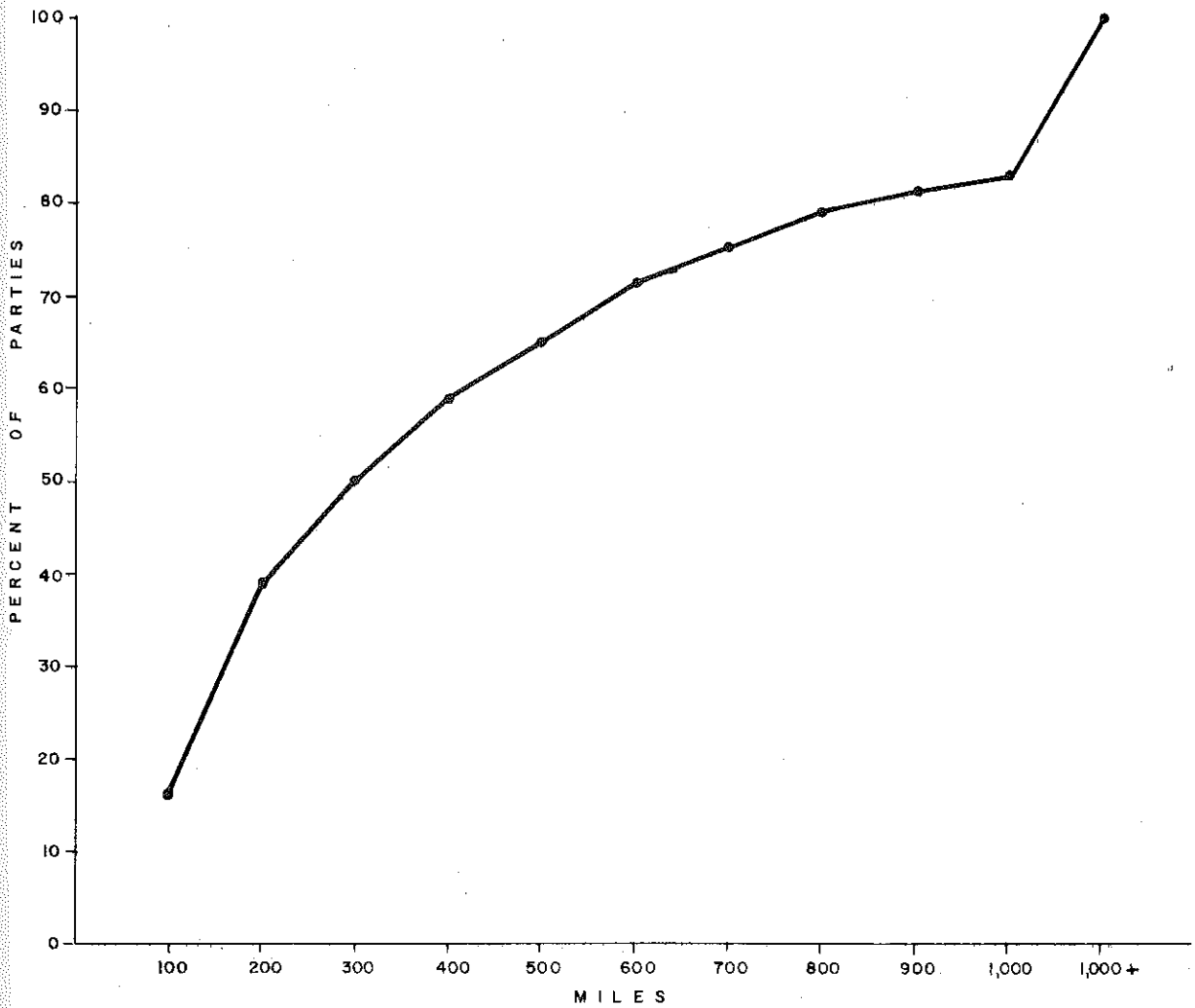
On the basis of the response to the survey, Ontario supplies the largest single group of campers with Quebec in second place. The mid-Atlantic states of New York, New Jersey and Pennsylvania account for nearly 17% of the campers, followed by the East North Central States with just under 11%. In total, Canadians make up 57.1% of the group with the balance being Americans.

TABLE NO. 8

ST. LAWRENCE ISLANDS NATIONAL PARK
MALLORYTOWN CAMPGROUND
RESIDENCE OF CAMPERS

<u>Province or Region</u>	<u>Percent of Parties</u>
Ontario	41.0
Quebec	10.7
Atlantic Provinces	3.7
Western Canada	1.7
Canada	<u>57.1</u>
Mid-Atlantic States	16.9
East North Central	10.7
New England	6.4
Pacific Coast	5.2
South Atlantic	<u>3.7</u>
U.S.A.	42.9

ST. LAWRENCE ISLANDS NATIONAL PARK
MALLORYTOWN CAMPGROUND
CUMULATIVE GRAPH OF DISTANCE TRAVELLED



The average distance that campers reported travelling to the park was 555 miles. For residents of Ontario, the average distance was 183 miles, for Americans 758 miles and for other Canadians 943 miles. Median travel distance was 300 miles. A cumulative graph showing travel distance has been prepared. This graph shows that most campers have travelled one day to each the park.

