

Report on the Characteristics and Habits of Visitors to Monhegan Island

A Simulation Forecast of Visitor Behavior and Island Revenues

With Data from Summer 2003 and 2004

**A review of why people come, what they do, how much they spend
and**

A Discussion of Maintaining the Island's Heritage Value.

Initial survey data gathered in July, 2003

New Survey data gathered in August 2004

Report submitted January, 2005

The view in 2020?



Executive Summary

For one week in July of the summer of 2003, FutureMetrics, at the request of the Monhegan Planning Advisory Board, surveyed visitors to the island. A report was generated from the data and analysis. The summary findings were presented to the island community and to the Maine Land Use Regulation Commission (LURC).

At the further request of the Monhegan Planning Advisory Board and with the encouragement of LURC, we returned in the summer of 2004 in August for a second round of surveys. We also administered a separate and far more comprehensive survey to island residents, property owners, and business owners. The results of that survey are presented in a separate report.

As we noted in the original report, Monhegan Island has a unique value for visitors. For most of those that come to the island, the visit's value is based on the natural and mostly unspoiled characteristics of the island. Intertwined with the impressions people have about their experience are the effects created by the number of other people also visiting the island.

This study continues the investigation of the relationship between the numbers of people on the island and the impression they have about their visit. We also investigate how the island gains revenues from visitors. This study reinforces the conclusions of the earlier report that overnight visitors, particularly those staying for a week or less, are the most important component of the island's aggregate revenue from tourists. It is also clear that these important visitors are more sensitive to increasing numbers of people than those that visit for the day.

Based on our analysis using data from both 2003 and 2004 our conclusions remain similar to those we reached in our first round of research. The analysis from the second round of research appears to support our work from 2003. We forecast that any significant growth in visitors, which by definition means a higher proportion of day visitors, will, over time, have strong negative impacts on the island's aggregate tourist revenues.

Furthermore, we also show that if there is significant growth in visitor traffic some scheme for controlling the numbers of day visitors will be necessary if the island is to maintain its ecological capital and continue to have a thriving tourism industry. Our data and analysis suggests that most visitors would be willing to pay a modest amount to preserve the island's heritage. Thus, in the model we use to simulate growth over time, we show that a modest fee can control the flow and mix of visitors and thus maintain the valuable "heritage" resource that is the island's primary attraction. In maintaining that resource, the island community also maintains the flow of revenue that has become an important component to the island's economy.

The key insight of this study identifies a necessity to maintain the ecological and cultural foundations of the Monhegan experience.

FutureMetrics would like to thank Dr. Wendy Harper, Economist, University of Maine for her assistance in crafting the survey and gathering data.

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Report on the Characteristics and Habits of Visitors to Monhegan Island and A Simulation Forecast of Visitor Behavior and Island Revenues

With Data from Summer 2003 and 2004

Introduction

The Monhegan Island community's economy has been intertwined with people visiting from the mainland for many generations. Overtime, the island's economy has become increasingly connected to the summer tourist business. Although there are a fixed number of beds available on the island that effectively places a cap on the number of visitors that can spend the night on the island, only the size and number of ferry trips from the mainland to the island limits the number of visitors that come only for the day.

Clearly one can envision too many visitors. Imagine a cruise ship anchoring off the island and bringing several thousand people over to walk through the village and hike the trails. No observer would dispute that this is too many people at once. However that leads to the question: How many are too many?

This study attempts to answer that question.

Over the period of one week from July 25 to July 31, 2003, 438 people completed a four page survey. In the period from August 12 to August 17, 2004 another 412 surveys were completed. The two surveys were very similar. However there are a few added questions and a few rewordings from the 2003 version. We asked about 20 questions (see a copy of the 2004 survey at the back of this report) with the intention of gathering data that would help to analyze the characteristics and activities of visitors vis-à-vis their impact on the island economy.

Most completed the survey as they were waiting for a ferry to the mainland. Thus most were just finishing their island experience.

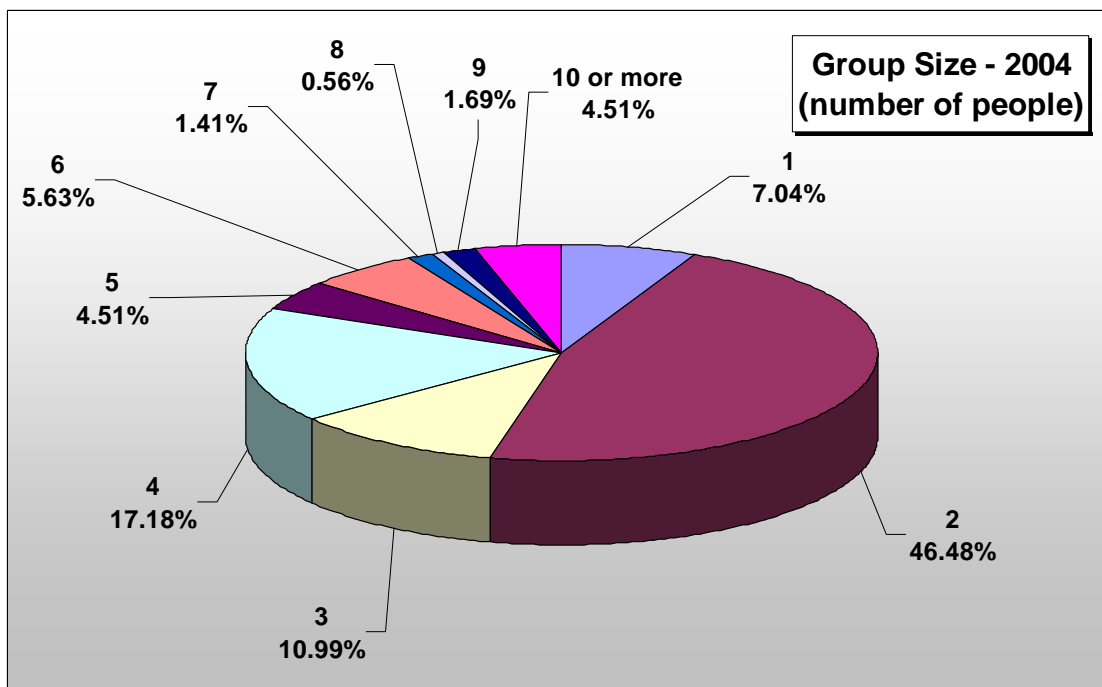
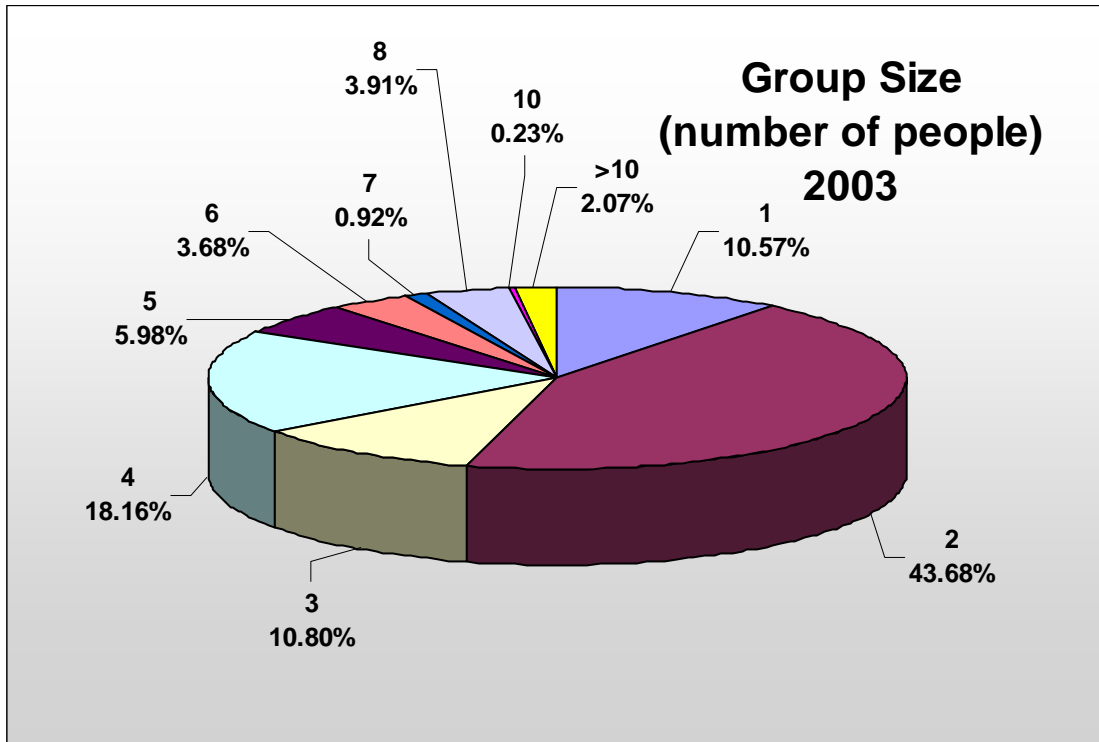
That data from the 2003 and 2004 surveys are summarized and analyzed in the following pages. The summaries identify some of the demographic characteristics and some of the relationships between characteristics and activities. The data also identifies visitors' impressions with the island experience and their sensitivity to the numbers of other visitors on the island. That information is used to analyze the impact of higher levels of visitors, which by definition must be day visitors, on the island's tourist revenues.

Finally, we use the insights gained from the analysis to set up a simulation in which we allow the numbers of visitors to grow. The simulation results provide guidance regarding the relationship of the number of visitors to the island's summer visitor revenues.

Demographic Data and Relationships with Activities

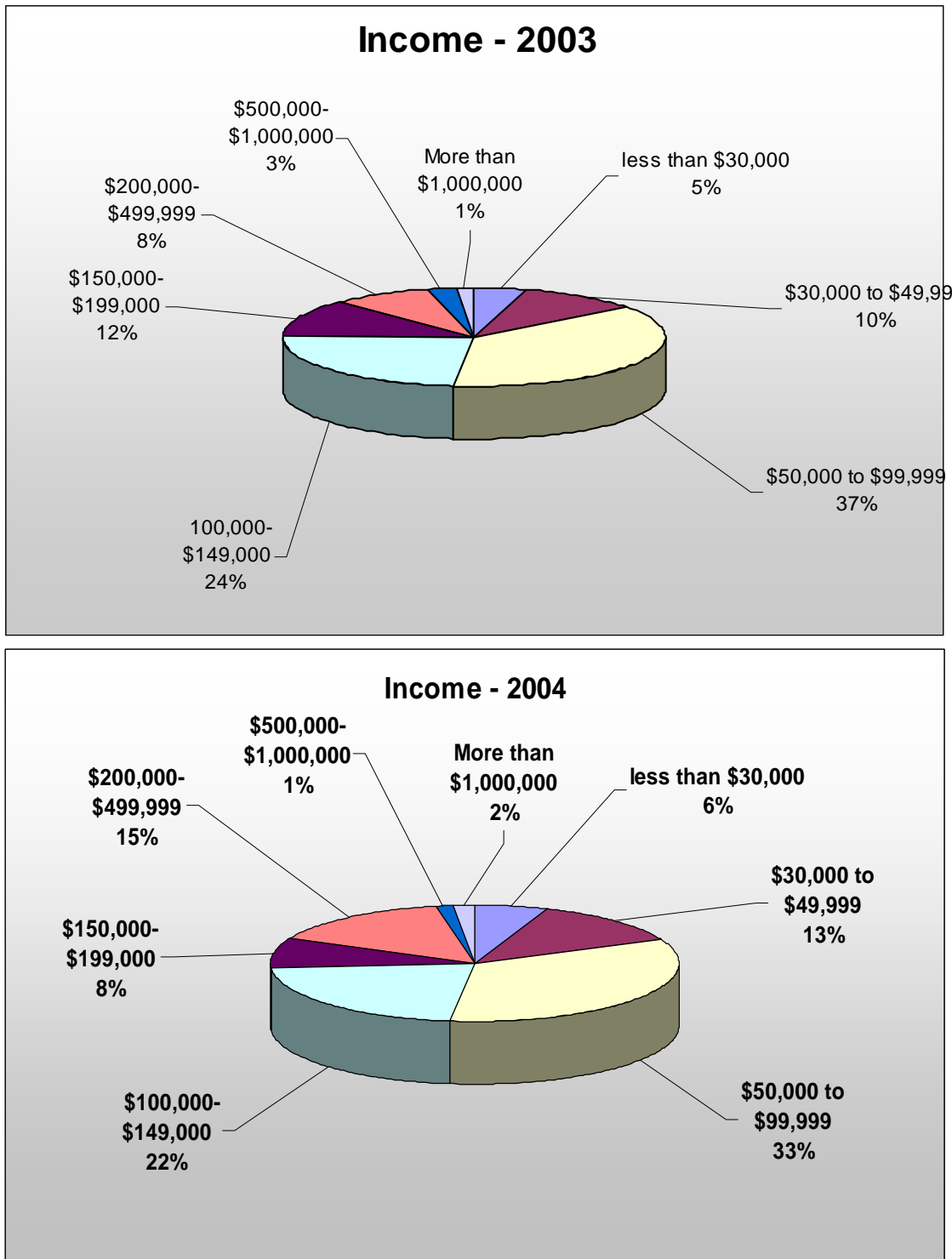
Visitors, for the most part, come in groups. The average group size was very consistent between years. The median group is two people. The breakdowns of group sizes are shown in these charts:

Figure 1 - Group Size



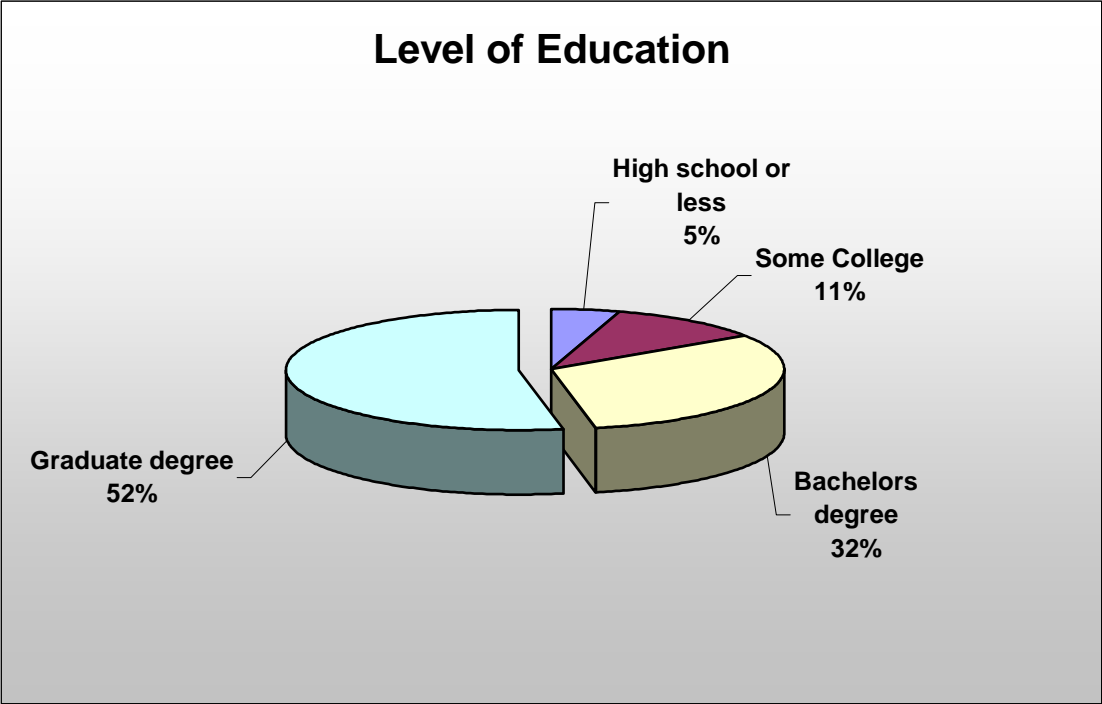
More than half of the groups had income levels between \$50,000 and \$150,000 per year. The average income in 2004 for visitors was \$88,000. The income profile for the two years was not significantly different. The average income was slight higher (\$85,500 in 2003).

Figure 2 - Income



The typical survey taker is well educated with more than half having a post graduate education. This profile was almost identical for both years.

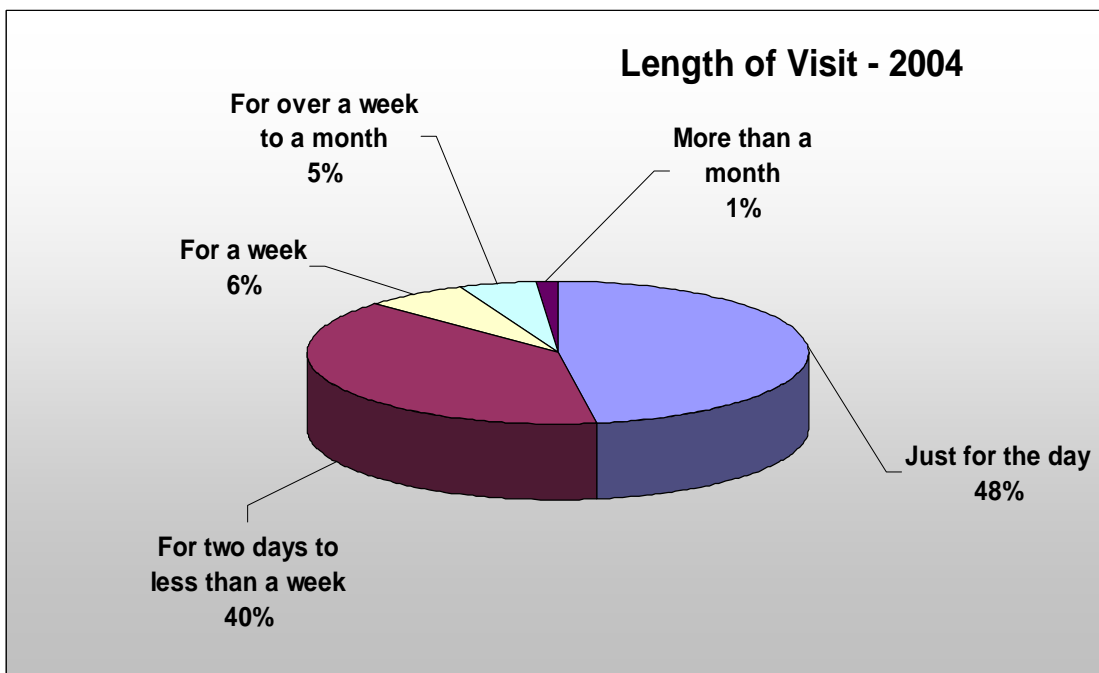
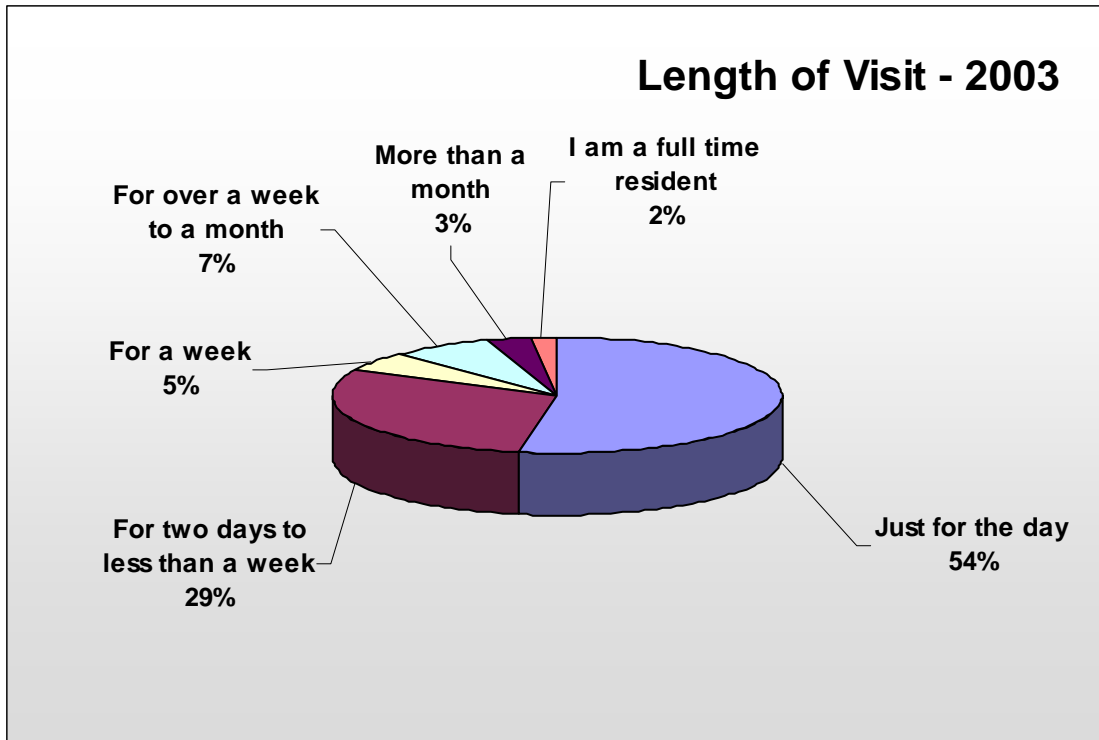
Figure 3 - Level of Education



The average visitor stayed on the island for just under two days. The trend between 2003 and 2004 suggests a small decline in the percentage of day visitors and a significant increase in the percentage of visitors that spend at least one night. (Note that full time residents are not included in the 2004 visitor survey. As noted in the introduction, they are the subject of a separate survey and report.)