C. Party Size and Composition

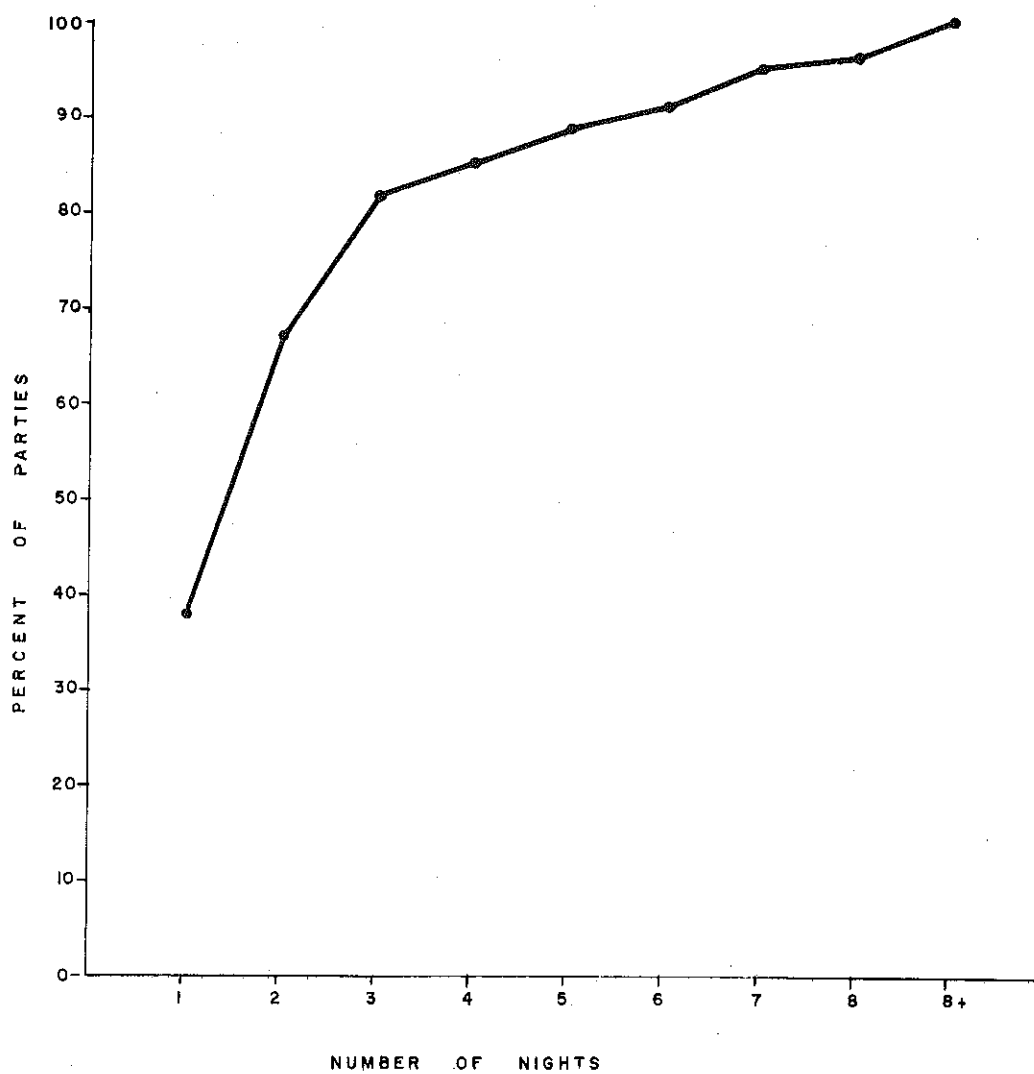
The size of party ranged from one to eight with an average of 3.7 and a median of 3.25. The true party mean is between 3.4 and 4.0 at the 95 percent confidence level. Although the results show differences in party size for Canadians and Americans, they are not significant.

Results indicate once again the camping is primarily a family affair. Two-thirds of the parties consisted of adults and children under 16. This proportion was consistent for Ontario, other Canada and the United States of America.

D. Length of trip and length of stay

Most of the parties covered in the survey were on a trip of several days duration. Ontario campers were on trips that averaged 10.6 days while other campers averaged just under 21 days. Twenty percent of the trips lasted three nights or less (presumably week-ends). These trips averaged 2.2 nights. The trips lasting over three nights averaged 19.6. The park caters the two main types of traveller, those on a week-end trip and those on a long vacation trip.

ST. LAWRENCE ISLANDS NATIONAL PARK
MALLORYTOWN CAMPGROUND
CUMULATIVE LENGTH OF STAY



Average stay in the campground was 2.8 nights with a range from one to 14 nights while the median is 1.4 nights. Campers from Ontario stayed longer than did visitors to the province; 3.3. nights for Ontario, 2.7 for other Canada and 2.0 for Americans. Week-end visitors spent 1.9 nights in the park. As week-end trips averaged 2.2.nights it appears that the week-end camper has the park as a specific destination. Vacation travellers average a full night more in the campground than do week-enders.

A cumulative graph of campground stay has been prepared. This graph shows that two-thirds of the visitors spend two nights or less and over 80% spend three nights or less. The average is as high as it is because a few parties spend a relatively long time in the campground.

E. Activities

Swimming is the main recreational activity engaged in by campers. Relaxation is ranked second in importance, followed by walking and use of the playground. Other water-oriented activities such as fishing and boating are of lesser importance. The interest of the campers in boating will be analyzed in a later section of this report.

The camper views the park as a place to spend a few days swimming and relaxing. He apparently has little interest in the river for other purposes, except possibly for scenic viewing. Activity importance and participation was the same for all groups of campers.

The prime activity, swimming, takes place across a busy highway from the campground. This fact, bolstered by observation, indicates that there is a lot of pedestrian traffic passing back and forth over the highway between the two parts of the park area at Mallorytown. With the heavy vehicular traffic along Highway 401, there are certain hazards in this pedestrian flow that must be recognized. The Province of Ontario is apparently relocating Highway 401 to a location north of the campground and this change should reduce traffic volumes on the river front highway. If the campground is retained, however, better ways of getting the camper across the highway should be investigated.

F. Camping Experience

The campers have been camping for an average of five years. Nearly one-quarter of the group were camping for the first year. Median experience was 3.3 years. These figures indicate that camping as a recreational experience is still attracting large numbers of new campers each year. Previous studies in other national parks over the last few years have shown a similar sized group of first year campers.

G. Camping Equipment

The type of equipment that campers use is of importance in assessing the facilities that may be required in the development of campgrounds.

TABLE NO. 9

ST. LAWRENCE ISLANDS NATIONAL PARK
MALLORYTOWN CAMPGROUND
TYPES OF CAMPING EQUIPMENT

<u>Equipment</u>	<u>Percent of Parties</u>			
	<u>Ontario</u>	<u>Other Canada</u>	<u>U.S.A.</u>	<u>ATI</u>
Tent	39.1	66.7	47.9	47.2
Tent Trailer	37.0	22.2	18.7	26.8
House Trailer	19.6	11.1	20.8	18.9
Camper	0.0	0.0	8.4	3.7
All other	4.3	0.0	4.2	3.4
	100.0	100.0	100.0	100.0
N.	46	18	48	112

Less than half the campers use tents as the majority favour some type of wheeled equipment. In this latter group, the tent trailer is the most popular, particularly with Canadians. The American group showed a slight preference for house trailers, and a wider variety of camping equipment than did Canadians. The type of equipment that campers have been bringing into campgrounds has been changing rapidly. In 1963 the proportion of tents to non-tents at Point Pelee National Park was 69-31. Comparable figures are not available for St. Lawrence Islands but if they were similar there has been a radical change in only three years.

H. Occupations

Campers were asked to check the occupational class of the head of the household. This type of question was used because of the ease of compilation but it has the disadvantage that the validity of the results is open to doubts. The class structure is subject to individual interpretation and

these interpretations may not agree with those of the research worker who designed the questionnaire. The data presented in this section should be read with the above limitation in mind, although the results should give a general picture of the occupations of this particular camping population.

TABLE NO. 10

ST. LAWRENCE ISLANDS NATIONAL PARK
MALLORYTOWN CAMPGROUND
OCCUPATIONS

<u>Occupation Class</u>	<u>Percent of Parties</u>			
	<u>Ontario</u>	<u>Other Canada</u>	<u>U.S.A.</u>	<u>All</u>
Sales, clerical	6.5	23.5	6.4	9.1
Managerial, proprietor	10.9	5.9	10.9	10.0
Skilled labour, Farmers	30.8	11.8	21.3	23.6
Service, semi- skilled	15.2	5.9	12.8	12.7
Professional	21.7	23.5	27.6	24.5
Retired	0.0	0.0	14.9	6.4
Students	0.0	0.0	2.2	1.0
Others	15.2	29.4	4.2	12.7
N.	46	17	47	110

The largest single group of campers is drawn from the ranks of professional people. Skilled labour and farmers form the second largest group followed by service employees. A relatively large number (12.7%) classified themselves as "other".

The details in the table indicate differences between Canadians and Americans with respect to occupational groups. The differences appear to be the result of the small size of the sample because in a test of the difference between the proportions there was no reason to reject the hypothesis that the two figures were equal.

I. Boating Interest

Because the main part of St. Lawrence Islands National Park is the group of islands in the St. Lawrence River, the survey sought to determine if there were any user relationships between the mainland portion and the islands. Specifically, campers were asked if they had brought a boat with them, if they had rented one, and if they had visited any island in the St. Lawrence River.