The breakdowns of lengths of visit are summarized in the following charts:

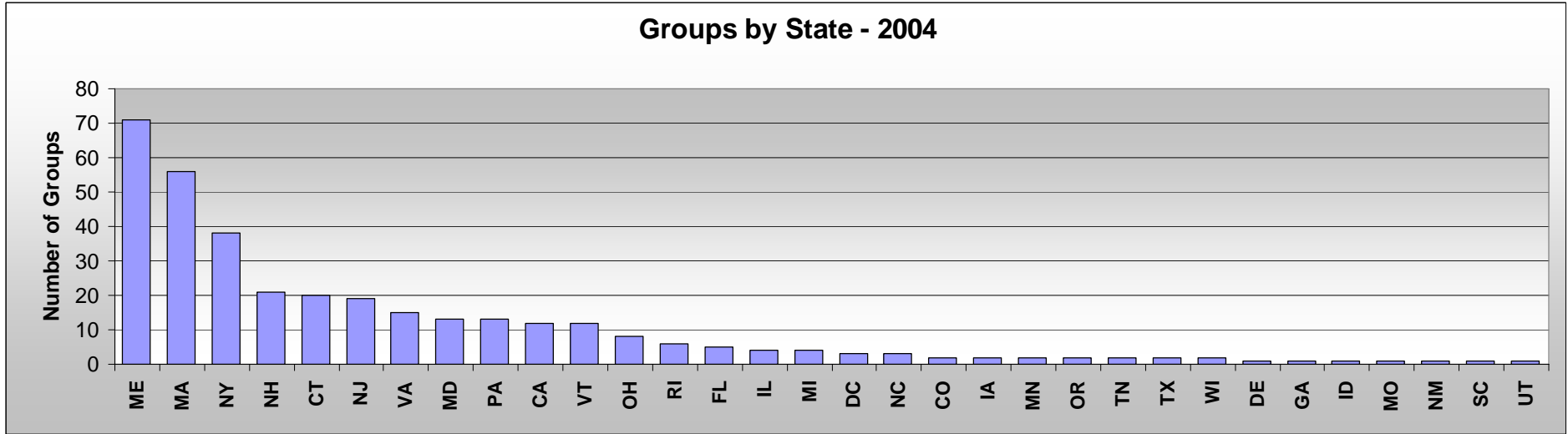
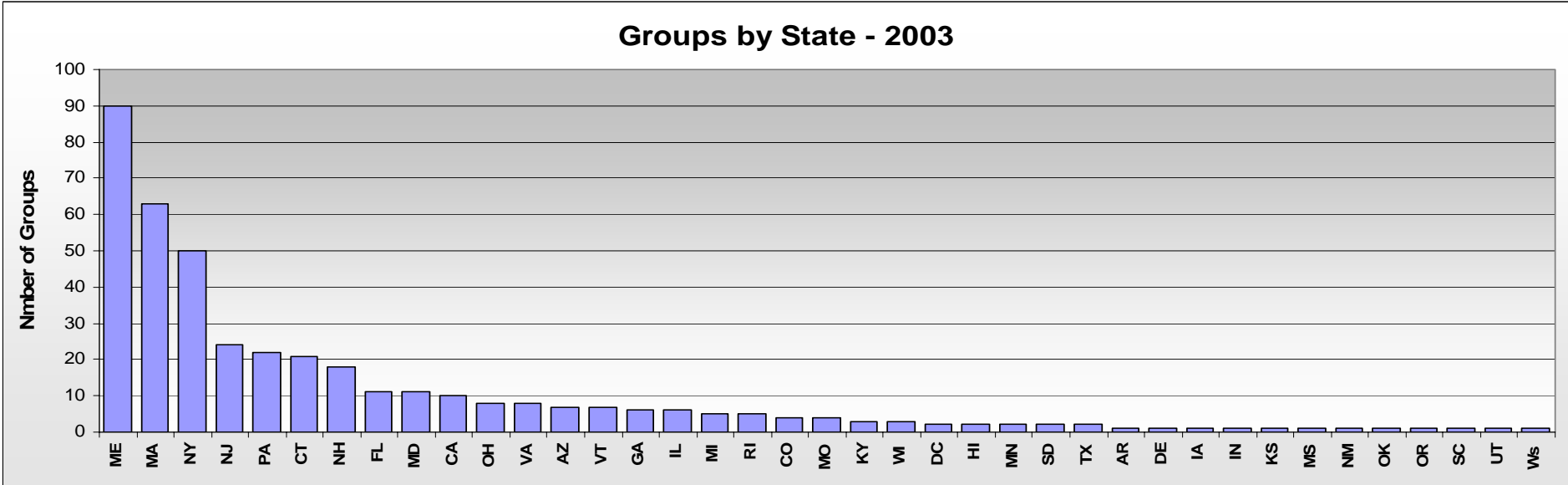
Figure 4 - Length of Visit

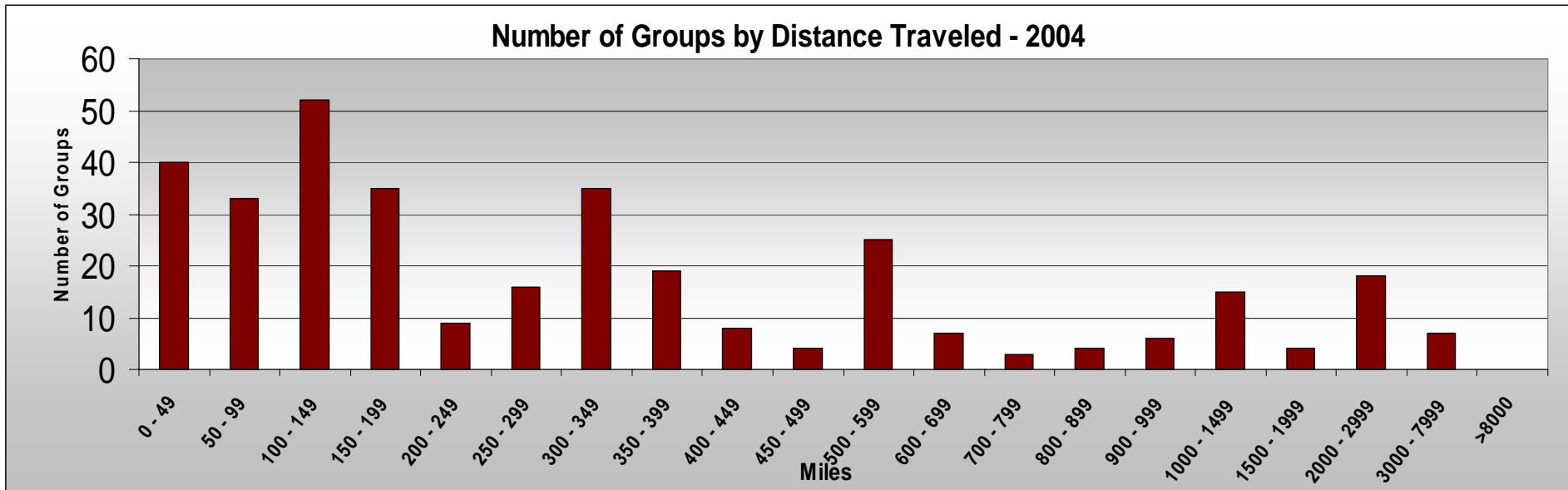
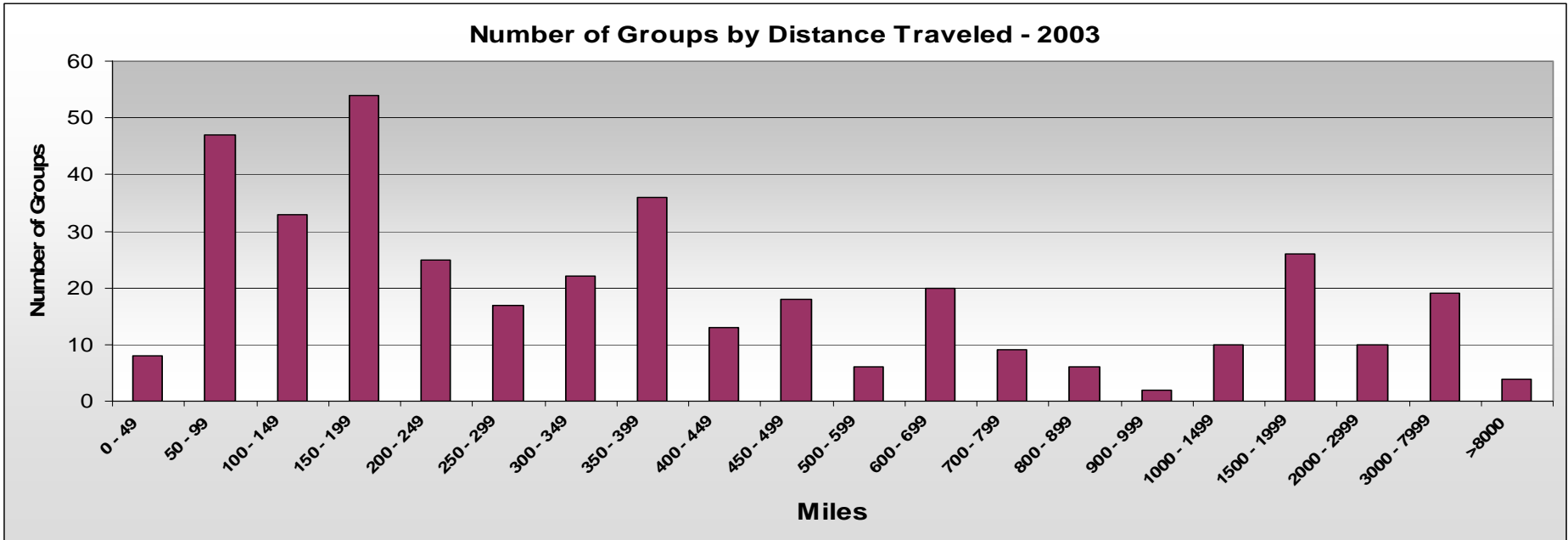


Visitors came from a number of states and had traveled, in some cases, long distances. The charts on the following pages summarize this data. There were also 8 groups from Canada, two from Australia, and one from England in 2003. In 2004 there were groups from Germany, Spain, Italy, and the Netherlands.

The average distance traveled in 2003 was 542 miles. The average distance traveled in 2004 was 441 miles. The median distance in 2003 was 276 miles. In 2004 the median distance traveled was 240 miles. The reasons for the difference may be related to the overall slowdown in consumer spending in 2004 and it also may be month dependent (that is, August travelers some from closer states on average). We do not have enough data from different years to determine this cause.

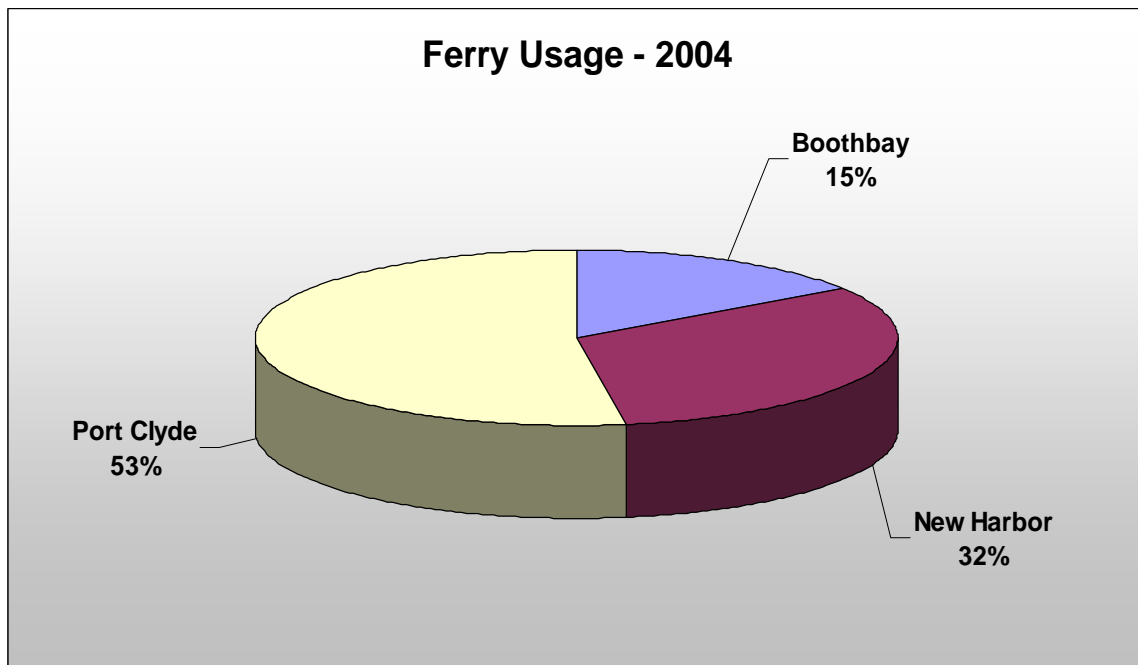
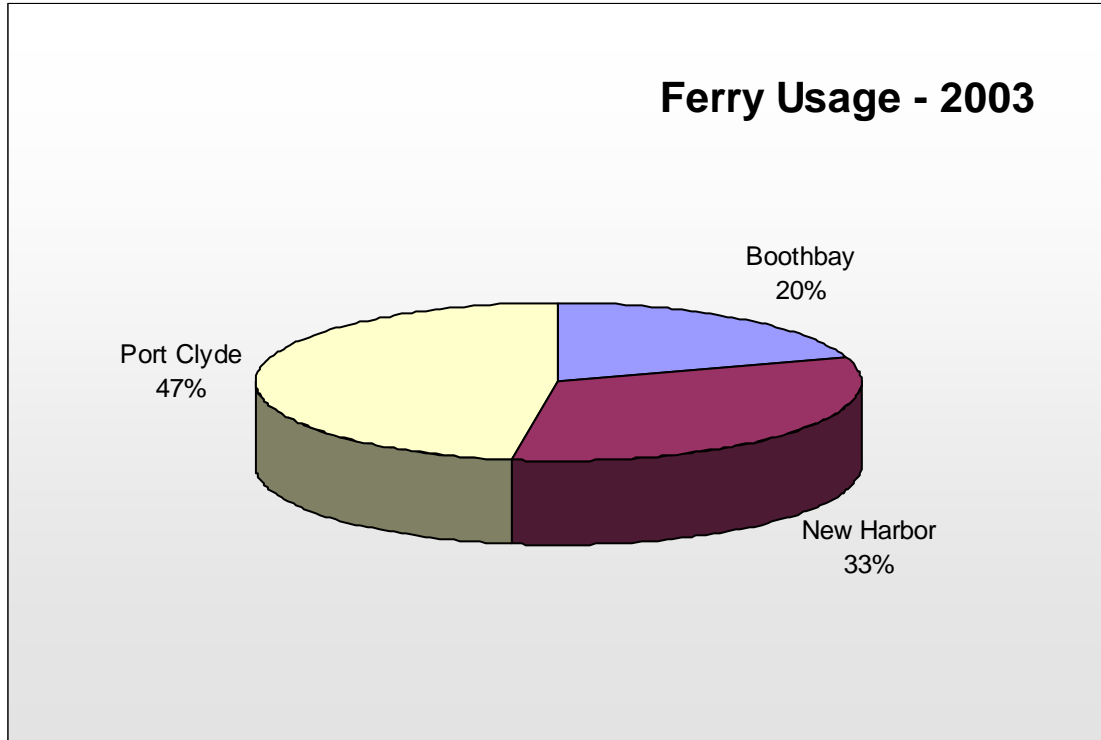
Figure 5 - Groups by State of Origin and by Distance Traveled





The visitors arrived at various times of the day primarily by ferry using coming from the ports as show in the charts. Note that the Port Clyde service gained market share from the Boothbay service.

Figure 6 - Ferry Usage



The ferries did not arrive and leave with the same numbers of people. The island tends to become most crowded between 11:00 am and 2:00 pm. The charts on the following pages show the cumulative number of visitors on the island. Note that the numbers only include people arriving and leaving the island and do not include people who did not arrive and leave during the week of data gathering. Note that in the mornings the accumulated number of people leaving generally exceeds the accumulated number of people arriving so the total can be negative.

We did take note of sea and weather conditions as well as visibility (fog) by gathering time stamped data from NOAA. We constructed an index to reflect the “friendliness” of the conditions to boat travel and sightseeing* and found a very significant correlation between our index and the numbers of day visitors on the boats (.74 for 2003 and .80 for 2004).

Based on the ferry capacities and daily trip schedules there is a potential for just over 700 people to be brought onto and off of the island per day.

In the 2003 survey, the maximum number coming on to the island during the week of the survey was on July 31; 438. This was matched by 422 leaving the island that same day. The lowest numbers were on Sunday, July 27; 176 onto the island and 219 leaving.

The story is quite different for the 2004 survey week. On Friday, August 13 high winds (southeast blowing 31 knots at 9am with wave heights reaching 6.4 feet at mid-day) caused the mid-day cumulative number of visitors to be negative 29! It was worse on Sunday, August 15. Although wind and wave levels were moderate, it rained all day and the maximum temperature was 64 degrees. The mid-day cumulative number of visitors was negative 51. The island was indeed relatively deserted on those two days. On Sunday 104 people came onto the island while 142 left. This is contrasted with the biggest day we observed on Tuesday, August 17, 2004 when there was 382 more people on the island by mid-day than had been on the island that morning. A total of 459 people came onto Monhegan that day while 430 left by evening. Several other days of higher winds and waves and fog also depressed visitor traffic.

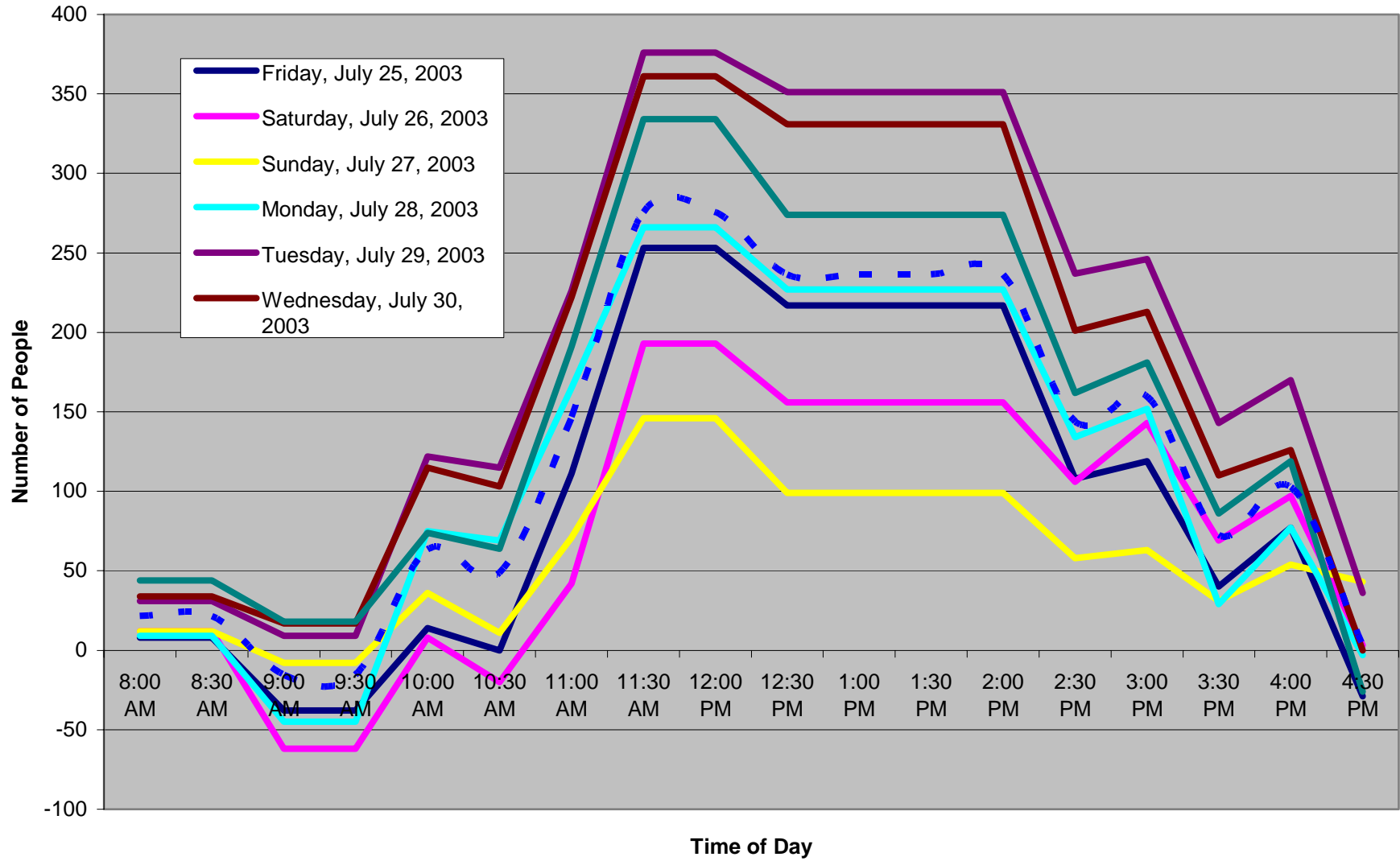
Saturday, August 14 was a day of moderately high winds and waves with fog and rain but the weekend effect of Saturday night stayovers countered the depressing aspects of the weather conditions.

As we will show below (see figure 8), the negative effect of the weather primarily impacts the day visitors. The negative cumulative visitors on Friday and Sunday was the result of overnight visitors that arrived on an earlier day leaving combined with very few day visitors coming to the island.

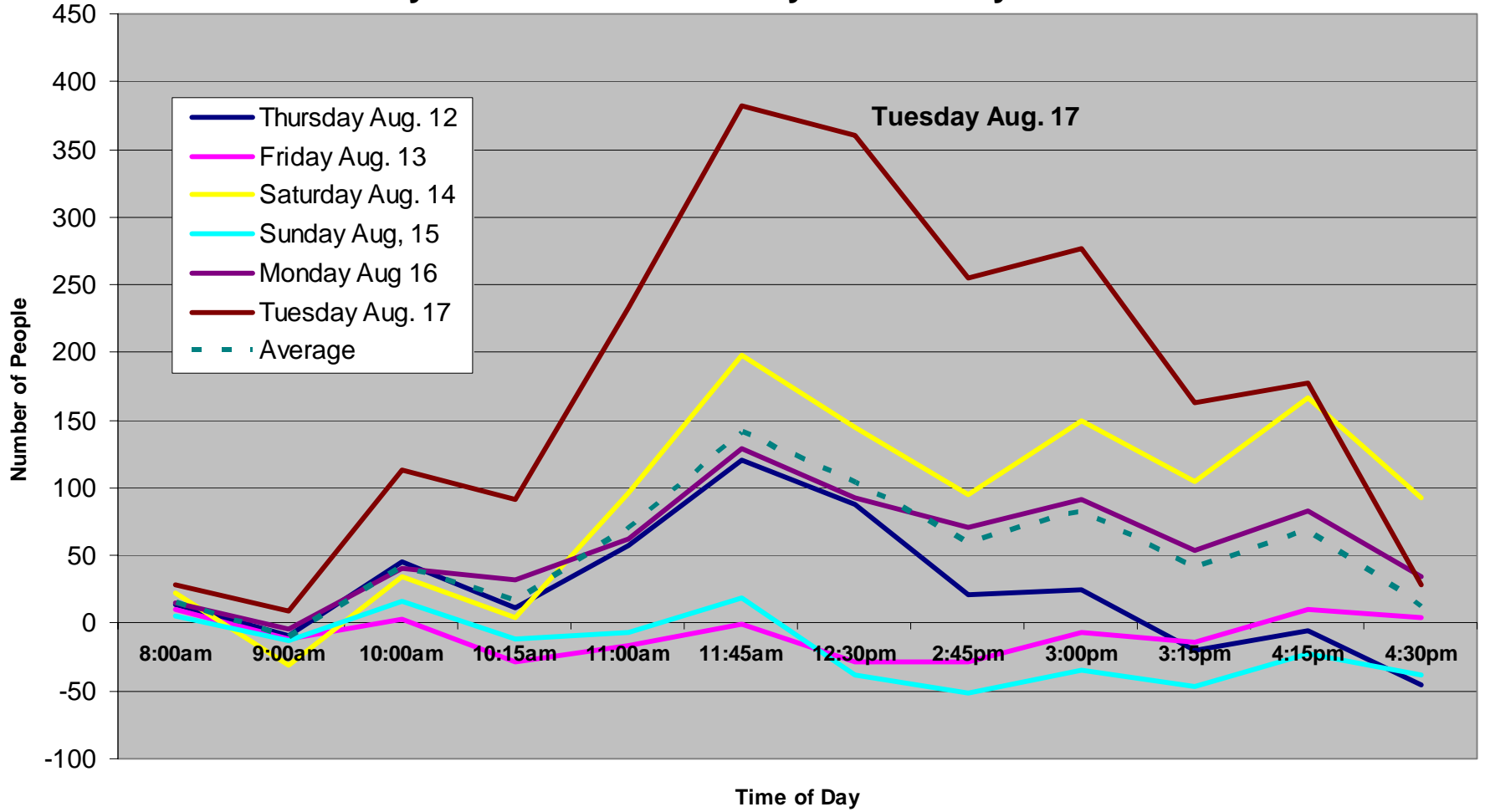
* This index is based on hourly data from the NOAA sea buoy near Monhegan for wind speed and direction wave height, and visibility. It is also based on weather data from Rockport and Augusta regarding precipitation and temperature.

Figure 7 - Daily Cumulative Visitors by Time and Day

Daily Cumulative Visitors by Time and Day -2003

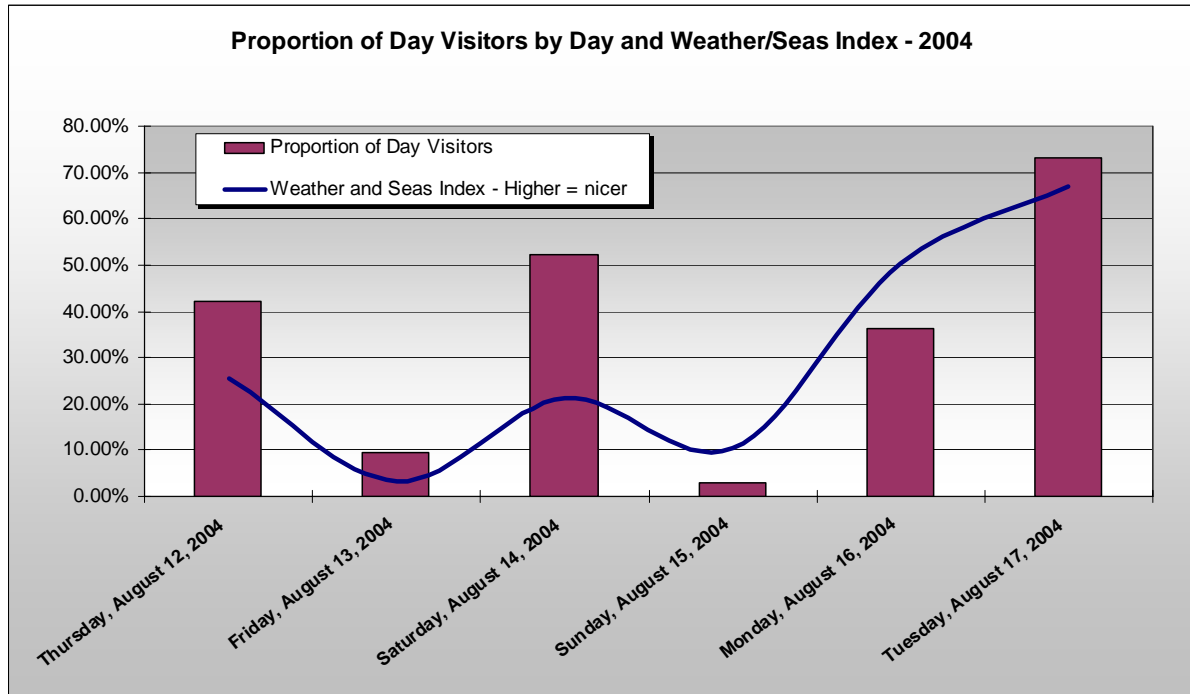


Daily Cumulative Visitors by Time of Day - 2004



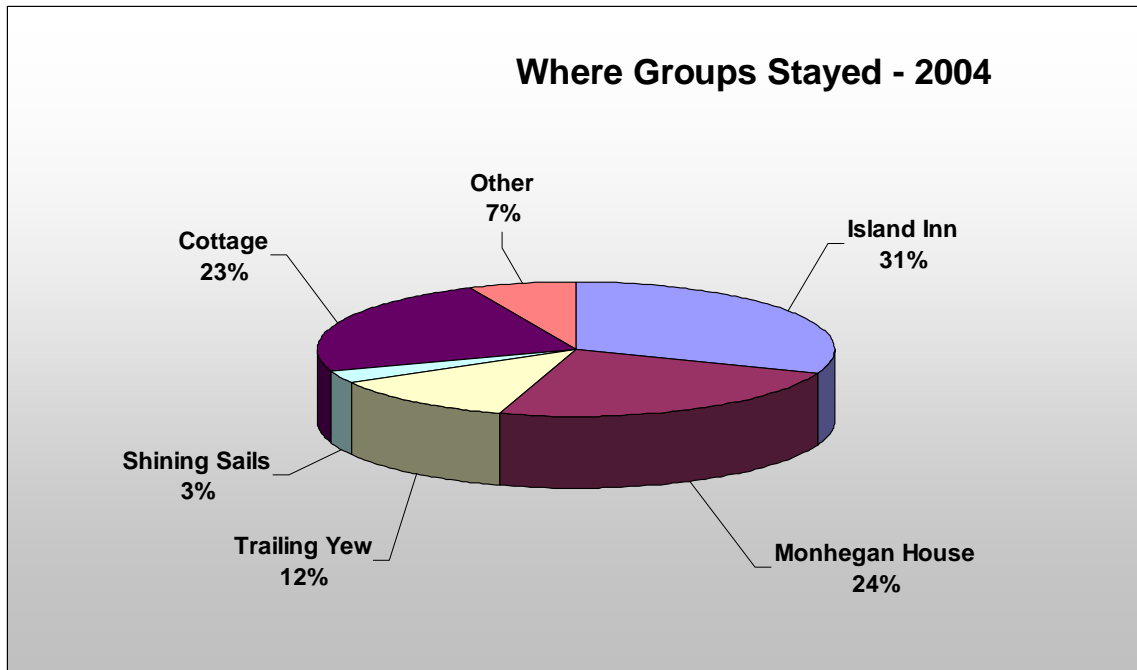
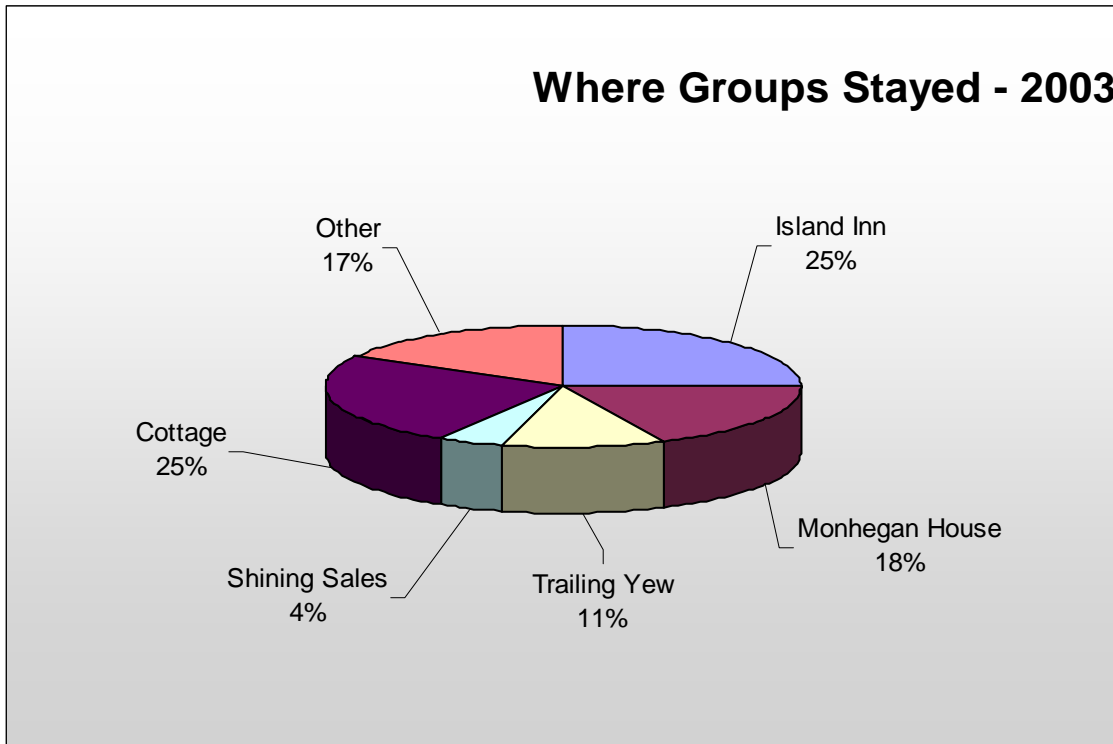
In aggregate, about 50% of the visitors brought by the ferries are day visitors. However, on any given day the proportion of day visitors is highly correlated to weather (.798). The chart below shows the relationship for the 2004 visitors.

Figure 8 - Proportion of Day Visitors by Day and Weather



The following charts summarize overnight visitor choices for lodging. Note that the two large hotels gained market share versus the other options.

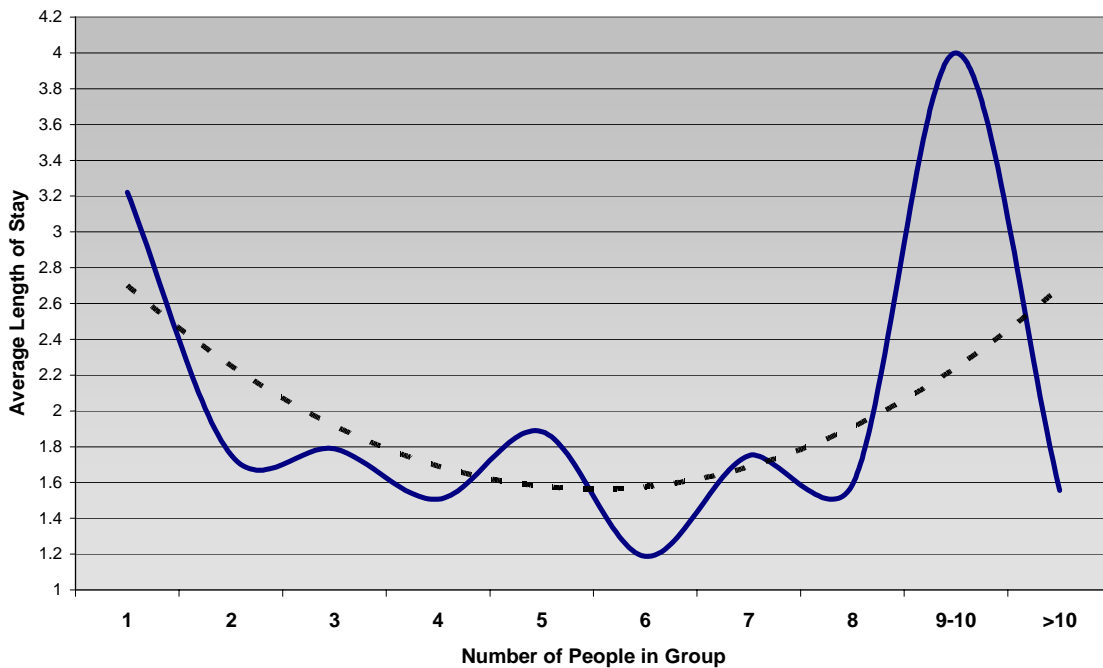
Figure 9 - Where People Stayed



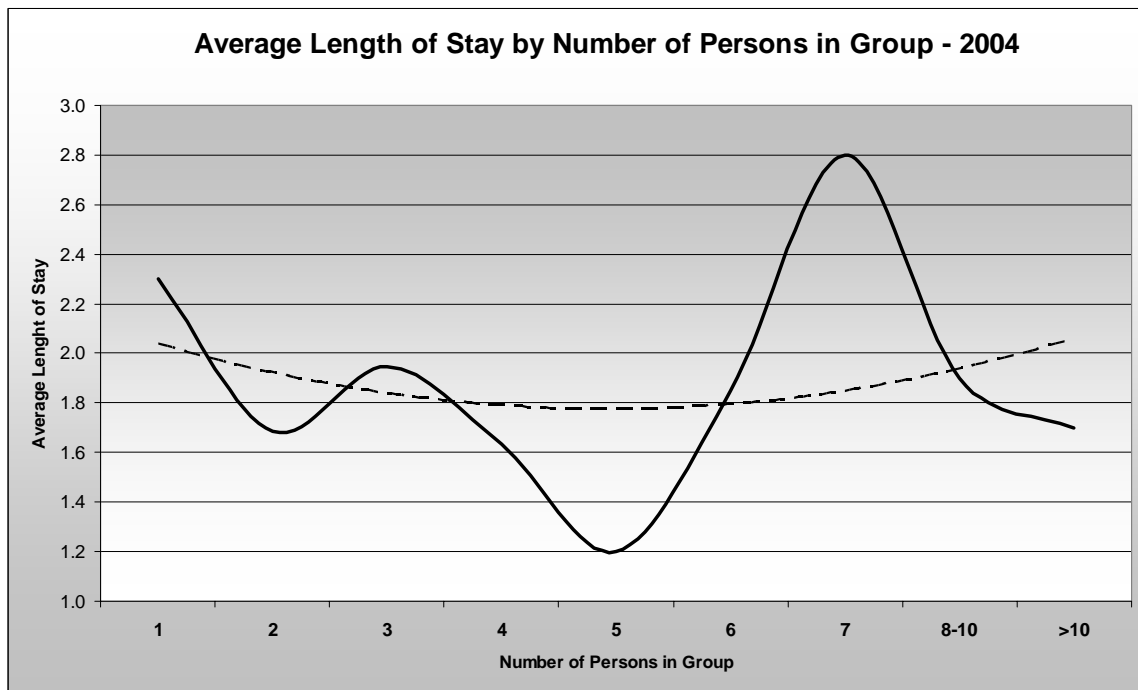
We also note that both smaller groups and larger groups tend to stay longer than medium sized groups; although this characteristic did moderate slightly in 2004. In the charts below, the dotted line is fitted to the data and shows the tendency for the average length of stay by the size of group. Note that the average length of stay declined from 1.85 days to 1.73 days from 2003 to 2004.

Figure 10 - Average of How Long Group Stayed on the Island by Group Size

Average of How Long Staying on the Island by Group Size - 2003



Average Length of Stay by Number of Persons in Group - 2004



In both survey years, about one half of visitors had been to the island before and half had not.

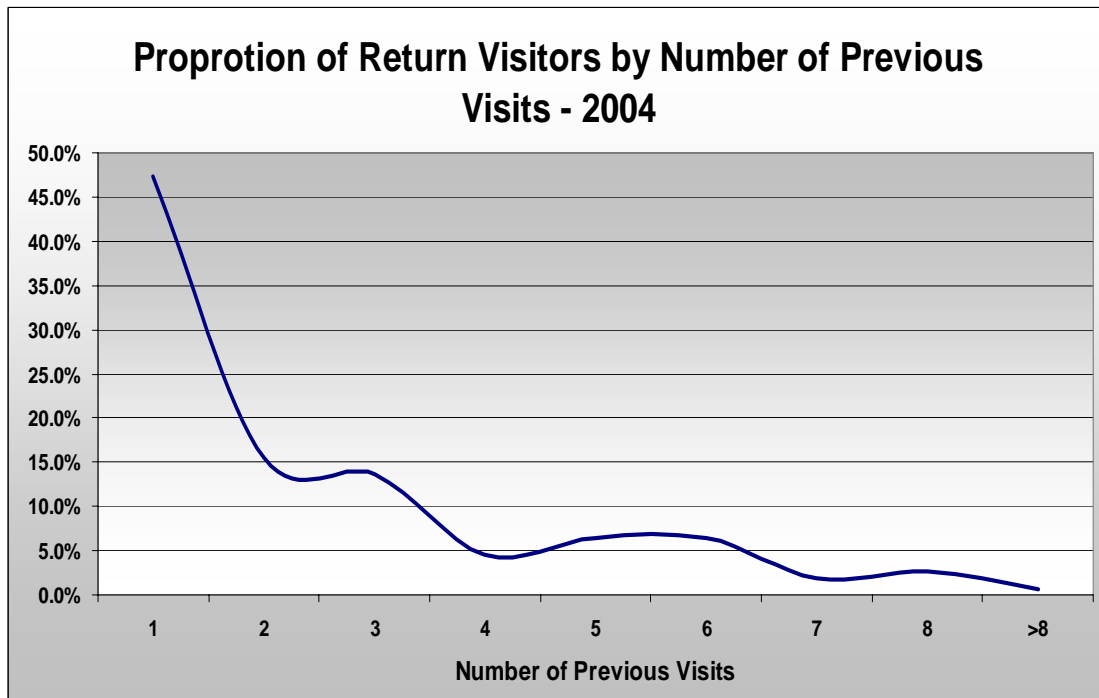
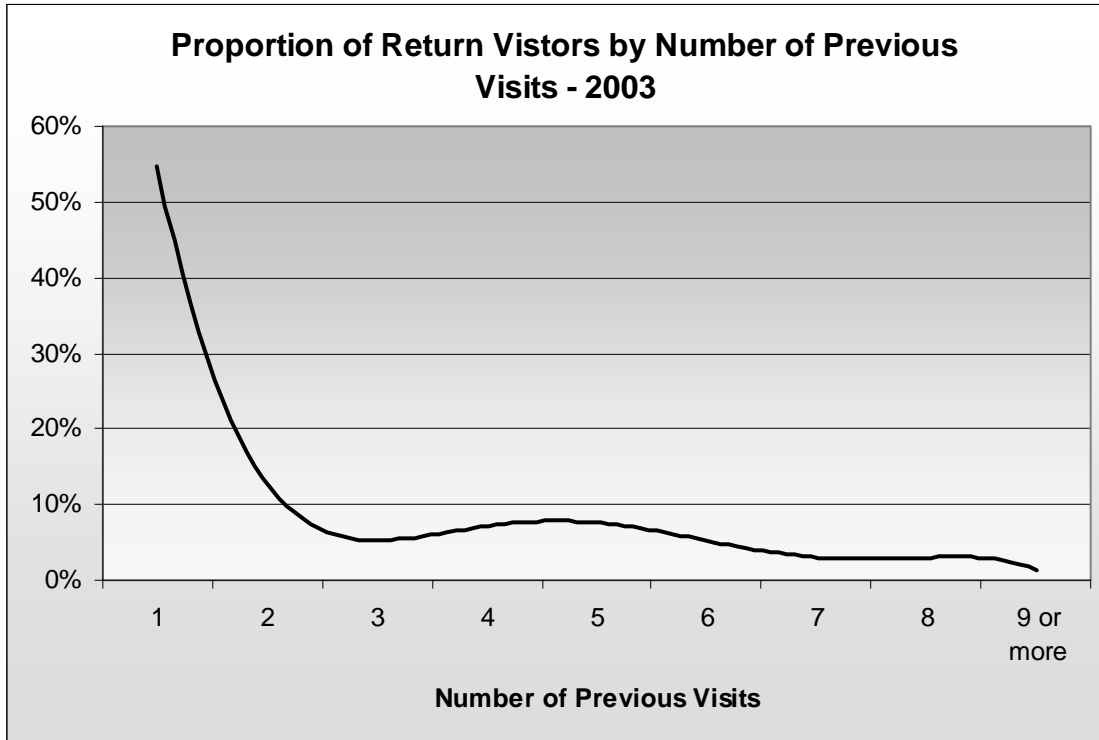
In 2003, first time visitors made up 72% of the day visitors and 28% stayed at least one night. In 2004, first time visitors were only 31% of day visitors. In other words, the proportion of first time visitors staying only for the day dropped significantly. This is probably weather related as discussed above.

Repeat visitors, however, tend to be overnigheters. In 2003 only 34% of repeat visitors were day visitors and 66% of the repeat visitors stayed at least one night. In 2004 that number is similar with 62% of visitors who had been to the island before staying the night.

Of those that had been before, many are multiple repeat visitors. Of those surveyed for whom this visit was not the first, in 2003 about 25% had been to the island at least 3 previous times. In 2004 that number rose to 29%. In other words, those that visit tend to return. (Please note that this survey excludes summer residents and thus this data is only for visitors that can be classified as tourists.)

The charts below show a fairly stable membership in the group of visitors that return multiple times although most (about 55% in 2003 and 47% in 2004) had been only once before. Building on the paragraph above, we see that an increasing proportion of return visitors have been before.

Figure 11 - Proportion of Return Visitors by Number of Previous Visits



Spending Habits and Island Revenues

The total number of people in the groups we surveyed (i.e., leaving the island that week) was 1283 in 2003. The total number of people in the groups we surveyed was in 2004 was 1194. Based on our count of the ferry passengers, 1524 people left the island during the six days we surveyed in 2004 and 2613 left during the seven days of surveys in 2003.

However, not every group spent money or answered the questions. The average surveyed group spent the following:

Table 1 - Average Spending by Category

2003	Average	Number of Survey Responses
Restaurants	\$ 53	295
Lodging	\$ 152	159
Groceries and supplies	\$ 31	196
Art work (total)	\$ 229	88
Other	\$ 61	133

2004	Average	Number of Survey Responses
Restaurants	\$ 92	250
Lodging	\$ 412	140
Groceries and supplies	\$ 48	180
Art work (total)	\$ 294	71
Other	\$ 55	99

This data confirms the fact that in 2004 there was a significant increase not only in the proportion of visitors that spend the night but also in the length of stay. However this is mitigated, at least for the week that we were on the island in the summer of 2004, by poor weather and a lower overall number of visitors versus 2003.

Based on our analysis of spending and the total numbers of people riding the ferries, we can estimate the weekly gross island income from tourism. In the week of the survey in August, 2004 the weekly island income is estimated to be \$253,000 from about 1800 visitors for an average of about \$140 per visitor. In the week of survey in July, 2003 the total is estimated to be \$258,000 spent by 2600 visitors for an average of about \$100 per visitor.

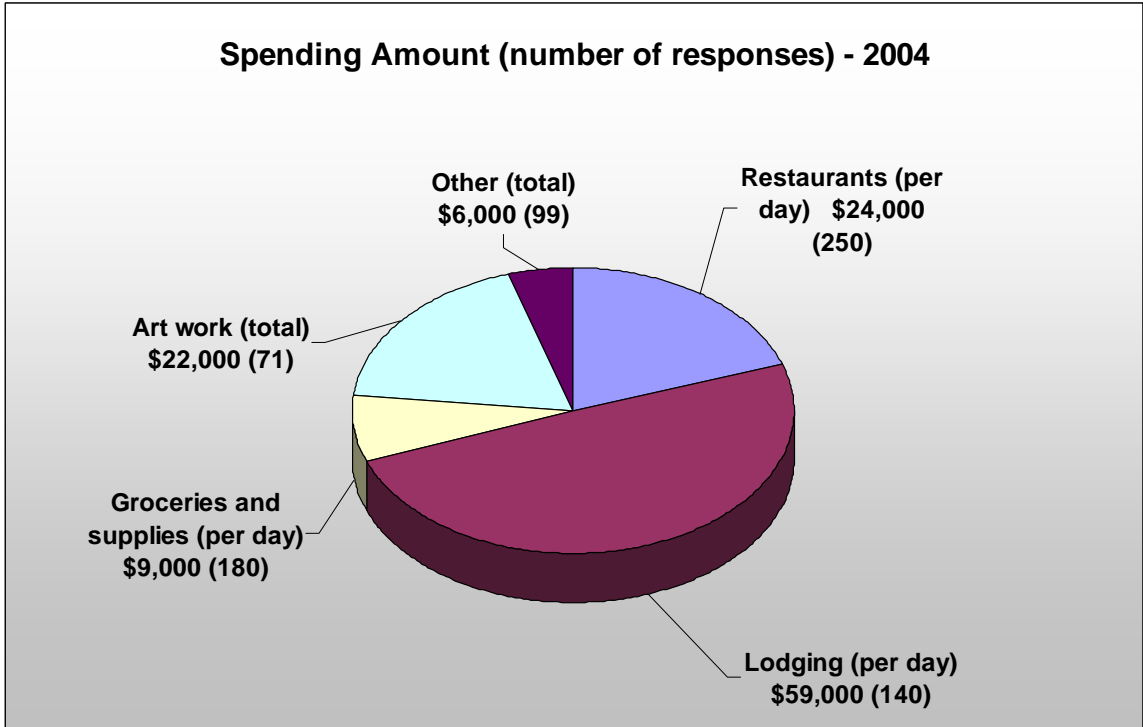
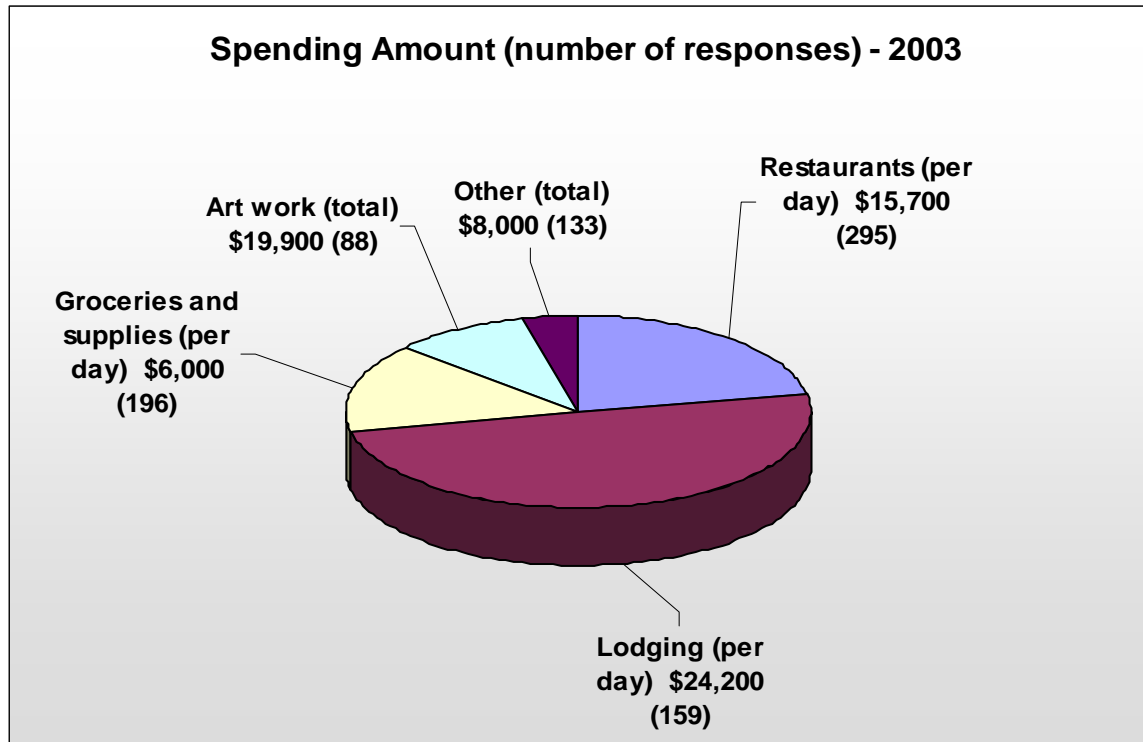
Table 2 – Tourism’s Contribution to the Island Economy

Contribution to Weekly Island Income (excluding art purchases) - Estimated Weekly Income from Tourism		
	July 25-31, 2003	Aug. 12-18, 2004
How Long on Island	Total Weekly Spending	Total Weekly Spending
Just for the day	\$ 54,401	\$ 57,841
For two days to less than a week	\$ 143,005	\$ 127,167
For a week	\$ 20,796	\$ 31,488
For over a week to a month	\$ 31,344	\$ 23,779
More than a month	\$ 8,322	\$ 12,330
TOTAL	\$ 257,867	\$ 252,605
Total number of Visitors	2,590	1,808
Average per visitor	\$ 100	\$ 140

We see that visitors, on average, spent more in 2004. The average is, in part, pulled up by the drop in the proportion of day visitors.