TABLE NO. 11

ST. LAWRENCE ISLANDS NATIONAL PARK
MALLORYTOWN CAMPGROUND
BOATING INTEREST

A. Campers With Boats on Trip

	Parties	
	Number	Percent
Yes	4	3.6
No	107	96.4

B. Boat Rental at Park

	Parties	
	Number	Percent
Yes	13	11.9
No	96	88.1

C. Visited Island in the St. Lawrence

	Parties	
	Number	Percent
Yes	24	20.0
No	88	80.0

The relatively few campers who brought a boat or rented one is consistent with the low activity participation reported for boating and fishing. It also appears that there is limited user interchange between the mainland and island portions of the park as far as campers are concerned.

J. Summary

The campground at Mallorytown has a strong user relationship with the day use area but a weak relationship with the island members. The two parts of the park, mainland and islands, are used as nearly separate entities. The campground serves as one of the few public access areas that are available to the public travelling or living along the St. Lawrence. In this regard it serves a function similar to the St. Lawrence Parks Commission's Brown's Bay Park which is located less than two miles east of the National Park.

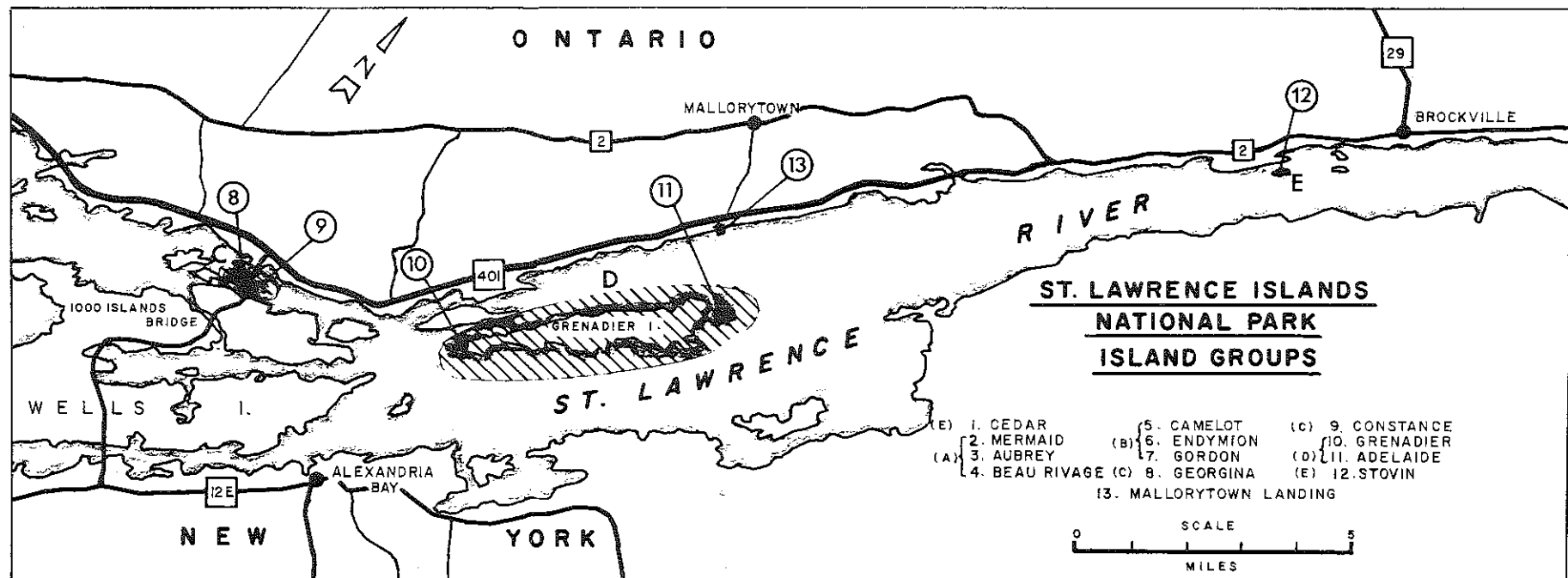
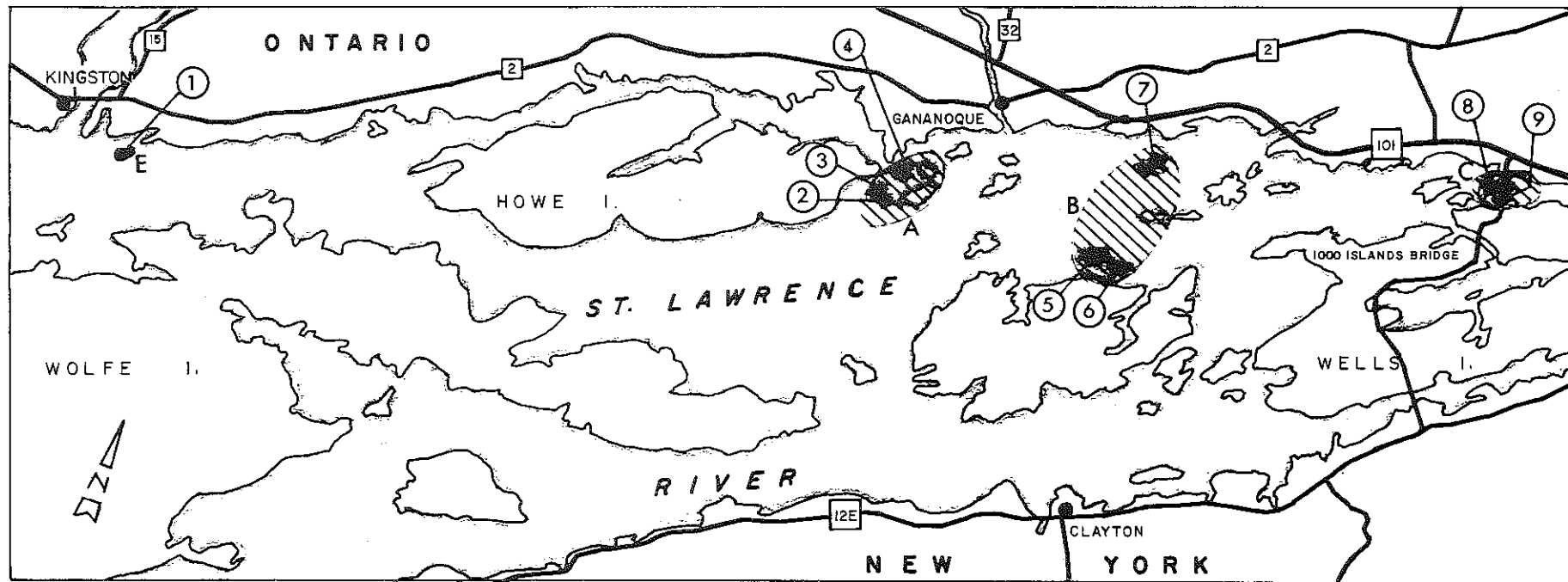
IV THE ISLANDS

Introduction

The 12 developed islands that make up the island portion of the park were surveyed by means of a voluntary registration. Boxes with a supply of a short questionnaire were located on each island at the main landing point. Visitors were requested to complete a questionnaire and deposit it in the box. The Warden Service undertook the servicing of the boxes.

Visitors were asked to indicate if their visit to the island would be overnight or not. Most returns indicated that the visit was an overnight one. A total of 583 useable forms were returned by overnight visitors and 94 by day visitors.

For the purposes of analyzing and reporting the data, the



islands were grouped into five areas. The basis of the grouping was location except in the case of Cedar and Stovin which are at the extreme ends of the island chain and were lumped together for convenience.

TABLE NO. 12

ST. LAWRENCE ISLANDS NATIONAL PARK
ISLAND PORTION
GROUPING AND QUESTIONNAIRE RESPONSE

Group	No. of Questionnaires		
	Overnight	Day Visit	Total
A.			
Aubrey	50	6	56
Beau Rivage	82	8	90
Mermaid	<u>58</u>	<u>12</u>	<u>70</u>
	190	26	216
B.			
Camelot	60	12	72
Endymion	73	3	76
Gordon	<u>66</u>	<u>15</u>	<u>81</u>
	199	30	229
C.			
Constance	19	8	27
Georgina	<u>45</u>	<u>5</u>	<u>50</u>
	64	13	77
D.			
Adelaide	59	14	73
Grenadier	<u>24</u>	<u>1</u>	<u>25</u>
	83	15	98
E.			
Cedar	21	4	25
Stovin	<u>26</u>	<u>6</u>	<u>32</u>
	47	10	57

For this report the islands will be referred to by the group letter assigned in the preceding table.

V DAY USE

Because of the small size of the sample that was obtained for any group of islands (see Table No. 12) the results of the day use portion of the island study will be presented as for the islands as a whole. Even for all the islands the sample obtained was small, hence the results should be viewed only as an indication of the nature of day use.

A. Place of Residence

Most of the day visitors to an island are residents of either Ontario or New York. Residents of Ontario made up 44.1% of the total, New York 31.1%, Quebec 10.7%. All other Americans accounted for 14.1%.

Within Ontario the towns along the St. Lawrence River contribute just over one-half of the visitors with Gananoque and Kingston the most important. The only city outside the St. Lawrence valley that ranks as a major source of visitors is Ottawa.

B. Party Size and Length of Stay

The mean party size is 4.9 individuals. This figure is relatively consistent for all islands and it is significantly larger than the mean party size recorded for the day use area at Mallorytown. Just over one-half of the parties pay a day visit to an island as part of an extended trip to the island area. Hence the number of parties who use the islands exclusively as part of a day trip is relatively small. The average length of stay on any one island is 3.7 hours, with a range from one to 10 hours. Median

stay is 2.9 hours.