The total amount spent in each category by those surveyed is summarized in the following chart.

Figure 12 - Spending Amounts in Various Locations



The characteristics of how money is spent depend on how long people stayed on the island. The following tables show the average amount spent daily for most categories. Artwork is shown as the total spent. Artwork also shows how many groups made purchases and the median purchase (there were a few expensive purchases that skew the average; thus the use of median is a more representative value of the typical purchase).

Table 3 - Breakdown of Visitor Spending by Length of Stay

2003

How Long on Island	Average Spent at Restaurants Per Day	Average Spent in Lodging Per Day	Average Spent on Groceries and Supplies Per Day	Average <u>Daily</u> Amount Spent (excluding Art)	TOTAL Spent on Art Work	Number of Groups that Bought Art	Median Art Purchase	TOTAL Spent on Other
Just for the day	\$ 40		\$ 17	\$ 57	\$ 8,517	34	\$ 23	\$ 3,488
For two days to less than a week	\$ 76	\$ 159	\$ 34	\$ 268	\$ 3,508	32	\$ 50	\$ 2,145
For a week	\$ 39	\$ 144	\$ 33	\$ 216	\$ 2,130	7	\$ 80	\$ 1,015
For over a week to a month	\$ 42	\$ 141	\$ 51	\$ 235	\$ 3,580	10	\$ 150	\$ 905
More than a month	\$ 35	\$ 74	\$ 33	\$ 142	\$ 2,200	5	\$ 400	\$ 355

2004

How Long on Island	Average Spent at Restaurants Per Day	Average Spent in Lodging Per Day	Average Spent on Groceries and Supplies Per Day	Average <u>Daily</u> Amount Spent (excluding Art)	TOTAL Spent on Art Work	Number of Groups that Bought Art	Median Art Purchase	TOTAL Spent on Other
Just for the day	\$ 45		\$ 15	\$ 61	\$ 3,136	28	\$ 100	\$ 1,461
For two days to less than a week	\$ 57	\$ 163	\$ 19	\$ 239	\$ 14,919	30	\$ 88	\$ 2,762
For a week	\$ 62	\$ 229	\$ 36	\$ 327	\$ 1,740	8	\$ 75	\$ 1,193
For over a week to a month	\$ 33	\$ 129	\$ 16	\$ 178	\$ 1,500	6	\$ 188	\$ 125
More than a month	\$ 52	\$ 137	\$ 22	\$ 210	\$ 750	1	\$ 100	\$ 10

This data shows that day visiting groups on average, excluding artwork, spent about \$200 per day less than groups that stayed at least one night in 2003. In 2004, longer term visitors became more frugal. The significant decline in total day visitors for the week versus the 2003 data had a strong impact on the “other” category.

The following table shows the contribution to the island’s weekly income from surveyed visitors categorized by the length of time that visitors stay on the island.

Note that day visitors account for about 1/10th of the island’s tourist income. (The 2003 and 2004 data for day visitors was influenced by several large art purchases as can be seen in the “including art” column for the day visitors.)

Table 4 - Breakdown of Island Tourist Income by Length of Stay

Contribution to Weekly Island Income (surveyed visitors only) - 2003		
	Excuding Art	Including Art
How Long on Island	Percentage of Total	Percentage of Total
Just for the day	11%	17%
For two days to less than a week	35%	32%
For a week	22%	20%
For over a week to a month	33%	30%

Contribution to Weekly Island Income (surveyed visitors only) - 2004		
	Excuding Art	Including Art
How Long on Island	Percentage of Total	Percentage of Total
Just for the day	8%	19%
For two days to less than a week	52%	49%
For a week	24%	20%
For over a week to a month	16%	13%

Spending patterns from 2003 to 2004 showed a remarkable variation based on the effect of having been a previous visitor. Of the aggregate money spent by visitors, there was a dramatic change from 2003 to 2004. In 2003 both day and longer term visitors spent less money on subsequent visits after the first visit. In 2004, day visitors spent a lot less whereas longer term visitors spent significantly more. The shift toward longer stays and larger groups by return visitors is part of the explanation. It also appears that more of these longer staying larger groups are buying their groceries on the island than they used to. The table below summarizes the information.

Table 5 - Spending by Length of Stay and Repeat Visit Status

Spending per Day by Length of Stay and Repeat Visit Status					
		Including Art		Excluding Art	
		Day Visitors	More than Day	Day Visitors	More than Day
Percentage change in spending as a result of having visited the island before	2003	76%	90%	70%	83%
	2004	30%	182%	33%	174%

We can also see that the average household income varied by the group's choice for length of stay. The tables below show the expected income (based on the income ranges indicated on the survey) by the length of stay. Please note that there were fewer numbers of groups that said that they stayed longer (versus the number of day visitors) and this is reflected in the table by the varying width of the 95% confidence interval statistics. The table does show that the average incomes of day visitors did not differ significantly from longer term visitors (with the exception of those that stay longer than a month whose household incomes are lower) in 2003. In 2004 household incomes for medium length stays was somewhat below the 2004 figures..

Table 6 - Average Household Income by Length of Stay

2003

Average Household Income by Length of Stay		95% confident between:	
Just for the day	\$ 119,000	\$ 110,000	\$ 128,000
For two days to less than a week	\$ 114,000	\$ 100,000	\$ 127,000
For a week	\$ 100,000	\$ 57,000	\$ 143,000
For over a week to a month	\$ 106,000	\$ 83,000	\$ 128,000
More than a month	\$ 66,000	\$ 13,000	\$ 119,000

2004

Average Household Income by Length of Stay		95% confident between:	
Just for the day	\$ 116,000	\$ 103,000	\$ 129,000
For two days to less than a week	\$ 87,000	\$ 74,000	\$ 101,000
For a week	\$ 75,000	\$ 42,000	\$ 108,000
For over a week to a month	\$ 133,000	\$ 94,000	\$ 173,000
More than a month	\$ 92,000	\$ 7,000	\$ 176,000

Not all day visitors spend money on restaurants, etc. In 2003 we observed that 36% of day visitors did not spend money on restaurants, 71% did not spend money on groceries

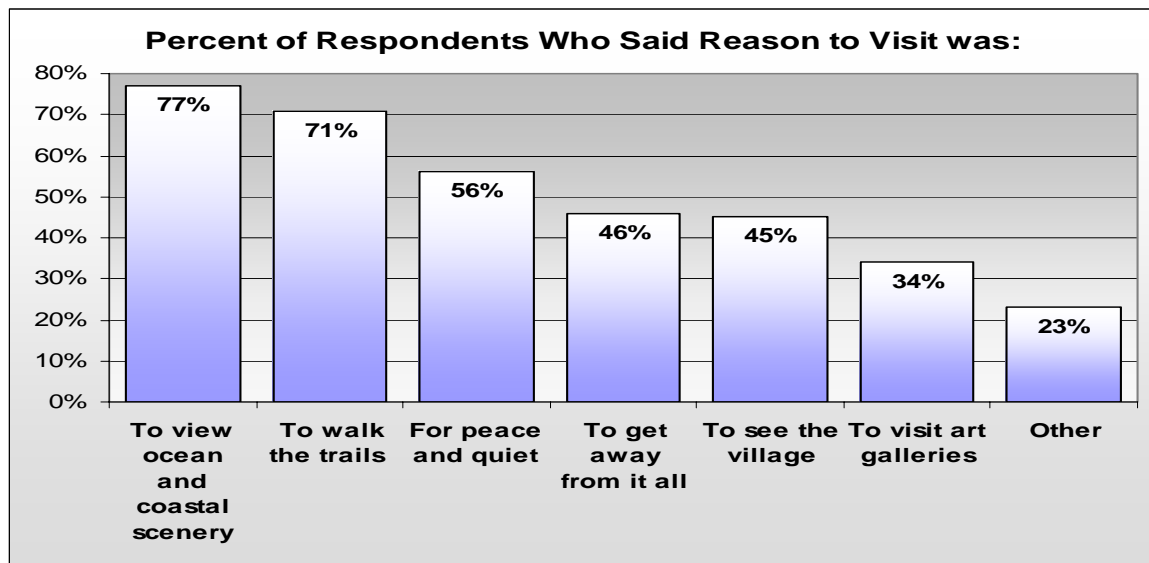
and supplies, 86% did not buy artwork, and 71% did not buy “other”. However, only 8.5% did not spend any money at all. In 2004 61% of day visitors spend money in a restaurant, 36% spent money on groceries, 16% on art. Only 1% reported buying “other” and 13% spent no money at all.

Reasons for Visiting the Island

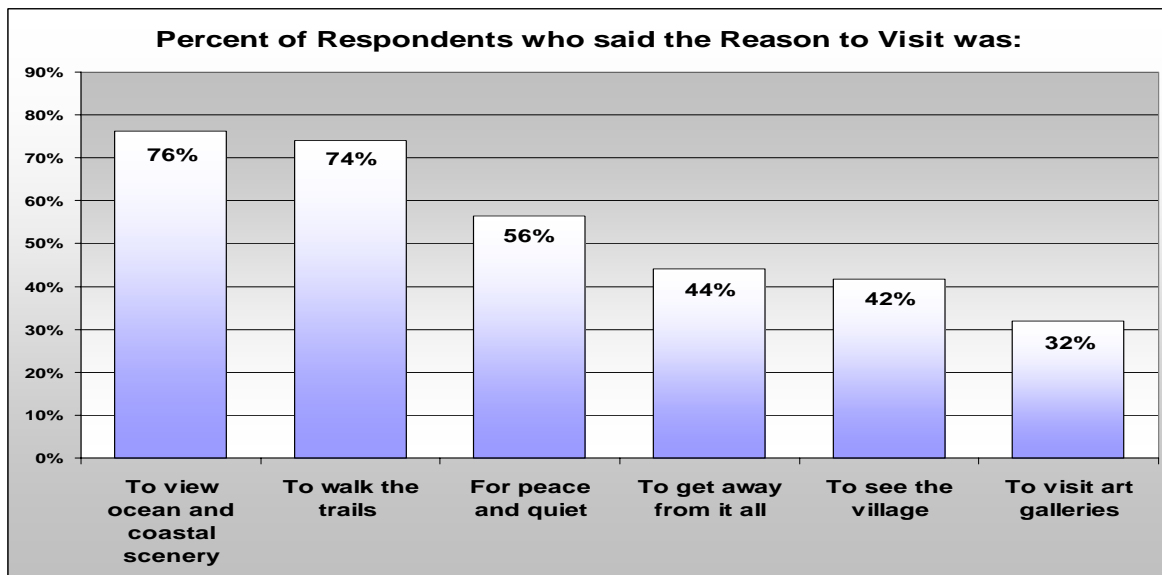
The visitors come to the island and they do engage in shopping and spending; but the main motives for visiting relate to the characteristics of the natural setting. The following charts show the percent of surveys that said the reason to come was for the reasons listed.

Figure 13 - Reasons for Visiting the Island

2003

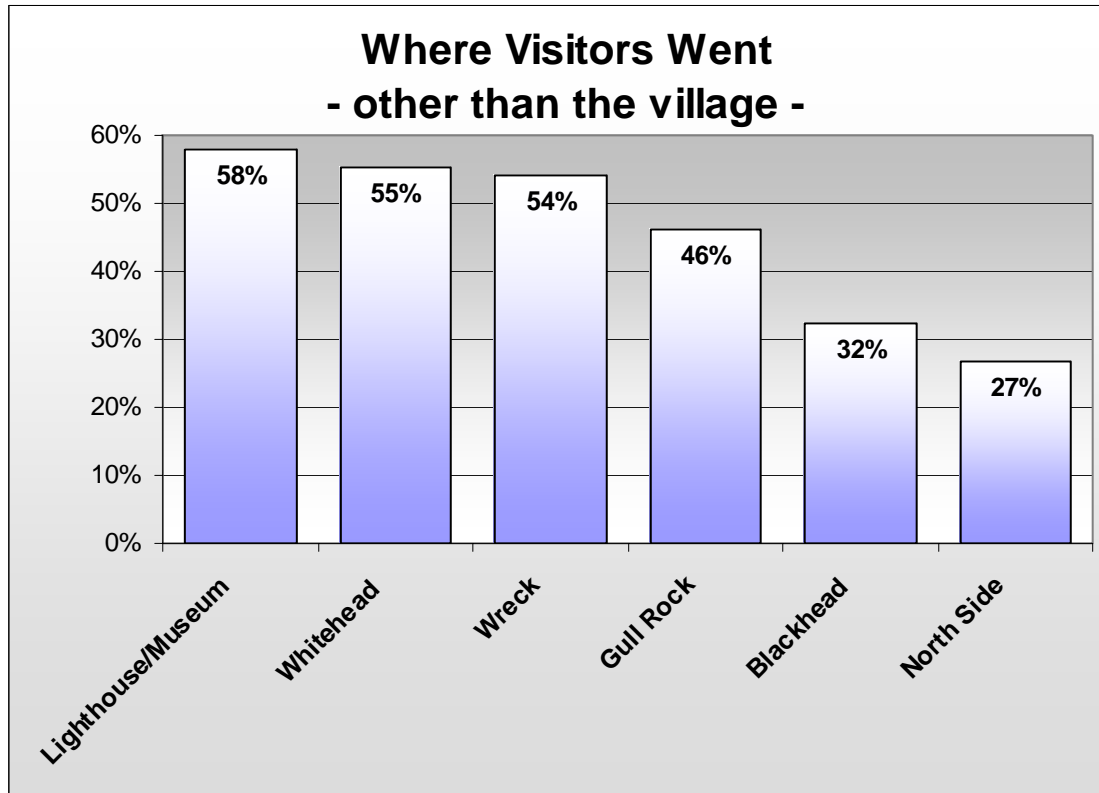


2004



Although just over 70% of visitors came to walk the trails, many did not make it out of town. In 2003 28% never left the village. In 2004 32% never left the village. The most popular destinations are shown in the chart below (the breakdowns for 2003 and 2004 are virtually identical).

Figure 14 - Visitors Destinations on the Island



Trail usage was most intense between the village, the museum, and Whitehead. About half of day visitors made that trek. Many returned the same way but about 2/3 made a loop by passing around the south end of the island. Longer term visitors were more balanced in their trail usage.

The tables on the following page show the trail usage patterns by length of stay.

Table 7 - Breakdown of Destinations Visited by Length of Stay

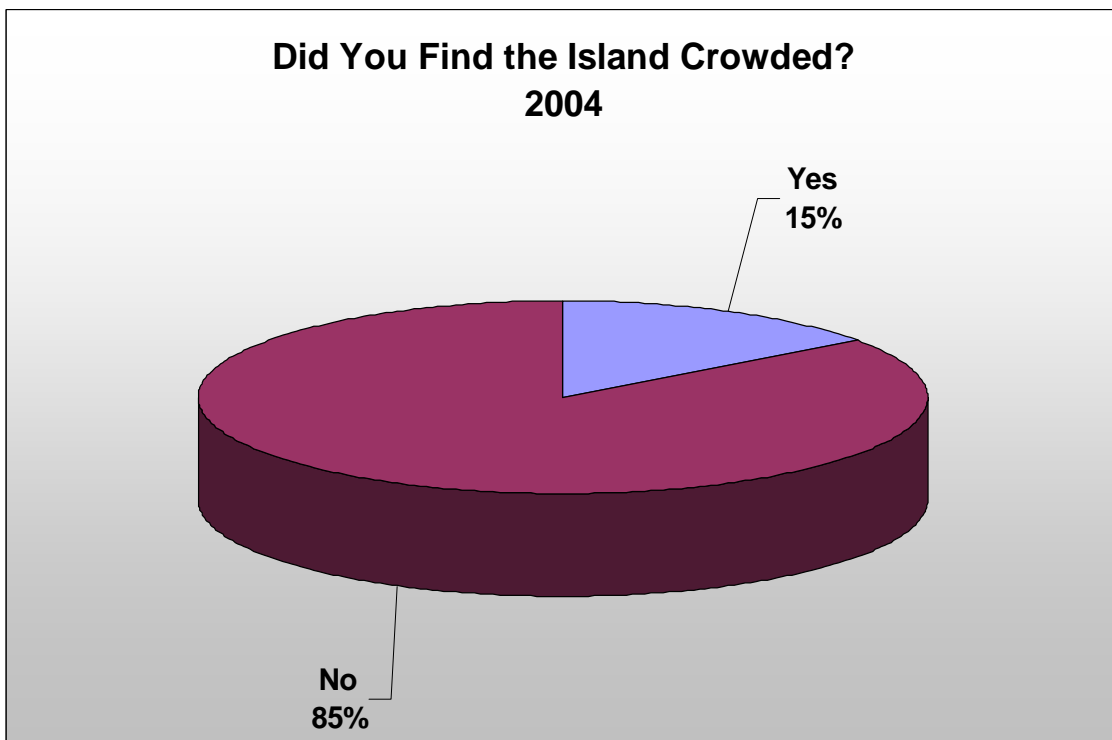
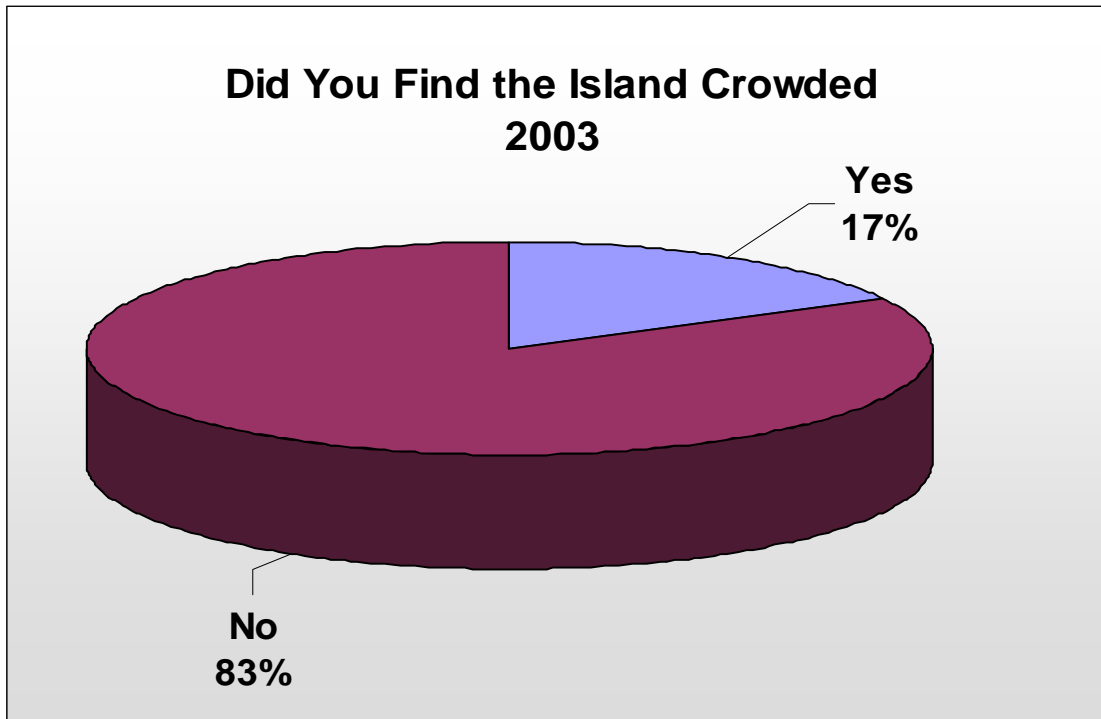
Destination by Length of Stay - 2003						
	Visited Lighthouse/ Museum	Visited north end of island	Visited Blackhead	Visited Whitehead	Visited Gull Rock	Visited old wreck
Just for the day	51%	9%	15%	47%	34%	37%
For two days to less than a week	62%	41%	48%	64%	57%	75%
For a week	70%	43%	57%	65%	65%	65%
For over a week to a month	81%	78%	72%	75%	72%	84%
More than a month	64%	50%	50%	57%	57%	57%

Destination by Length of Stay - 2004						
	Visited Lighthouse/ Museum	Visited north end of island	Visited Blackhead	Visited Whitehead	Visited Gull Rock	Visited old wreck
Just for the day	54%	13%	19%	49%	36%	32%
For two days to less than a week	57%	28%	39%	55%	48%	58%
For a week	54%	33%	38%	38%	50%	63%
For over a week to a month	56%	44%	50%	50%	39%	50%
More than a month	20%	20%	0%	20%	0%	20%

Perceptions of Crowding

Most visitors did not find the island crowded. The chart below illustrates the response breakdown to a yes or no question on crowding.

Figure 15 - Response to "Did you find the Island crowded"

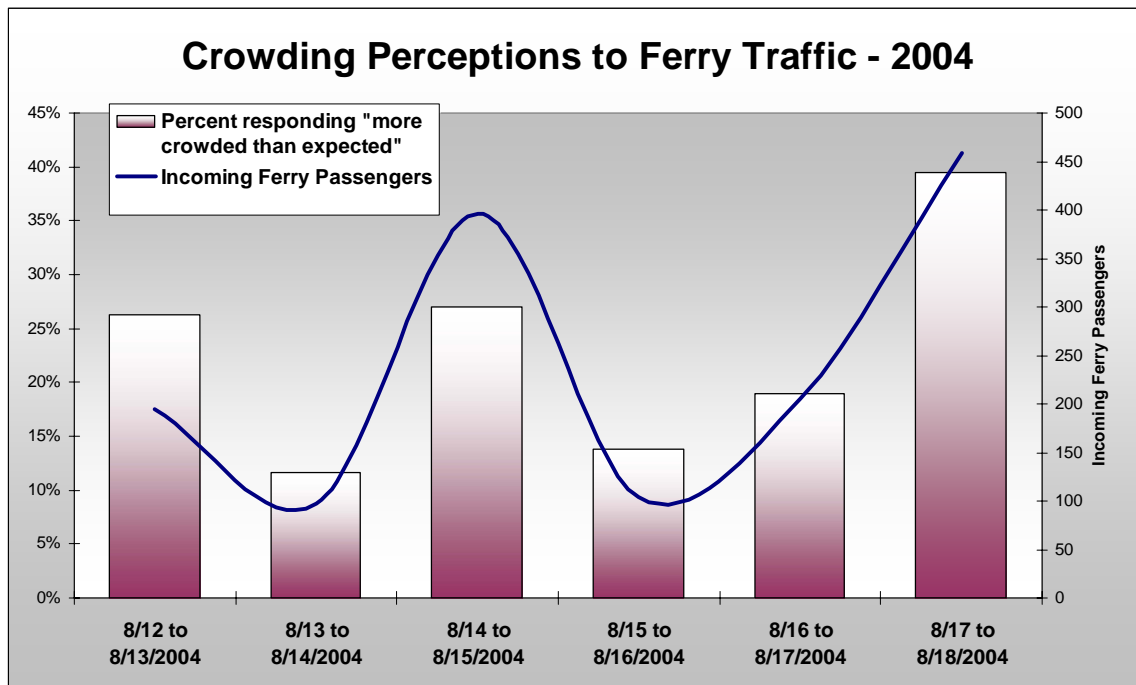


There is a relationship between the number of people coming on to the island and the perception of crowding. We correlated the number of people coming onto the island to the responses on crowding. We assumed that people leaving in the morning had been influenced by the previous afternoon and that morning's incoming ferry traffic, and those leaving in the afternoon had been influenced by that day's incoming ferry traffic. We observed that people were much more likely to perceive crowding after peak flows versus the lowest flows. The correlation between the number of ferry passengers and a response of "more crowded than expected" was .91 in 2004.