C. Place of Boat Launching

Most of the boats reported in the survey were launched at points along both banks of the St. Lawrence from Prescott to Kingston. Gananoque was the most important launching place with 24.7% of the boats being placed in the water at this point. Rockport, Ontario, and Alexandria Bay, New York, were the next main launching places with 9.4% of the boats each.

TABLE NO. 17

ST. LAWRENCE ISLANDS NATIONAL PARK
ISLAND PORTION - DAY USE
RESIDENCE AND BOAT LAUNCHING

	Percent of Parties	
	<u>Residence</u>	<u>Boat Launched</u>
Ontario	44.1	68.2
New York	31.1	25.6
Quebec	10.7	6.2
Other	<u>14.1</u>	<u>0.0</u>
	100.0	100.0

Many boating parties bring their boats into Ontario before embarking on a trip along the St. Lawrence River. The mainland portion of the park was not mentioned as a boat launching place.

D. Activities

Day visitors use the islands primarily for sightseeing, picnicking and swimming. Fishing and boating were of lesser importance. With exception of sightseeing which was not recorded at the mainland day use area, the primary interests

of the day visitors at the two parts of the park are similar.

E. Occupations

The occupational structure of the day visitors is similar to that recorded for the overnight visitors. A comparison of the day and overnight visitors is presented in Table No. 18.

VI OVERNIGHT USE

A. Place of Residence

Overnight visitors are primarily Canadian although there are some noticeable variations between groups.

TABLE NO. 13

ST. LAWRENCE ISLANDS NATIONAL PARK
ISLAND GROUPS
RESIDENCE OF OVERNIGHT VISITORS

<u>Residence</u>	Percent of Parties Island Group					
	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>All</u>
Ontario	53.7	43.2	48.4	45.8	36.2	47.0
Quebec	13.7	7.1	15.7	8.4	19.1	11.3
Other Canada	0.0	0.0	0.0	1.2	0.0	0.2
Canada	67.4	50.3	64.1	55.4	55.3	58.5
New York	24.7	33.2	17.2	27.7	31.9	27.8
Other Mid-Atlantic	3.7	7.6	6.2	6.0	8.5	6.5
New England	1.6	1.5	0.0	3.6	0.0	1.5
East North Central	2.4	6.0	9.4	1.2	3.3	4.3
U.S.A.	32.1	48.2	32.8	42.1	44.7	40.1
Noted Stated	0.5	1.5	3.1	2.5	0.0	1.4

There is no apparent pattern by geographic location to the variation. On the basis of available information, the reasons

for the differences cannot be given. For all the islands the ratio of Canadian to American visitors is very similar to that reported for the Mallorytown Campground. A noticeable difference between the islands and the Campground is the absence from the islands of visitors who reside in places without direct access to the St. Lawrence River. If the distant visitors are excluded from the comparison, the similarity in visitor residence is even more noticeable.

B. Length of Stay

The length of stay on any island is relatively short with the average 1.8 days. There is a slight variation between groups of islands. The only noticeable difference between visitors is that residents of Quebec stay from a day to a day and a half longer than other visitors.

TABLE NO. 14

ST. LAWRENCE ISLANDS NATIONAL PARK
ISLAND GROUP
AVERAGE LENGTH OF STAY

<u>1. Group</u>	<u>Average Length of Stay in Days</u>
A	2.09
B	1.72
C	1.30
D	1.60
E	1.76
All Groups	1.82
<u>2. Place of Residence</u>	
Ontario	1.8
Quebec	2.7
New York	1.3
All Others	1.6
Canadians	2.1
Americans	1.5

Although the difference in length of stay are small they are significant. Canadians stay a half day longer than Americans.

C. Size of Party

The average size of an overnight party is 4.09 with a range from one to thirteen. Median party size is 3.45. The true mean lies between 3.94 and 4.22 at the 95% confidence level. Average size of a Canadian party is 3.91 and of an American party 4.34. The differences in these averages is significant. Overnight parties travelling by boat are significantly larger than those who travel by automobile and use Mallorytown Campground.

D. Length of Trips

Visitors to the islands are on trips that last an average of 12 days. Canadian visitors are on trips that last significantly longer than Americans, 14.5 days to 9.8 days. Both groups spend 14% of their trip at one of the islands. Trips of three days or less account for 17% of the total. These short trips average 2.4 days. The other longer trips have an average of 14.1 days.

E. Visit Other Islands

For most overnight visitors to the Park, the trip consists of a visit to several islands. Seven out of ten parties indicated they had visited, or intended to visit, at least one more island. Ontario visitors were less likely than other groups to visit more than one island. This tendency

was particularly noticeable at Aubrey, Beau Rivage and Mermaid Islands. It appears that the visitors do not spend very long on any one island but that they do spend a longer time in the island chain.

F. Boat Launching Point

The portion of the trip to the islands that takes place on water begins in a wide variety of places.