Table 8 – Relationship of Crowding Perception to Ferry Traffic - 2004

Date	Percent responding "more crowded than expected"	Incoming Ferry Passengers
8/12 to 8/13/2004	26%	195
8/13 to 8/14/2004	12%	98
8/14 to 8/15/2004	27%	396
8/15 to 8/16/2004	14%	104
8/16 to 8/17/2004	19%	206
8/17 to 8/18/2004	40%	459

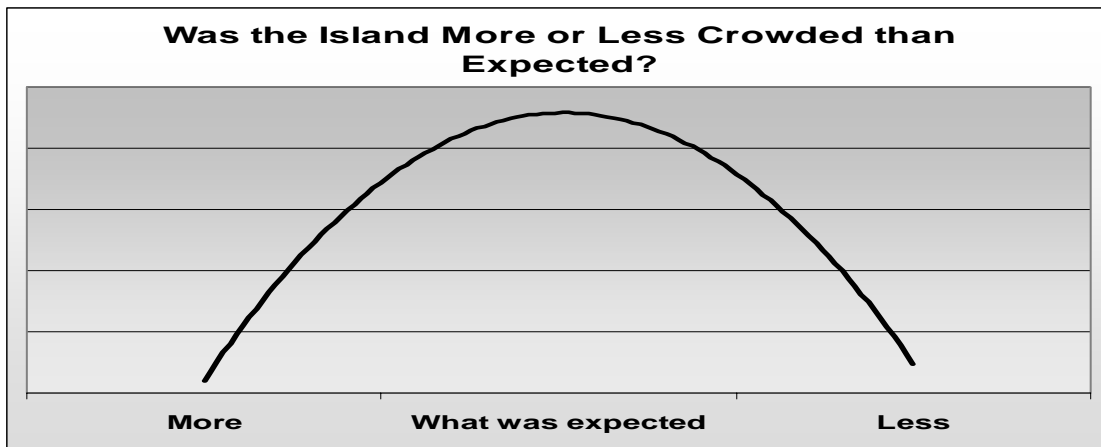
Figure 16 – Crowding Perception and Ferry Traffic



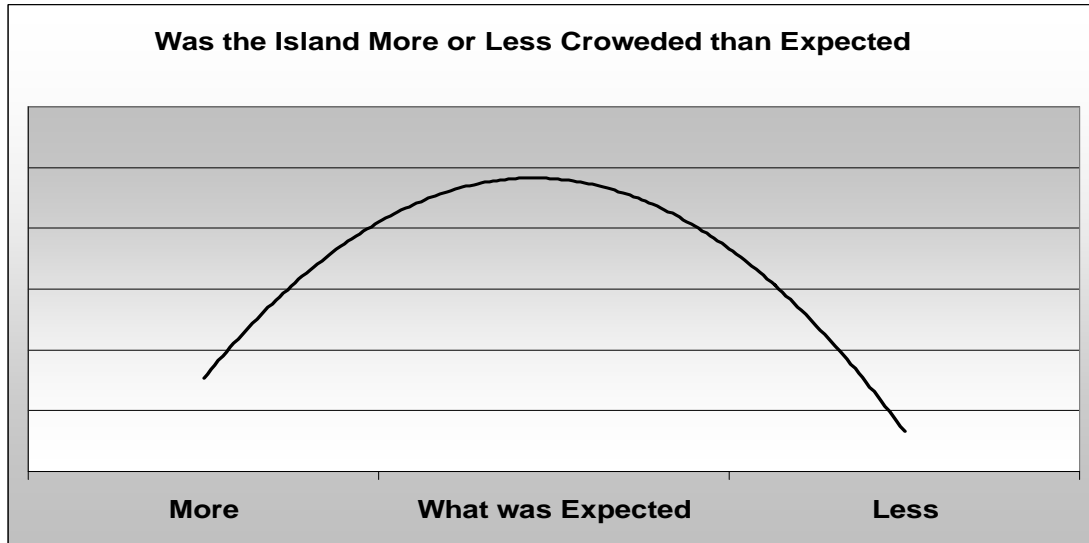
Visitors were, for the most part, not surprised by the number of people they encountered on the island. The distribution of responses is very symmetrical (see charts below). In 2003, 68% of respondents said the crowding was as expected. 15% said more than expected and 18% said less. In 2004, 60% said crowding was as expected, 24% said more and 17% said the island was less crowded than expected. Interestingly, the island was far less crowded on average in 2004 yet the distribution went from skewing right to skewing left.

Figure 17 - "Surprise" at the Degree of Crowding

2003

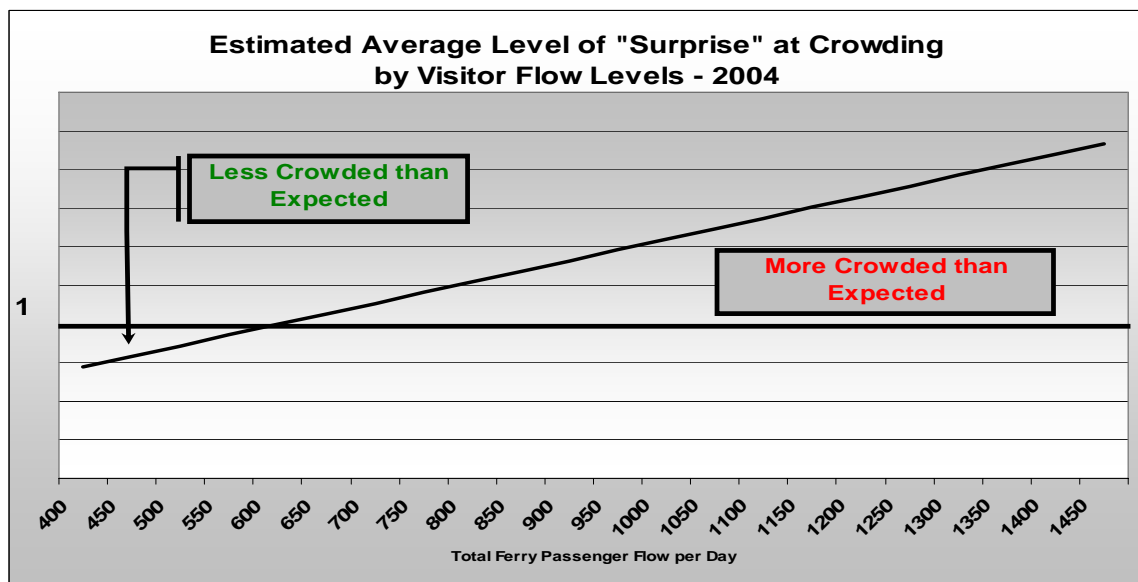
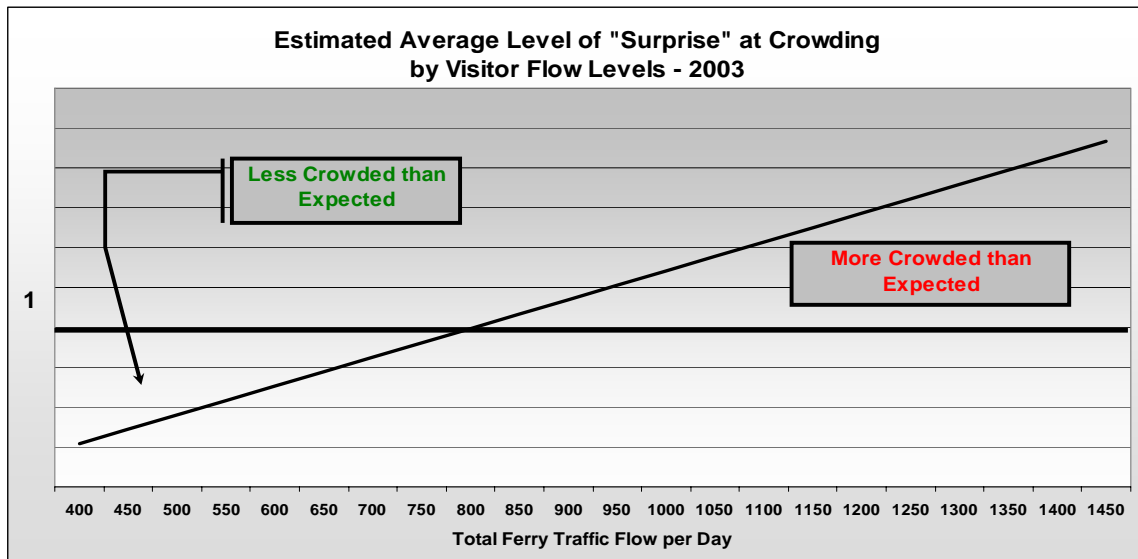


2004



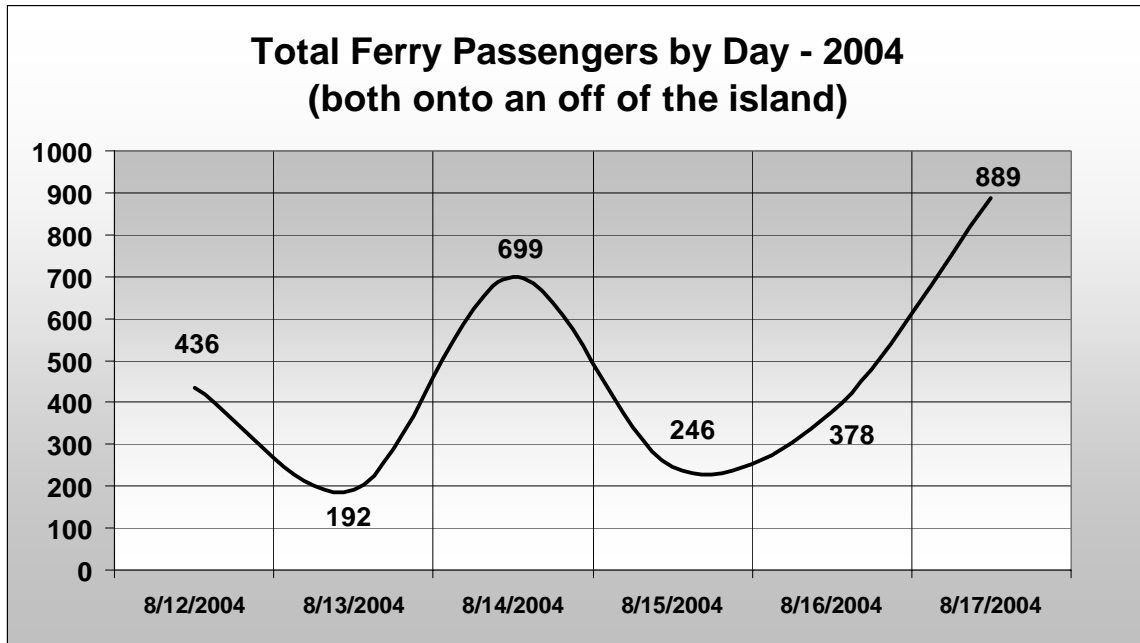
However, as noted above, the pattern of response is related to the flow of visitors onto the island. Based on the data we can estimate the expected average response based on different levels of ferry traffic. We expect that the level of crowding on the ferry contributes to the perceptions so for this analysis we are counting the total flow as the sum of people coming onto and off of the island. An average response of “one” means that the number of responses is the same as that observed over the entire sample. An average different than one means that an increasing proportion of people would be pleasantly or unpleasantly surprised (as shown in the charts below).

Figure 18 - Estimated Level of ‘Surprise’ at Crowding by Visitor Flow



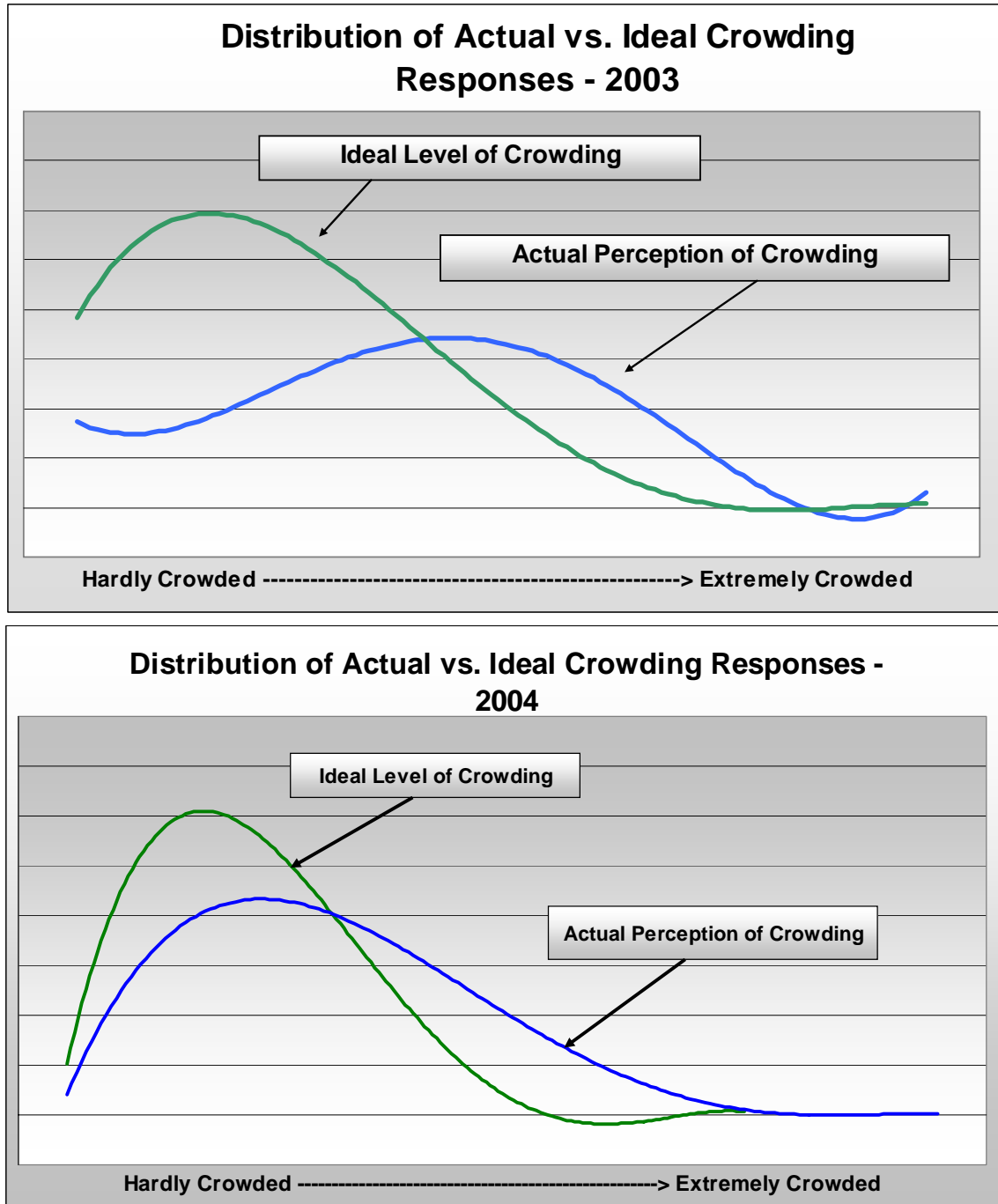
Notice that the respondents in the 2004 group are more sensitive to changes in the number of people. In 2003 the inflection point was at about 800 people per day. In 2004 that shifted leftward to about 600 people per day. We suspect that the large fluctuations from very empty days to very busy days caused people to be more sensitive to the busier days. See Figure 19 below.

Figure 19 – Total Ferry Passengers by Day



We also asked the visitors to rank the degree of crowding and to express, on the same scale, their ideal level of crowding. The results are summarized in the charts below.

Figure 20 - Actual versus Ideal Level of Crowding



The average of the responses expressing their actual perception of crowding on a scale of 1 to 10 (hardly crowded to extremely crowded) was 4.1 in 2003 and was 3.8 in 2004. When asked to express their ideal level, the average of the responses in 2003 and in 2004 was 2.9. The charts show that the ideal level remains essentially unchanged. We feel that this sets a very good benchmark for our simulations (later in this report). We also see that the average perception of actual crowding does correlate well with the flow of people onto and off of the island. In 2004 these were significantly fewer visitors than in

2003 during the survey week and visitors' perceptions of crowding were also significantly lower.

The data shows an influence on the perception of crowding that is based both on the length of stay and on whether or not this was the first visit to the island. Repeat visitation significantly increases either cohort's perception of crowding (see table 9 below). The most significant divergence in 2003 was between first time day visitors and repeat overnight visitors. In 2004, since the island had fewer day visitors during the survey week, overnight visitors in general perceived much lower levels of crowding. As in 2003, we see a significant increase in perceived crowding by day visitors on their second (or more) trip to the island.

We also see a continuation of the pattern in which those most sensitive to crowds are repeat overnight visitors.

It is important to note that these different perceptions are based on seeing the same numbers of people on the island. Table 9 summarizes this information.

Table 9 - Crowding Perception by Length of Visit and Repeat Status

Crowding Perception by Length of Visit and Repeat Status - 2003		
Scale uncrowded =1 very crowded = 10	Day Visitors	More than Day
First Visit to the Island	3.1	4.1
Been Before	4.0	4.6

Crowding Perception by Length of Visit and Repeat Status - 2004		
Scale uncrowded =1 very crowded = 10	Day Visitors	More than Day
First Visit to the Island	3.5	3.5
Been Before	4.2	4.3

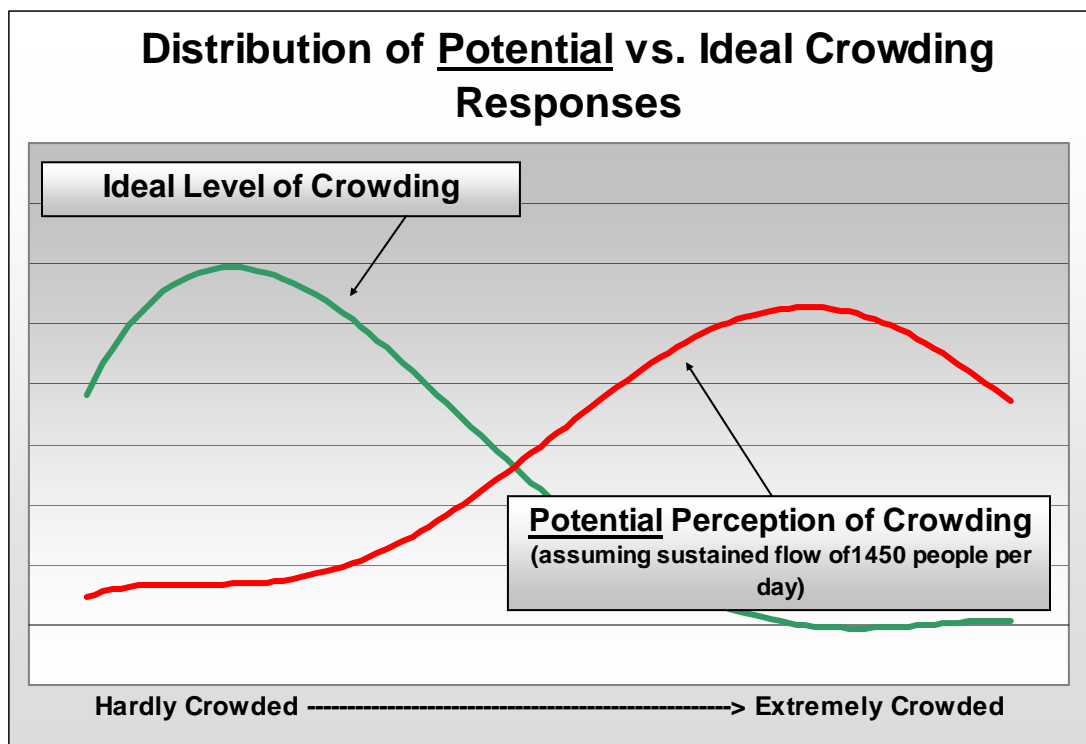
Figure 20 suggests that although visitors, on average, did not perceive the island to be very crowded, they did wish that the island were less crowded than it was. Whereas the ideal level of crowding will not alter much with time, as was shown by figure 20, the perception that visitors have of the actual level of crowding is clearly a function of ferry traffic flow and the number of people riding the boats. The average flow onto and off of the island during the time of the survey in 2003 was 743 people per day (the maximum day was nearly 900). In 2004 the average flow onto and off of the island was far lower at 475. The maximum however in 2004 was also almost 900 in one day.

As noted above, sustained flow levels onto and off of the island increase the bias of responses in which the level of crowding perceived would be more than expected.

As we also have shown above there is some level of visitor flow (the number of people going onto and off of the island) above which people become “surprised” by how crowded the island is. That was about 800 in 2003 and about 650 in 2004. We think that the large weather and sea condition related fluctuations in visitor flows in 2004 are what increased overnight visitors’ sensitivity to changes in crowding. That is, although the aggregate average perceptions of crowding were lower in 2004 than in 2003 due to those days in which the island appeared almost deserted, the threshold for the number of visitors that precipitated a “surprise” at the crowds was also lower as the conditions shifted from almost deserted to a typical summer day’s visitor flow.

Based on both the 2003 and 2004 data we can estimate how the “perceived crowding” distribution would shift as more people per day visit Monhegan. The chart below compares the ideal level with what we estimate the response would be if the current ferries ran at near capacity most days.