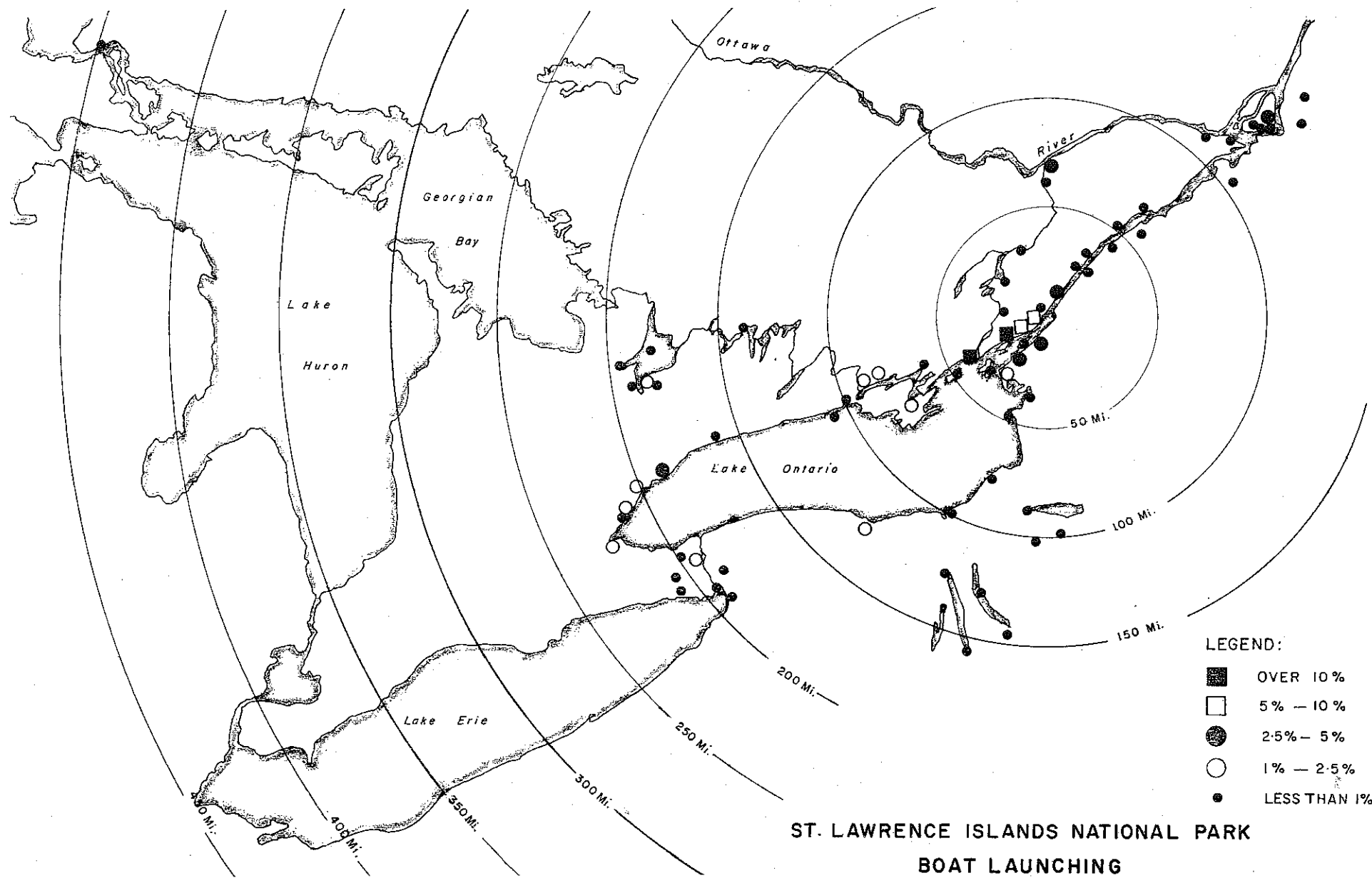
TABLE NO. 15

ST. LAWRENCE ISLANDS NATIONAL PARK
ISLAND GROUP
BOAT LAUNCHING DISTANCE

<u>Straight Line Miles from Park</u>	<u>Percent of Parties</u>
0 - 50	54.8
51 - 100	10.6
101 - 150	10.4
151 - 200	11.4
Over 200	12.8

While most boats are put in the water within 50 miles of the park, many visitors make extensive trips by water to reach the area. The principal launching points in Ontario were Kingston (15.5% of all boats), Gananogue (10.8%), Rockport (9.2%) Ivy Lea (5.5%) Brockville (4.0%) and Toronto (4.0%). Montreal accounted for 4.3%, while Alexandria Bay and Clayton, New York each had 4.7%. The mainland portion of the park is insignificant as a launching point for island travel. This finding confirms the view expressed earlier that there is little user connection between the two parts of the park.

The various launching points, the volume of launching



ST. LAWRENCE ISLANDS NATIONAL PARK
BOAT LAUNCHING

and the distance relationships involved have been mapped.