Figure 21 - Ideal Level of Crowding versus Estimated Potential Perception of Crowding



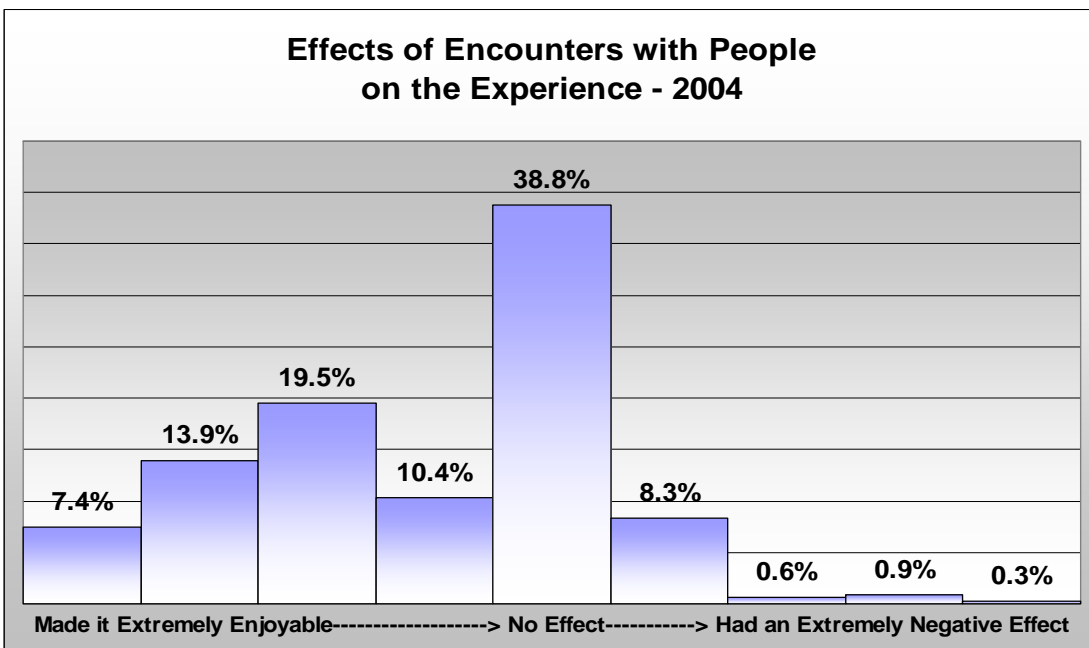
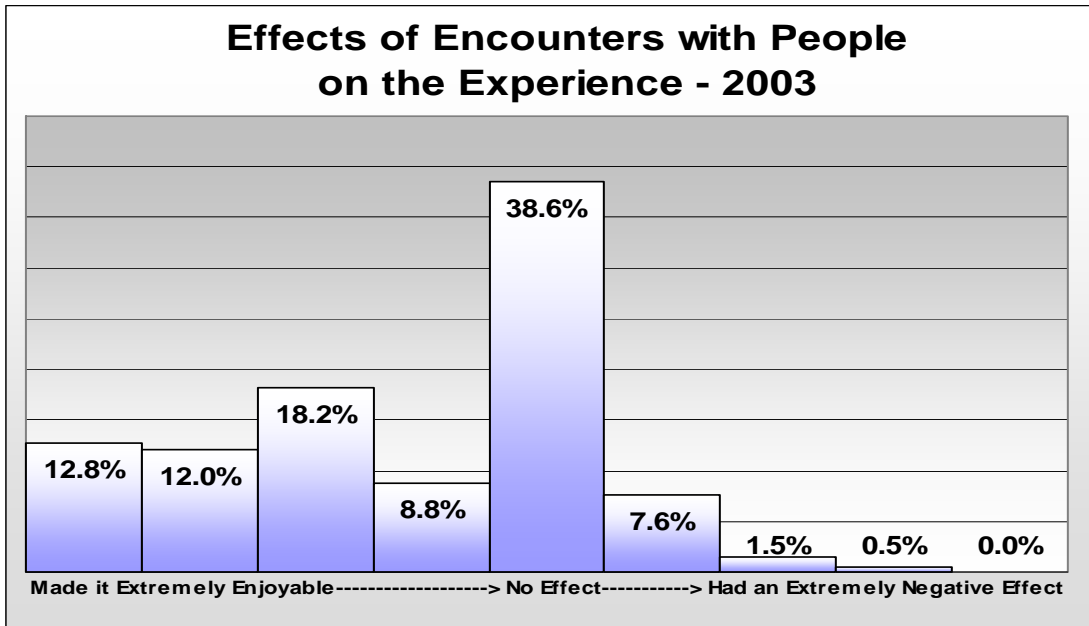
To reach this level, the currently running boats would have to run at near capacity for almost every run. Although this is unlikely, the data does suggest that if there were added runs or larger boats then people's experiences could shift from, on average, an experience similar to what they expected to an experience that did not meet their expectations.

What is clear from the data is that as the island gets more people, repeat overnight visitors will be strongly affected and will, all else held constant, be the first to be pushed over the threshold that leads to an increasing displeasure with the island experience.

It is clear from the data that the visitors value the natural and unspoiled characteristics of the island as the primary reasons for coming. They also enjoy walking through the village and visiting the art galleries. Intertwined with these assets that underpin the "heritage resource" is how the perceptions of being in those locations vary with the flow of people onto and off of the island. Those perceptions will affect future plans for returning to the island as well as decisions by those considering a first time visit.

We did not observe a pronounced negative effect in response to current levels of visitor traffic. In fact, we observed a positive effect resulting from interactions with people. The charts below show that some found their encounters with others added to their valuation of the experience. Also, note the remarkable consistency between the responses in 2003 and 2004.

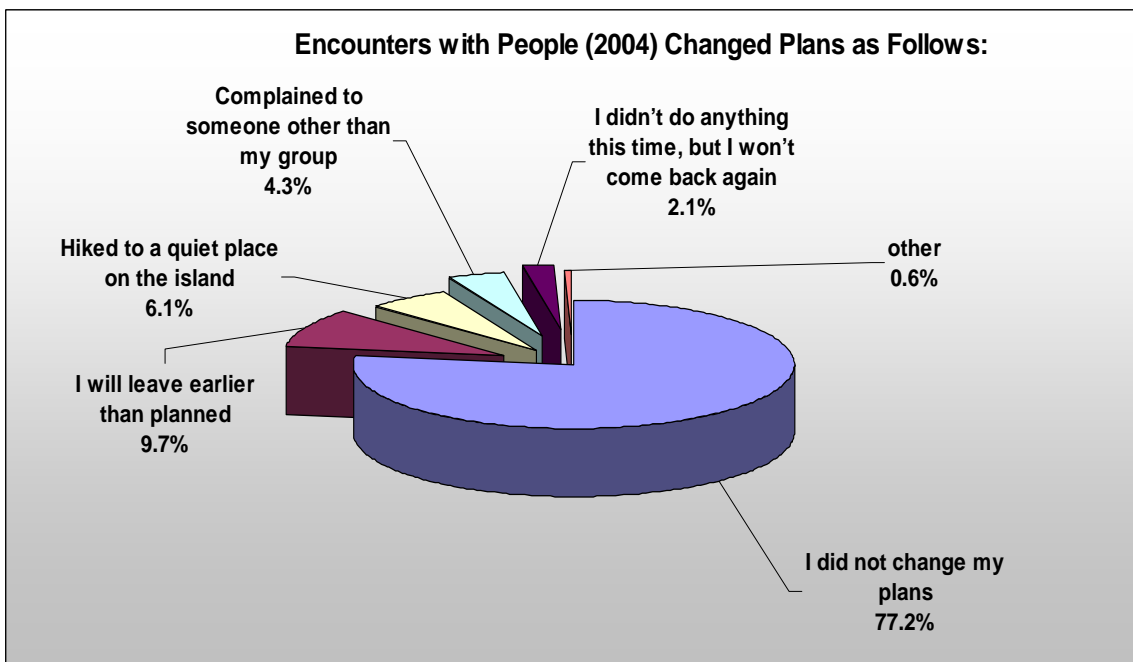
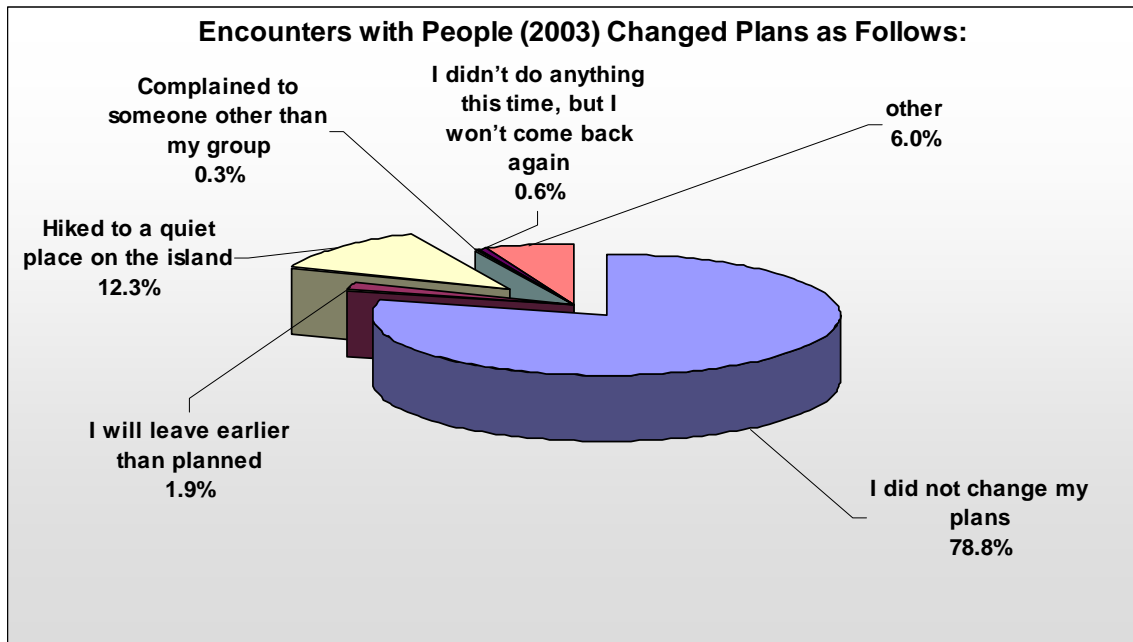
Figure 22 - Effects of Encounters with People on the Experience



In both years' surveys, day visitors tended to be nearer the middle of the distribution in figure 22 and visitors staying more than one night tended to be nearer the extremes.

We observed that the majority of visitors, in general, did not find the people they encountered to be obstacles to the fulfillment of their expectations as the charts below illustrate. In this case there are some notable differences between years. A significantly higher proportion of people said they planned to leave earlier due to their encounters with other people. Also the proportion of people saying they would not come back increased.

Figure 23 - How Encounters with Others Changed Plans



Simulation of Increasing Visitor Numbers

Based on the data and information that we have gathered and developed from our visits to the island in 2003 and 2004, we were able to refine the dynamic model that we developed for the 2003 report. The model incorporates current perceptions and expected changes in perceptions into a feedback system that forecasts the volume of visitor flows to the island and the characteristics of those visitors over time.

Please note that the simulation described below, while mathematically complex, makes a number of simplifying assumptions. For example, we do not have data on the historical trends of the number of people visiting the island. Anecdotal evidence from interviews suggests that, in spite of some recent cyclicalities in visitor flows, in general more and more day visitors are coming during the peak months. Thus the growth rate of incoming visitors is assumed but the actual rate of growth may be different. While this will make the estimates for when the outcomes forecast below incorrect, it will not, so long as there is growth in visitor traffic, make the estimates of what will happen any different. We also abstract from any variation in daily visitor flows due to weather effects and base the model on sustained average numbers of visitors. This assumption could marginally effect the conclusions since if there is a foggy, cold, and windy summer, then the island will be less crowded with day visitors versus overnight visitors as we observed in 2004.

However, again, this effect will only change when the outcomes happen not whether or not they will happen. Interestingly, based on the 2004 observations, bad weather and sea conditions “sensitize” overnight visitors to crowding. That is, it appears that a day on the island in which there are very few day visitors creates a contrast for a day in which the summer day visitor flows are more normal or even above average (pent up demand from the bad weather days). We clearly observed an increase in crowding “surprise” after an empty day on the island even when the visitors flows were not significantly different from days in which the crowding “surprise” was lower.

Although we are confident that the model is robust, we would not recommend basing policy decisions on the outcomes shown in the following pages. We would recommend that the general forecasts be taken as a broad indication of what could happen and as the basis for beginning a discussion about the future of Monhegan Island. The parameters of the model are based on one week of sampling in late July, 2003 and again in mid-August, 2004. .

There were a total of 2,590 people brought onto the island during the week of the survey in 2003 (2,615 left the island during the same week). In 2004 there were a total of 2,457 people brought onto the island (2,334 left that week).

We estimate that there is a potential for almost 5000 people to visit the island if every ferry were to run at capacity. Since overnight capacity is fixed, it is likely that when the visitor count is higher than what we observed, the proportion of the total income that day visitors contribute to the island’s tourist economy will be higher. While the proportion may be higher, each day visitor on average spends significantly less money per day than overnight visitors. There is unlikely to be any disagreement that 5000 people per week would make the island “overcrowded”.

We assume that any effect do to overcrowding would appear as a lagged effect. That is, the revenues in the years of overcrowding would be higher but in the following years, as previous or potential visitors that are alienated by the loss of the “heritage resource” value choose other destinations, the revenue from those alienated visitors would decline. There is some level of visitor flow that maximizes island tourist revenue, maintains the heritage resource, and maintains that optimal level of people visiting the island over time. (Please note that all of the dollar values are considered without any assumption of inflation; that is, the values are in real 2004 dollars.)

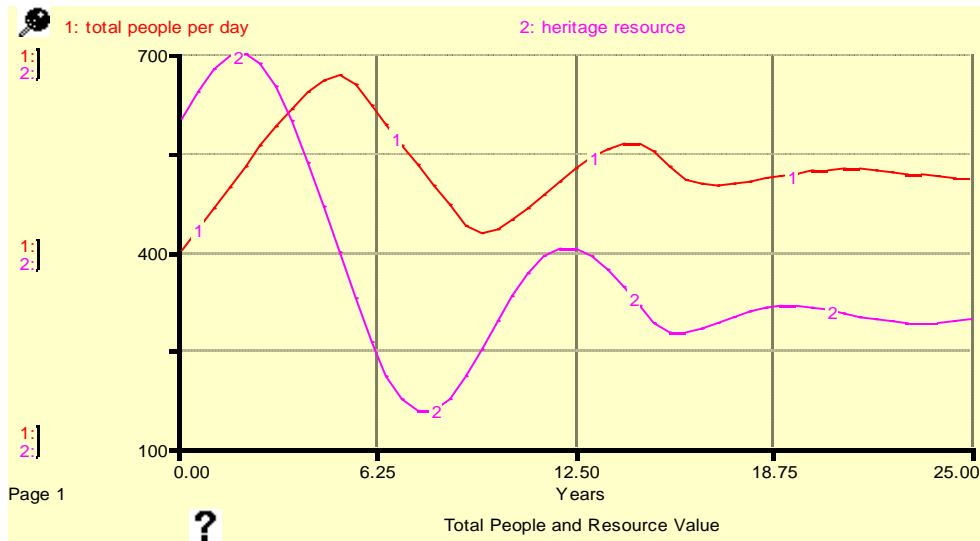
The dynamic simulation model that we have developed accounts for the sensitivity of day and overnight visitors to crowding during the tourist season. These sensitivities, as was shown above, are different. The model allows the “heritage resource” to vary depending on the number of visitors on the island. If the island becomes overcrowded, the heritage resource suffers a diminution of value and visitors are less likely to return in the future. Then if fewer visitors come in the future, the heritage resource can recover value.

The number of visitors that come to the island is based on feedback effects from the degree of crowding and the effect that has on the decision about whether or not to return to the island in the years following the visit and also on the quality of word-of-mouth recommendations disseminating to potential first time visitors.

The chart below summarizes the relationship between visitors per day and the value of the heritage experience (note the value on the heritage experience is unitless and is used for relative valuation). Since our data suggests that the island is currently below its sustainable carrying capacity in terms of total visitors, the value of the resource increases in the near term. This rapidly reverses as the increased perceived value of visiting the island attracts more visitors. In this simulation, the heritage resource trends toward a state that is significantly degraded from current levels.

Using data from both years to calibrate the model, the simulation converges toward a total of about 510 incoming people per day visiting the island as the steady state solution. That works out to about 3600 visitors per week. The model suggests that the average visitor will continue place increasing value on the heritage resource for the next few years but that value will begin to decline as the daily input to the island crosses about 530 visitors per day. The model exhibits overshooting characteristics due to the lag between visits and use of information about previous visits. Thus the average visitors per day fluctuate between 450 and 670 over the first 9 years.

Figure 24 - Simulation: Total Visitors



We have also deconstructed the average visitors per day into day and overnight visitors (see figure 25 below). Since our data suggests that overnight visitors are more sensitive to crowding than day visitors (although day visitors also expressed a higher sensitivity to crowding in 2004 than in 2003), we see that, given the projected diminished value of the heritage resource, overnight visitors will react by returning in fewer numbers. As overnight visitors are displaced by day visitors, eventually the number of overnight visitors will decline substantially. Note that the 2003 data suggested that overnight visitors would become extinct at about 19 years in the future. The 2004 data, due to increased sensitivity to crowding by day visitors and a slightly decreased sensitivity of overnight visitors (see table 9), suggests that overnight visitors will not become extinct (at least in the 25 year span of the simulation) but will come in far fewer numbers.

As the island becomes more crowded, word-of-mouth will, given the parameters of the model, causes fewer overnight visitors to come to the island. This outcome does suggest a serious effect on those visitors who provide the majority of the island's revenue. Information about the state of the island's heritage resource will transmit to those who make the island an overnight destination. Word-of-mouth (or word of travel agent or internet site) will reach a significant proportion of those who make plans that require both a commitment of time and money. In 2003, about 45% of all overnight visitors stated that the visit to Monhegan was their primary vacation destination for the year. In 2004 about 40% of overnighters came as their primary vacation for the year.

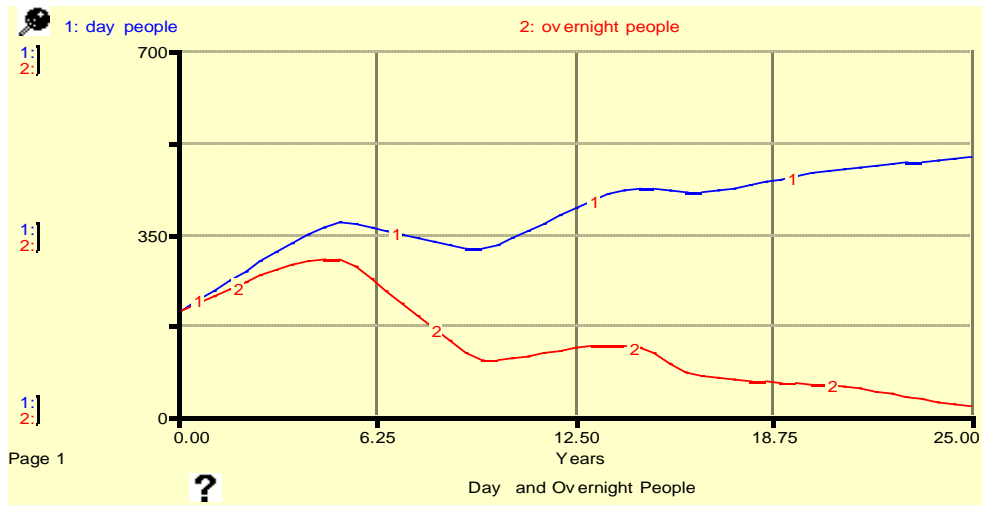
In contrast, day visitors will continue to come and will converge on the steady-state solution over time. They are also somewhat intolerant of crowding and thus the number of day visitors does not grow without bound.

68% of day visitors in 2003 and 58% in 2004 were coming for their first visit to the island (compared to 29% of overnight visitors in 2003 and 50% in 2004 that came to the island for the first time).

The 2004 data also shows that there were an increased proportion of overnight visitors making a first visit and an increased proportion of day visitors making a second or more

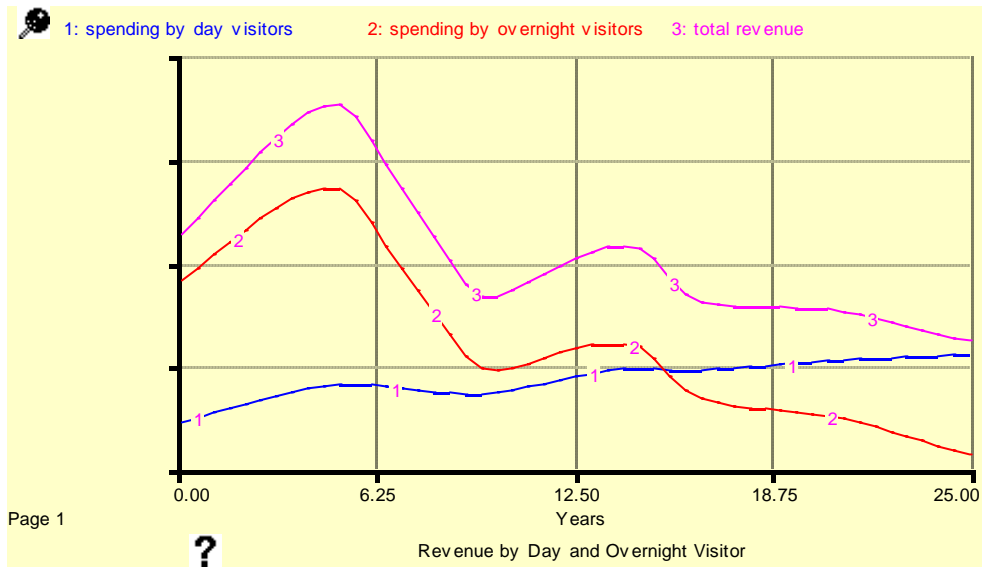
visit. Although only two years of data is insufficient for making conclusions, this pattern of change (a higher proportion of repeat day visitors and a lower proportion of repeat overnight visitors) is consistent with the forecast in the following chart.

Figure 25 - Simulation: Visitors by Cohort



Using the averages spent per day by overnight and day visitors, we can estimate the island’s projected revenue stream. The chart below shows that total island revenue is estimated to peak in year five of the simulation. The model suggests a peak of about \$100,000 per day at year five and an income of about \$34,000 per day in year 25.

Figure 26 - Simulation: Revenue Projections



The chart below shows average revenue per person per day estimated by the simulation.

Figure 27 - Simulation: Average Revenue

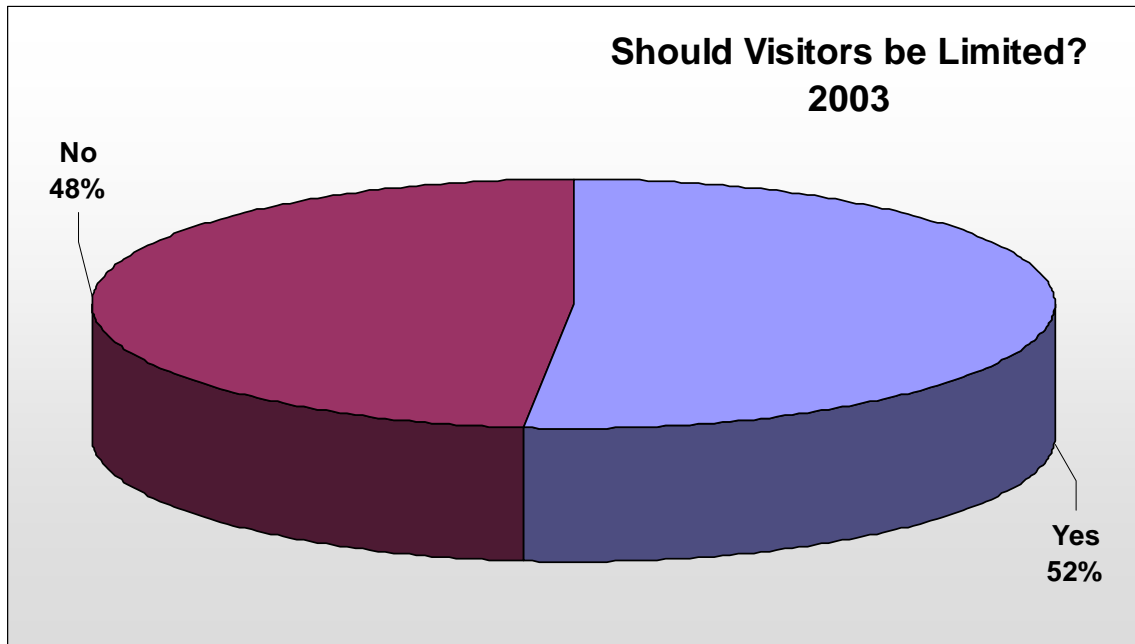


Based on this simulation and based on the expectation that both maintaining the island’s heritage resource and maximizing the island’s tourist revenue are desirable outcomes, there is clearly an optimal level of daily visitors. This leads to the question asked in the introduction: what are the optimal number of visitors and is there a way to achieve that number?

It is clear from the survey data that visitors do value the “heritage resource” in such a way that they do not want to see the island become overcrowded.