While most boats are launched along the St. Lawrence, or on Lake Ontario, the inland waterways of the Rideau and Trent Canals, and the canals of New York State provide boat access to the islands in the Park.

G. Activities

The overnight visitors are primarily interested in swimming, sightseeing and boating. There are differences in the participation in various activities between the island groups. Camping ranks fairly low (20.4% of the parties) as an activity. This low interest in camping would indicate that most overnight visitors use their boats for overnight accommodation.

TABLE NO. 16

ST. LAWRENCE ISLAND NATIONAL PARK
ISLAND PORTION
ACTIVITIES OF OVERNIGHT VISITORS

<u>Activity</u>	<u>Rank Order By Group</u>					
	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>All Groups</u>
Swimming	1	3	2	1	2	1
Sightseeing	2	1	1	2	1	2
Boating	4	2	3	3	3	3
Fishing	3	4	4	4	4	4
Camping	6	7	6	6	6	5
Picnicking	5	5	5	5	5	6
Relaxing	7	6	7	7	7	7
Skin Diving	8	8	8	8	7	8

H. Occupations

Overnight visitors to the islands are drawn largely from people in the managerial, proprietary and professional fields. In fact just over 70% of the heads of households in the survey fell into these classes. Skilled labour and farmers accounted for 11.9% of the total and sales and clerical 9.1.

TABLE NO. 17

ST. LAWRENCE ISLANDS NATIONAL PARK
OCCUPATIONAL COMPARISON
MALLORYTOWN CAMPGROUND AND ISLAND GROUP

<u>Occupational Group</u>	<u>Percent of Parties</u>	
	<u>Mallorytown</u>	<u>Islands</u>
Sales, clerical	9.1	9.1
Managerial, proprietor	10.0	36.8
Skilled labour, farmers	23.6	11.9
Service, semi-skilled	12.7	5.2
Professional	24.5	33.3
Retired	6.4	2.6
All Others	13.7	1.1

The data presented in the table suggest that the Mallorytown Campground and the Islands cater to different markets as far as overnight visitors are concerned. These figures are also an indication that vacation boating is still very largely the preserve of the better paid members of society.

TABLE NO. 18

ST. LAWRENCE ISLAND NATIONAL PARK
OCCUPATIONAL COMPARISON
OVERNIGHT AND DAY VISITORS - ISLAND AREA

<u>Occupational Group</u>	<u>Percent of Parties</u>	
	<u>Overnight</u>	<u>Day Visitor</u>
Sales, clerical	9.1	9.6
Management, proprietor	36.8	35.1
Skilled labour, farmer	11.9	12.8
Service, semi-skilled	5.2	4.3
Professional	33.3	34.0
Retired	2.6	3.2
All others	1.1	1.0

These findings of this part of the study reaffirm the assertion that areas accessible by boat are largely patronized by higher income groups.

VI Discussion:

A. Methodology

In this study several different methods were used to collect the information necessary to achieve the objectives set forth. The observational techniques used in the day use area were originally designed for an area that received less use and they have been used successfully in such areas. As designed they worked well on week-days, and on week-ends when weather restricted attendance. On heavy use days the volume of use caused the method to become less effective than planned. In future studies of day use areas where heavy week-end use is likely to occur the methodology being tested at Riding Mountain National Park in the visitor pattern study 1967 should be adopted if the tests are successful. Additional testing of

the method will be used at Lower Fort Garry National Historic Park.

The use of a voluntary questionnaire on the islands produced sufficient returns for a thorough analysis of the overnight visitor. Relatively few returns from day visitors leaves several unanswered questions, i.e. are there few day visitors, do day visitors not complete questionnaires as readily as overnight visitors, are most day visitors to one island overnight visitors to another. Better results could be obtained if checking procedures were built into the data gathering process.

Copies of the forms used in the various parts of the study are included as appendices to the report.

B. Results

Two major facts emerged from the study. The first of these there is little user relationships between the mainland portion of the park at Mallorytown and the island members. Use at Mallorytown is related to the local towns and cities and to Highway 401. The islands are related to boat traffic along the St. Lawrence. People who use the mainland area do not visit the islands, at least on the same trip. In addition, the analysis of the occupational structure indicated that the islands cater to a different market than does the mainland area.

The second fact is that the park caters to visitors from a larger area than the immediate vicinity of the park. Although the local cities and towns are major sources of visitors, there is a surprising number of visitors from longer distances. In this way the park functions as much more than a local or regional park. Its location along the international boundary is reflected in the use by visitors from the United States.

As St. Lawrence Islands National Park is the nearest National Park to the two major metropolitan areas of Canada and to many residents of the United States, this Branch should be sure that its development of the park is a good example of the standards that should be maintained in National Parks. In any interpretative program the fact that the two portions of the park cater to distinct markets should be kept in mind. Any program initiated on the islands will not reach the visitors to the mainland and similarly any program on the mainland will not influence the island visitors.