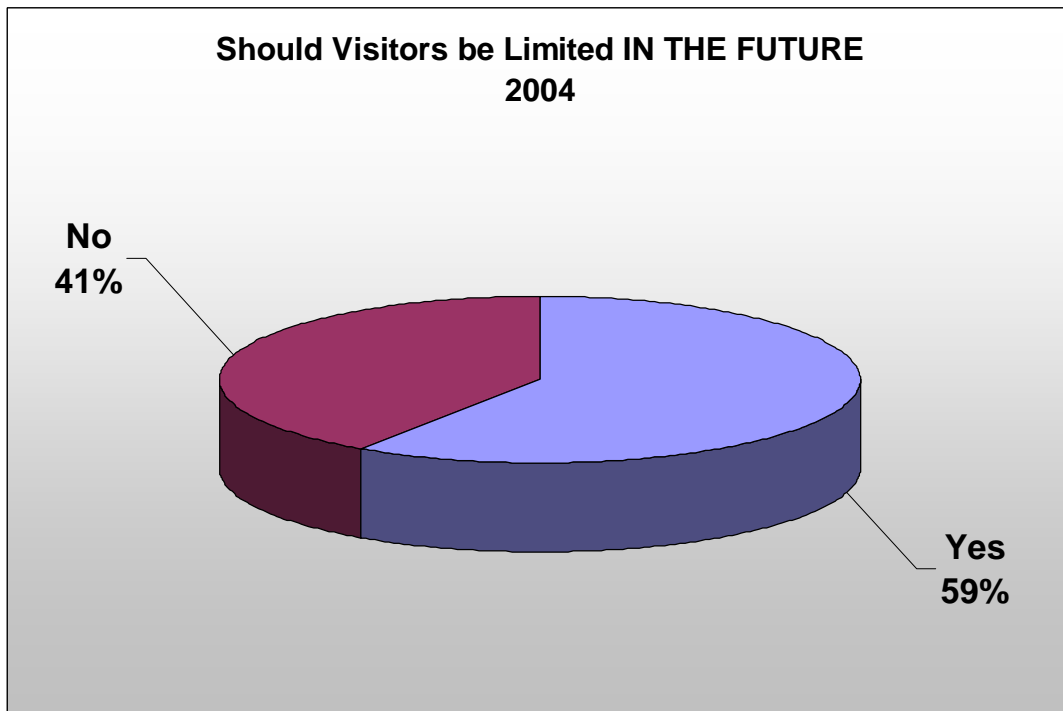
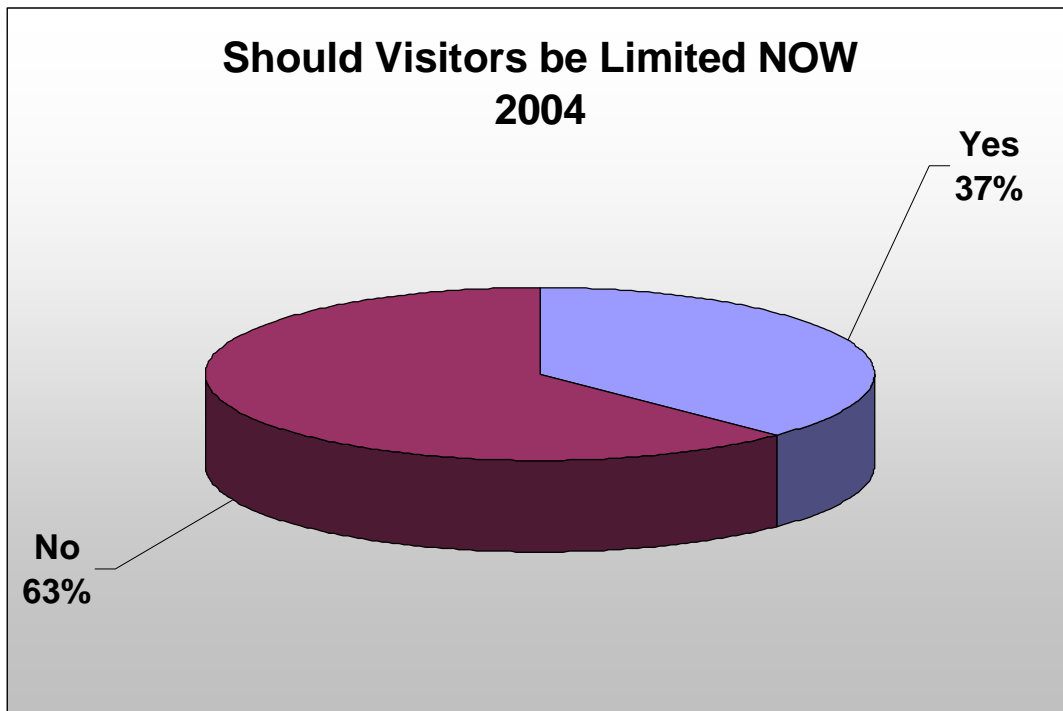
When asked in 2003 if visitors should be limited in some way, more than half of those surveyed who had an opinion said yes.

Figure 28 - Should Visitors be Limited - 2003?



In 2004 we asked two questions: Should the number of visitors be limited now and should visitors be limited in the future? The results are in the following charts:

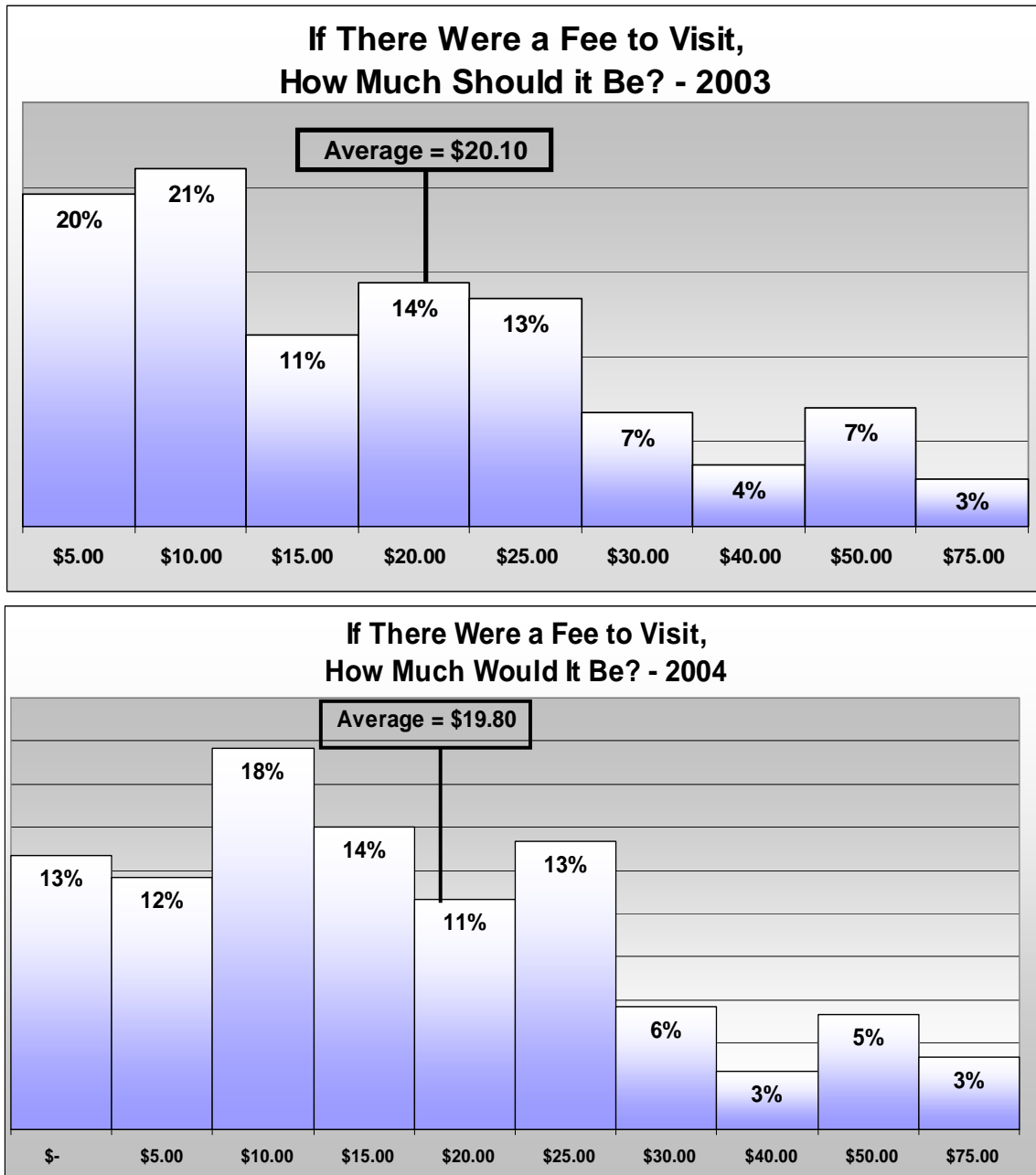
Figure 29 - Should Visitors be Limited - 2004?



Whereas the majority of the island's visitors at this point in time do not think that Monhegan Island has reached a point of overcrowding, a majority do envision a time when crowding will be a problem.

In order to help us understand how people value their visits to the island, we asked them to imagine that each adult visitor has to pay a fee to step onto Monhegan. We also suggested that this fee might be used to help maintain the island's trails, historic landmarks, and infrastructure. We then asked them how high did they think the fee would have to be in order for them to decide NOT to come to Monhegan. In 2003, 75% of respondents answered the question. In 2004, 87% of the surveys had that question answered. In the 2004 survey we also added an option for \$0.00. The results are summarized in the charts below.

Figure 30 - If There Were a Fee to Visit, How Much Should it Be?



We can view this information as an insight into how much visitors value the experience. In other words, of the visitors surveyed who responded to this question, on average they

would be will willing to pay about \$20.00 to preserve the fundamental reason that they choose to come to the island. (There were several write in values on the 2004 survey including one of \$2000 and one of \$500; these were excluded from the analysis as outliers.) The data also provides information regarding the relationship of some of the characteristics of the visitors to their willingness to pay.

The table below shows the results for five characteristics (other less significant characteristics are omitted). For example, on average, going from “Just for the day” to “For two days to less than a week” increases the 2003 survey group’s willingness to pay by \$5.86 over what they would have paid otherwise. This seems sensible since a one-time fee cost would be diluted over the length of the stay. Note that the values are more or less consistent over the two years.

If we restrict the sample to visitors who have previously visited the island we see a much higher sensitivity to crowding. For example, whereas the full sample in 2004 is willing to pay a \$1.74 premium if they perceive the island to be more crowded than expected, if the sample is restricted to visitors who have been to the island before, they are willing to pay \$4.10 extra. If the sample is restricted to first time visitors, this characteristic becomes insignificant.

Table 10 - Willingness to Pay by Characteristic

Average Additional Willingness to Pay by Increase in Characteristic 2003	
Household Income	\$ 1.62
How Long on the Island	\$ 5.86
More, Same, or Less Crowded than Expected	\$ 2.31
Difference between Actual and Ideal Level of Crowding	\$ 0.57
Total Money Spent Per Day (per \$100)	\$ (0.34)
Average Additional Willingness to Pay by Increase in Characteristic 2004	
Household Income	\$ 1.07
How Long on the Island	\$ 4.32
More, Same, or Less Crowded than Expected	\$ 1.74
Difference between Actual and Ideal Level of Crowding	\$ 0.47
Total Money Spent Per Day (per \$100)	\$ (0.09)
Sample Restricted to People Who have been to Monhegan Before - 2004	
More, Same, or Less Crowded than Expected	\$ 4.10
Difference between Actual and Ideal Level of Crowding	\$ 1.60
less than \$30,000	
\$30,000 to \$49,999	
\$50,000 to \$99,999	
\$100,000-\$149,000	
\$150,000-\$199,000	
\$200,000-\$499,999	
\$500,000-\$1,000,000	
More than \$1,000,000	
Just for the day	
For two days to less than a week	
For a week	
For over a week to a month	
More than a month	

The data also shows that day visitors would be least willing to pay a fee. The following table shows the actual average of the fee values selected broken down by length of stay.

Table 11 - Average Fee by Length of Stay

Average Fee by Length of Stay - 2003	
Just for the day	\$ 15.33
For two days to less than a week	\$ 26.01
For a week	\$ 26.88
For over a week to a month	\$ 26.58
More than a month	\$ 32.14

Average Fee by Length of Stay - 2004	
Just for the day	\$ 15.36
For two days to less than a week	\$ 20.43
For a week	\$ 27.35
For over a week to a month	\$ 26.43
More than a month	\$ 28.97

The median fee picked by day visitors was \$10.00 both years. In 2004 27% of day visitors those choose zero or \$5.00.

Table 10 also shows that household income has a positive influence on willingness to pay to preserve the island’s heritage. The difference between the bottom and top cohorts shows that the increase over what they would pay otherwise is \$11.34 in 2003 and \$8.56 in 2004.

Table 10 also shows that total money spent by visitors has a negative effect on willingness to pay. However, this is marginal. For each extra \$100 spent per day, the willingness to pay is decreased by, on average, \$0.34 in 2003 and only \$0.09 in 2004.

What Table 10 does illustrate is the sensitivity that visitors have to the quality of the experience in terms of the number of people they see. The value of a “surprise”, in terms of the island being more crowded than expected, was to add \$2.31 (in 2003) to the value they place on maintaining the island’s character. The difference between the actual and ideal levels of crowding also has a strong impact on visitor’s willingness to pay to preserve the island’s heritage. If we use the difference in median values derived in the full-ferry scenario discussed earlier, we would expect people, on average, to increase their valuation of the island’s desirable characteristics by about \$4.20 in excess of what they would choose as the correct value at current levels of visitors.

So we see that on average, visitors do place a monetary value on maintaining the characteristics of the island that motivates them to visit. The questions that remain unanswered however are to what degree would such fees affect both the flow of people onto and off of the island and the island’s aggregate revenue from tourists?

The simulation model was altered to include a fee that was based on the number of day visitors coming to the island; in other words the fee varied with changes in flow. The desired outcome of the model was no long-term degradation in the “value” of the heritage resource. Since our data suggests that the island is currently below its sustainable carrying capacity in terms of total visitors, the value of the resource increases in the near

term. This in turn attracts more visitors who thus cause the value of the resource to decline; eventually returning it to the original valuation since, in this model, growth and the ratio of overnight to day visitors is controlled by a fee.

For this simulation we capped the maximum number of overnight visitors at 350. However we also set the average number of overnight visitors at a maximum of 300 (assuming that the island's hotels and other overnight destinations do not run a full capacity all week but at about 85% capacity). Figure 31 below shows that the value of the heritage resource returns to its original level over time. Total visitors remains more or less fixed at about 510 per day; slightly less than the unconstrained simulation. That would suggest, since 300 are overnights, that 210 day visitors per day, on average, is the desired target. This outcome does provide a level of guidance regarding the relationship between day and overnight visitors. In 2004, day visitors averaged 36% of the total visitors. In 2003 that average was 55%.

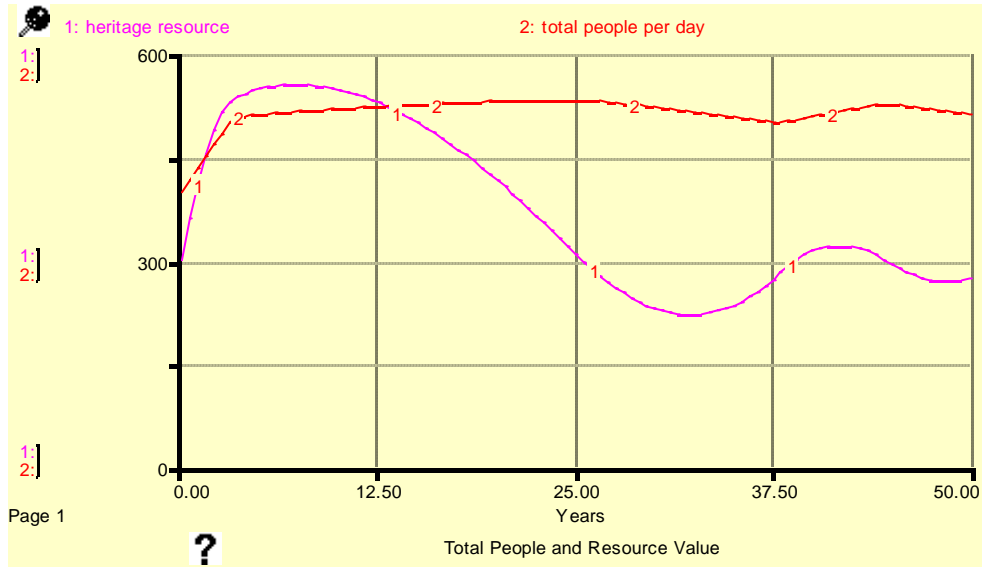
Table 12 – Percent Leaving who are Day Visitors

2003					
Percent Leaving who are Day Visitors					
Friday	Saturday	Sunday	Monday	Tuesday	Wednesday
7/25/03	7/26/03	7/27/03	7/28/03	7/29/03	7/30/03
58%	47%	44%	57%	48%	73%

2004					
Percent Leaving Who are Day Visitors					
8/12/2004	8/13/2004	8/14/2004	8/15/2004	8/16/2004	8/17/2004
Thursday	Friday	Saturday	Sunday	Monday	Tuesday
42%	10%	52%	3%	36%	72%

Under the assumption of full capacity, the ideal ratio of day visitors to total visitors would be about 42%. However, if there is some level below 300 that more correctly describes the average level of tourist beds occupied, then the ideal ratio will be higher. The totals observed during the survey weeks were less than the estimated ideal level and thus the crowding effects are subdued in spite of the observed ratio. We can be somewhat sure that as the daily visitors approach levels above 500 per day, the number of those that are day visitors becomes more and more significant to the impressions of those that are not.

Figure 31 - Simulation: Total Visitors and Heritage Resource with Fee



Charts 31 and 32 show that total numbers of day and night visitors remain more or less constant and that total revenue of around \$90,000 per day (which includes the fee revenues) is held near maximum for the duration of the simulation. Chart 33 shows the average revenue per person which stabilizes at about \$175 per day (compared to about \$66 per day in the unconstrained simulation with no fee).

Figure 32 - Simulation: Day and Overnight Population with Fee

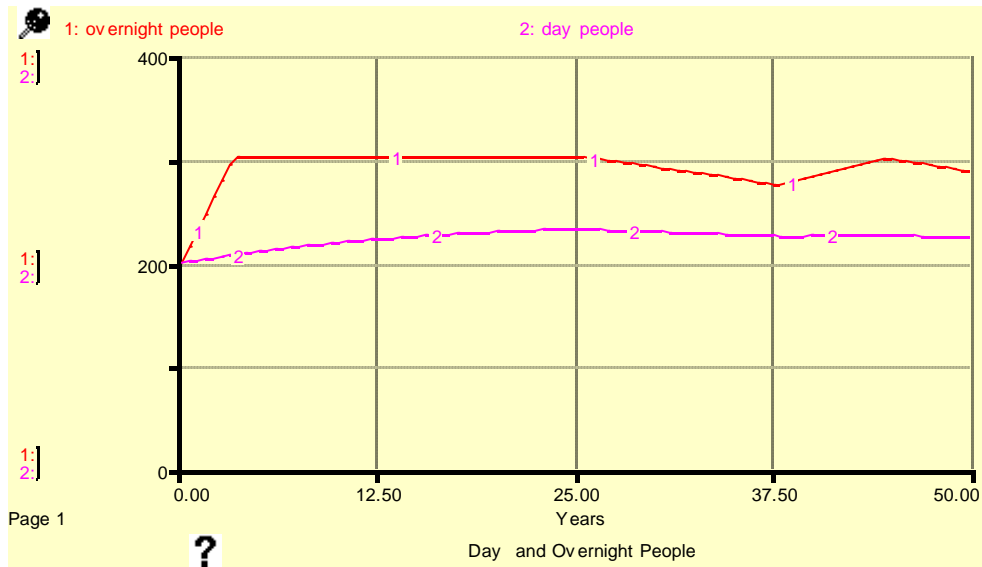


Figure 33 - Simulation: Island Revenue with Fee

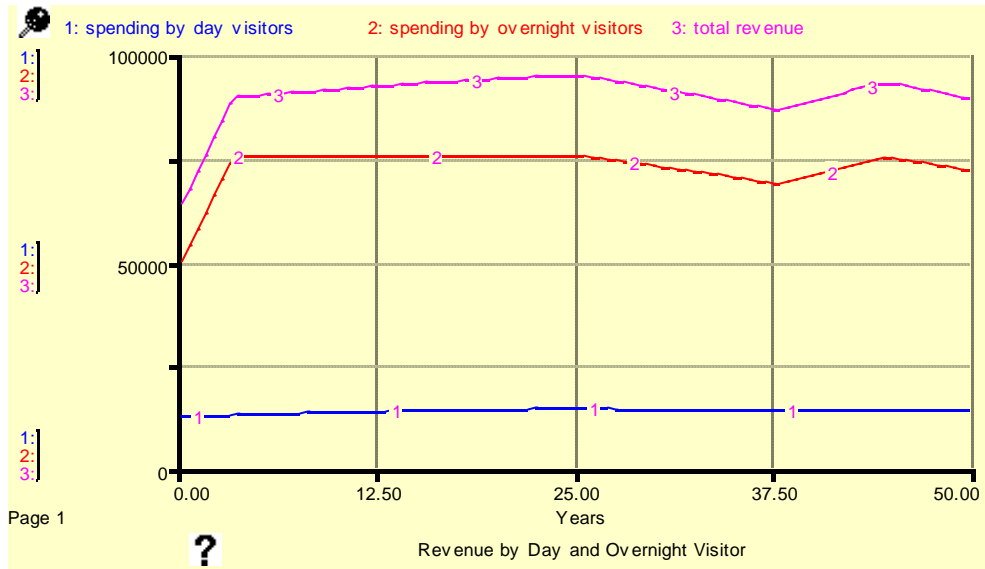
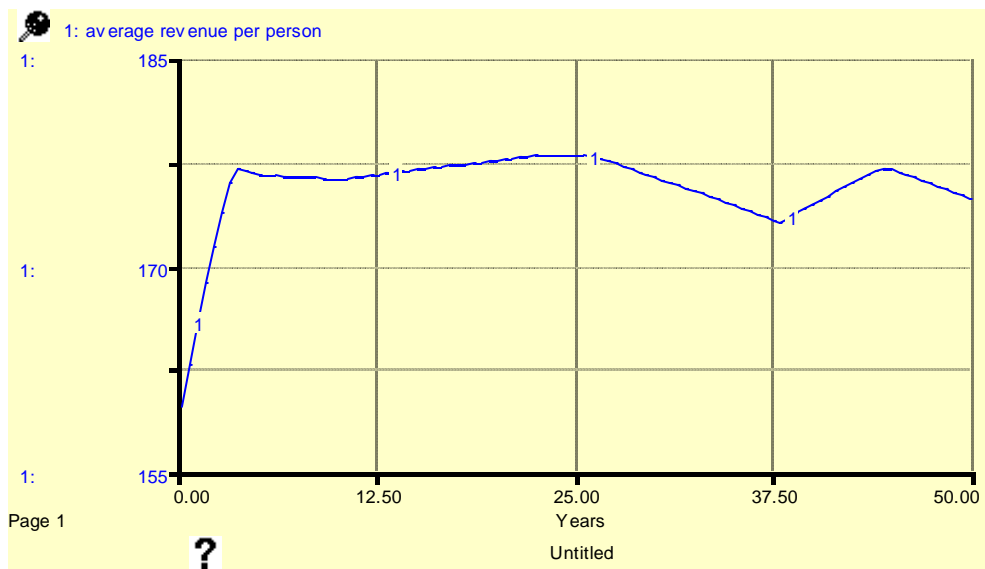
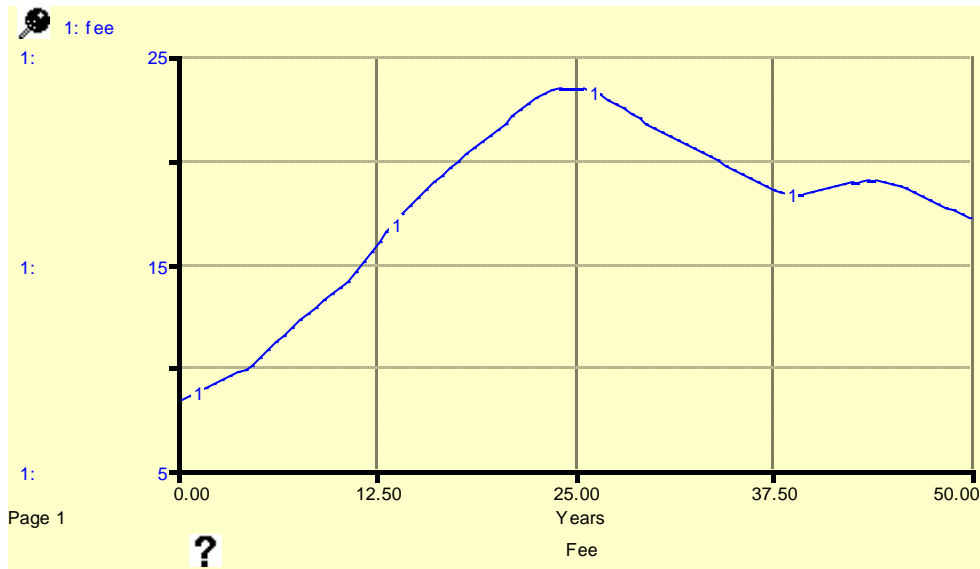


Figure 34 - Simulation: Average Revenue per Person with Fee



The last chart below shows the fee that over time that achieves this outcome. The fee begins at about \$8 and reaches a maximum of about \$23 at about year 25.

Figure 35 - Simulation: Fee



While the fee achieves a desirable outcome in both ecological and economic terms, any conclusion reached by policy makers should consider that imposing a fee will also change the character of the island in other ways. Although the survey results regarding limiting visitors suggest a more or less even split in opinion, the comments that some visitors made about fees (see the appendix) suggest that more research should be done specifically to attempt to understand the long-term effects on the heritage of the island if that solution were implemented.

Furthermore, our simulation model could just as easily have used a quota to achieve very similar results. An implicit quota on overnight visitors that is set by the number of hospitality beds on the island already exists. Setting an explicit quota for day visitors would achieve almost the same outcome as shown above. The significant difference would be the fee revenues forgone that would result in lowering the daily island revenues by between \$2,000 and \$9,000 per day in peak season depending on how high the fee is.

Conclusion

Monhegan Island has a unique value for visitors. Those visitors include people, amongst them a number of artists, who spend summers on the island, many who come to spend a few days on the island and many that come just to spend the day. For most of those that come to the island, the visit's value is based on the natural and mostly unspoiled characteristics of the island. Intertwined with the impressions people have about their experience are the effects created by the number of other people also visiting the island.

This study, conducted over two summers in 2003 and 2004, investigated the relationship between the numbers of people on the island and the impression they have. We also investigated how the island gains revenues from visitors. It is clear that overnight visitors, particularly those staying for a week or less, are the most important component

of the island's revenue from tourists. It is also clear that these important visitors are more sensitive to increasing numbers of people than those that visit for the day.

Based on our analysis our conclusions remain very similar to those we made after the initial data analysis after the 2003 research. We can forecast that any significant growth in visitors, which by definition means a higher proportion of day visitors, will, over time, have strong negative impacts on the island's aggregate tourist revenues.

Furthermore, we also forecast that if there is significant growth in visitor traffic, a modest fee (or quota) can control the flow and mix of visitors while also maintaining the valuable heritage resource that is the island's primary attraction. In maintaining that resource, the island community also maintains the flow of revenue that has become so important to the island's economy.

The key insight of this study identifies a way to maintain the ecological and cultural foundations of the Monhegan experience. Maintaining those foundations is also good for the island's economy. It is important to understand that when determining how to respond to changes in the island's character that the response itself will become a part of what Monhegan is.

Finally, while our modeling used a fee to control the flow of visitors, any scheme that achieves a control over the number of visitors and the mix of day versus overnight visitors will achieve the same outcome. In that regard, a simple quota on day visitors to compliment the implicit quota on overnight visitors will yield almost identical results.

Appendix

Copy of the Survey

Comments by Survey Takers

Copy of Survey – 2004 Version

Time _____

Date _____

Please take a few minutes to help the Monhegan Island Community learn about your experience on the island.

1. How many people are in your group? _____

2. How long will your group be (or have you been) on Monhegan Island?
 - Just for the day
 - For two days to less than a week
 - For a week
 - For over a week to a month
 - More than a month
 - I am a full time resident

3. If your group is staying more than one day, where are you staying?
 - Hotel or B&B:
 - Island Inn
 - Monhegan House
 - Trailing Yew
 - Shining Sails
 - Cottage (Is it a rental or a friend or family place ?)
 - Studio apartment
 - Other (Please specify): _____

4. Is this your primary vacation destination for this year? Yes No

5. Have you been to Monhegan before? Yes No
 - a. If so, how many times? _____

6. Where is your primary residence? _____
 - Town and Zip
 - State

7. Approximately how much (not including the ferry) did (or will) your group spend in total? If you are not sure of the totals, put down your guess per day and check the box.
 - a. Restaurants _____ check if per day
 - b. Lodging _____ check if per day
 - c. Groceries and supplies _____ check if per day
 - d. Art work _____
 - e. Other _____

8. Why did you choose to come to Monhegan? (check as many as apply)

- To see the village
- To visit art galleries
- To walk the trails
- To view ocean and coastal scenery
- For peace and quiet
- To get away from it all
- Other (Please specify): _____

9. Did you find the island to be crowded? Yes No

10. Consider the number of people you encountered on the island, on the following scale how would you rank crowding on the island?

Hardly crowded			Somewhat			Extremely crowded		
1	2	3	4	5	6	7	8	9

11. Consider how crowded you just ranked the island. If you could pick an ideal level on the same scale what would it be?

Hardly crowded			Somewhat			Extremely crowded		
1	2	3	4	5	6	7	8	9

12. How did the number of people you encountered, whether very few or very many, affect your experience?

Made it Extremely enjoyable				No effect			Had an extremely negative effect	
1	2	3	4	5	6	7	8	9

13. Did the number of people that you encountered cause you to change your planned activities?

Not at all		Somewhat			Very much so			Not applicable	
1	2	3	4	5	6	7	8	9	99

14. How did you change your plans? (check all that apply)

- I did not change my plans
- I will leave earlier than planned
- Hiked to a quiet place on the island
- Complained to someone other than my group
- I didn't do anything this time, but I won't come back again
- Other (Please specify): _____

15. Was the island more or less crowded than you expected?

- More What I expected Less

16. Do you think the number of visitors to the island should be limited?
Now: Yes No No opinion/Don't know
In the Future: Yes No No opinion/Don't know

17. Consider your response to the last question and imagine that each adult visitor has to pay a fee to step onto Monhegan. (NOTE: This fee might be used to help maintain the island's trails, historic landmarks, and infrastructure.) How high do you think the fee would have to be in order for you to decide NOT to come to Monhegan?

\$0.00	\$5.00	\$10.00	\$15.00	\$20.00	\$25.00	\$30.00	\$40.00	\$50.00	\$75.00
If other, please write the value here. _____									

18. Would you return to Monhegan or would you recommend a visit like yours to someone else?

- Yes, I will return Yes, I will recommend a visit No

If no, briefly describe why not.

19. What is your highest education level?

- High school or less
 Some College
 Bachelors degree
 Graduate degree

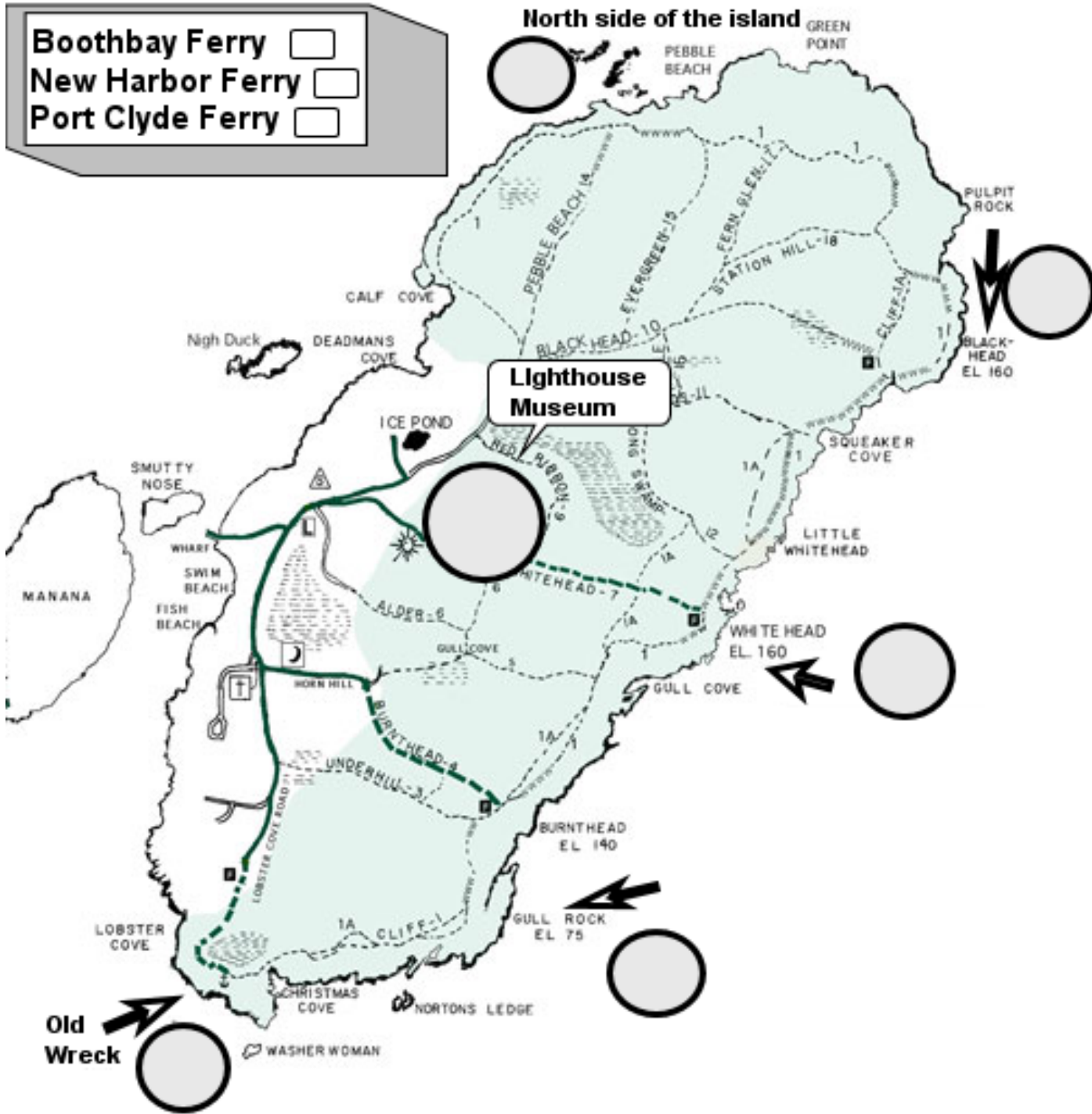
20. What is your households' approximate pre tax annual income?

- less than \$30,000
 \$30,000 to \$49,999
 \$50,000 to \$99,999
 \$100,000-\$149,000
 \$150,000-\$199,000
 \$200,000-\$499,999
 \$500,000-\$1,000,000
 More than \$1,000,000

Please add any comments that you feel are important.

Please see the last page for a few more questions. Please check which ferry you are using (leave blank if you came on your own boat). Also please put an X in the grey circles if you visited that part of the island.

Boothbay Ferry
 New Harbor Ferry
 Port Clyde Ferry



Thank you very much for taking the time to help us maintain and preserve the Monhegan experience.

Comments

2003

Good luck sounding as if you're trying not to become a theme park. Yet charging a fee to land and? Seems to reinforce the concept of a theme you're doomed!

Fee for boat already costs a bit. Then add food and or souvenirs An additional fee could make the island prohibitive to young people just starting out, retirees on limited fixed incomes and middle class families too bad to limit access to so many who might enjoy and respect this beautiful island

I would not pay a boat fee and island fee. The boat should pay the islanders.

NEED MORE PUBLIC RESTROOMS. BETTER ACCESS TO GOOD DRINKING WATER.

If special need for funds please tell people. They can donate.

Beautiful spot

The limited # of boat excursions already limits the # of people who visit the island- so it already is pretty regulated. Also, paying a fee to visit the island is not a good idea. Visitors are patrons to all your island businesses- which help the island's economy- paying a fee to come to the island will discourage people and ultimately hurt your economy

More vehicles than when we were here 11 years ago

Do not charge Fee! Outraged at "fee concept!"

What's this all about why a fee- I'm not happy w/ this?

COMMENT: Please mark the trails better especially where two trails meet. We found ourselves on the wrong trail near I-A; TR-506, 10 I-A several times along gull cove or Christmas cove not interested if crowded or not crowded

I hope you don't change. It was a perfect visit.

Great Island

Although in reality I'd just try to hire someone else's boat. I come, in spite of everything

One-time fee could be any amount

We love Monhegan and have been coming for years; the only things we would NOT like are an increase in technology or growth of tourist supporting business. (We want to work here!!)

The island should be cleaner.

Leave things as they are.

Gorgeous spot- classy, artsy, nature preserved hasn't changed much since my last visit 22 years ago

I didn't find it to be crowded. But emptier on nice

Current ferry service may set an appropriate limit to numbers of visitors - so it may simply be important not to increase ferry service!!

Perhaps restrict/charge daytrippers

This place is wonderful - wouldn't change anything. If you are considering charging a fee, please don't set it so high that only the wealthy come here.

Don't like this idea (fee). It is repressive. I can afford more, but that shouldn't mean a high price should be charged to people who cannot afford an entry fee. I would not like to see Monhegan become the next Nantucket.

Put the fee in the boat. Charge and act like you like it. Is there Dramamine (?) on the island today??

Hostile signs + negative attitudes by landowners create a sense that these folks are - shall we say - assholes.

The ferry ride cost \$60 for two people.

Don't change anything.

Restrict # trips boats (ferries) make to island

Thanks for the survey and its intentions. We look forward to many more years of enjoyment! * Separate bins @ all establishments.

Enjoyed my experience here. My fiancé and I would love to return!

Just what I wanted. Met great people along the way - both natives + visitors. Although I hate to see the Island out of reach for folks with less money, I would also want to see the island survive

We didn't answer #20 because we felt like the goal was to restrict the island to rich folks, somewhat like charging as high as the market will bear. If that's the case, it's certainly enough to keep us away.

The island is definitely worth more, but considering the price of the boat...plus lunch! *Also, the toilet situation was a major inconvenience. I ate in a restaurant where patrons could not dispose of the toilet paper in the toilet! Smelly and unsanitary!

I DON'T THINK THAT ANY FEES SHOULD BE CHARGED TO COME TO WHAT IS ESSENTIALLY A PUBLIC PLACE.

It was very nice. Flowers are beautiful. The Island Inn was very tasty. Survey seems unusual. Maybe more public restrooms and trash cans.

I would take more care about the dogs.

I support MISCA's plan.

The cliff trails should be better marked, i.e. with names.

Day trippers should contribute \$2-\$5 cottage renters \$25 or so per week overnight guests same as day trippers per day

40-45 years ago I loved to go to Nantucket. I no longer go there because it is crowded and rich and "perfect", spoiled by rich investors- I hope this doesn't happen to Monhegan- I love it here- Thank you!

Dogs should pay to spend a day here.

Town should incorporate

I think that current numbers should be the maximum. I think that \$20.00- 30.00 is reasonable, but I will never stop coming to Monhegan. If the fee was several hundred dollars, I'd still pay it.

There are already enough fees involved. While I love Monhegan a great deal, I think this would be going WAY too far.

Two things please look ahead 10 to 15 years from now. If the older people die who's going to keep the island growing. Fishing is slowing up and will be less 10 to 15 years from now

I would have less to spend at shops I am retired with a limited income it is a joy to be able to sail here and quietly enjoy the island.

Don't make this lovely island exclusivity

A room tax should be added so the day trippers are not penalized. The room tax should go to maintenance, lighthouses, roadwork anything that benefits the

Enjoyed the visit.

Please upgrade sanitary facilities.

The boat was expensive enough.

We appreciated the rustic growth of the island and the lack of tacky modernization that you see in places such as Cape Cod/ etc.

Beautiful island.

Charging a fee would make Monhegan feel like an amusement park & I would not come back.

Been coming here for 30+ years and love it. It has definitely gotten more expensive and commercial over the years which are too bad.

That (fee) too weird to think about

We noticed that the regulars here felt like they were being crowded with tourists even though there weren't many - not very inviting in that way.

That is a stupid idea and I would not send anyone here if that were the case. On the contrary I would tell people not to come. For those that have suggested a fee tell them to get over themselves. Casey Radmonds.

GREAT ISLAND. I LIKE ITS FOODS.

Would have spend more, but ATM didn't work.

I am 10 years old 5th grade! Everybody should have been here!

Couldn't use our Visa and we forgot to bring much cash with us.

The Island was heavenly! Don't charge admission for entry.

We paid \$70 to catch a ride here. It may hamper our ability to return with our family if there were fees at every turn. A small charge to maintain the island could be reasonable. Or a donation box.

This is a beautiful island & it was wonderful to get to explore it for a few hours.

I feel tourism is here to stay, the islanders have accepted the fact. I feel we need a balance of

having the tourist come, summer residents and the ecology to keep Mohegan as special as it is today.

Roads and areas are very unkempt - junky - trails and roads better marked.

20- LONG TERM- FOR THE DAY \$5.00/V10- IF IT GOT REALLY CROWDED I MIGHT NOT COME!

Other option is to raise day trip ferry fee for people going in and back in one day. Make it very high except for people who live in Monhegan (going to mainland and back in a day)

I own a house here, rent it 2 mo per year, live in it 2 mo. Per year with frequent visits throughout the year. While I like uncrowdedness, I understand that many depend on summer business-

Fee should be transparent- i.e., fee should be collected by the boat companies. Fee for owners, year-round residents, and weeklong and visitors should only have to apply once a year (if that)

Limit amenities and you will limit visitors. The people I know who would enjoy Monhegan wouldn't mind the absence of private toilets, fancy food...

ART WASN'T AS GOOD AS I EXPECTED.

More groceries/fewer gift shops. Try to keep Monhegan from changing too much- Like the feeling of being in a place apart from our regular daily lives

Summer residents should be included Question #2 (4 to 6 months) :)

A few strategically placed natural-looking receptacles for recyclables would be helpful.

IF A FEE WAS IMPOSED I WOULD EXPECT A TRASH BIN

The people who live/work here are wonderfully friendly

Would love a later ferry (6 or 7pm) would have had ____ here if I had time/ late lunch

I think the number of ferries should remain the same as it is now.

WOULD HATE TO SEE FEE TO "STEP" ON THE ISLAND SINCE IT'S ALREADY EXPENSIVE TO PAY FOR LODGING AND FERRY EXPENSE. PLUS COSTS ON ISLAND ARE EXPENSIVE.

THE COSTS NOW ARE GETTING TOO MUCH -TAXES -UTILITIES -UP-KEEP -BOAT Even the islanders and cottagers are having a difficult time making ends meet

If I have to pay a fee, I want less car traffic.

Found trucks annoying. We are artists and were checking it out for maybe next summer. Decided against.

She's been visiting 30 yrs found volume of crowds to be same, not too crowded

Should have more restrooms

Better literature on current showings. Directional signs another lavatory.

Don't add a fee. The ferry already costs a lot.

Wish the boat didn't leave so early and return.

Difficult to find way efficiently.

Will come back to do more exploring.

Better markings on trails with approximate mileage.

VERY NICE PLACE NOT TOO COMMERCIAL

More restrooms

Very nice

IT WAS GREAT THAT I WAS ABLE TO BRING MY DOG. I WOULD NOT HAVE COME W/OUT HER. I DO LIKE THE STRICT RULES ABOUT LEASHING, LITTER, SMOKING. GREAT VISIT.

Need a pub/tavern/sports bar

This type of survey would be equally important for the other two groups that come to the island. Locals and staff kids. Locals approx. 50-75 Staff approx. 100 - (this group is integral to the functioning of the island and are frequently overlooked)

We love this place, hope it stays the same!

The Island was great, I'm sure some might find the # of people difficult, but we can't really afford more for a vacation. Charging fees only limits access to rich people, when I'm sure you'll agree makes things worse, not better!

It is beautiful. The Trails were wonderful to be on.

Visitors are okay as long as they don't stay too long

Seems to be many more vehicles on the island- trucks made a significant impact on noise level. On our first visit 6 years ago seemed to be only 3 or 4 trucks and we only saw them driving on occasion.

A fee would be lame, it's pretty hard to get here and the crowds haven't grown much in 25 years

No right to impose a fee. We are property owners and pay taxes. But even if we weren't. Mohegan residents have no right to impose a fee on visitors, anymore than we do on Cape Cod. Freedom of movement in the USA us an inalienable right. Plus, Mohegan benefits economically from it visitors.

No fees island not crowded

We've enjoyed hiking the trails. But I think it will be more helpful if there is a little bit more signs on the trail. If it takes too much effort, maybe ask for a fee to step onto the island and then use that money for signs and for cleaning up.

This island is wonderful

2004

Trails need more marking with distances and difficulty.

Better sign on trails (big & brighter color)

In my judgment, any limitation should be to preserve the natural environment. Any fees charged for access should be dedicated to that end.

Too many vehicles.

The trails are beautiful but they need to be better marked. We loved the little fairy houses on Cathedral Trail. We plan to come back again and stay next time.

Good time

What is the fee used for?

Don't turn the island into limited access to only a few...as in the state of FI where people buy their place- then want the "rabble" off the beach which we all own...most people seem to respect the beauty of the island- I saw no litter.

Need more public facilities

The fairy houses were cute It was just lovely.

I had fun. I love Monhegan.

We had a terrific time- don't limit people- limit development (particularly houses).

Not enough single gay men. Just kidding. It's lovely.

The only reason to come is to spend at least a week and paint, a great relaxing getaway, if a fee is considered it would seem appropriate to have a sliding scale. Day trippers with family should be given consideration.

The garbage dumps on the dock are terrible. If they could be moved it would be better. An outhouse on some of the trails maybe.

It's a lot less touristy than I thought it would be- trails are wonderful

I would limit the # of people by allowing fewer people on the boat NOT by charging more \$

Beautiful place! Thank you.

Don't feed birds!

I had wanted my mother to come but she has a rolling walker and just getting a place to stay to accommodate her off island was very difficult. I came because I'm also getting older and it was difficult for me to get as far as I did even. I'm glad I came.

The number of boats (and hence number of people) seem similar to past years. Limiting the number of people should only be done if there is obvious damage to the island (as in loss of water supply)

Food was just average.

More signs on trails would be helpful (small signs) Monhegan is an exquisite island with a unique ecological history. More emphasis should be placed on the natural history and acts taken to conserve the island and its natural resources.

The question of whether or not to charge a fee is noteworthy. There are pros and cons. Money needed to keep up trails, etc. However, if you charge a fee to owners -liability and negligence issues to protect patrons against known hazards.

I think you should sponsor more artists (especially young)
Hiking was awesome.

Get rid of the microwave tower :) (go statellite?)

We live in MN and have to restrict access to the BWCA (Boundary Waters Canoe Area)- it is worth doing so!

I come out for monthly work. As an adoption caseworker, any exposure to travel out here is covered by my agency/my clients/ the state of Maine. As you consider your options, please consider folks like me and who would end up paying the fee (if any).

We would have stayed longer- but the weather was very rainy.

Please blaze mark the trails of high use- Route 1. This would keep people on the trails more. Paint blazes on rocks and tree trunks. -Dogs on trails w/o leashes are damaging to moss on trails.

However- artist were closed on the days they said they were open- yoga advertised became ad hoc. One of us is an artist- positive experience with artists visited. Like 'getting away,' sea, quiet with opportunity to interact. Very much like the "community".

I Love Monhegan :)

Thank you! Work hard to keep your island beautiful. It is one of the last places!

Beautiful place. Most relaxing.

We Love Monhegan!

We would've liked to see more galleries open- especially in the rain! Also we liked to hike- but needed to arrange for short shop/gallery hours/ I also thought that the "locals" didn't seem too pleased to have us here.

Great place- do what you need to do protect the island and it's people!

Gallery hours were a bit limited. Would also be nice if there were more evening options. Trail markers should've been a bit more noticeable. Perhaps in a brighter color.

Would you not limit the # of people automatically by limiting the number who can ride on the ferry?

We love Monhegan. Pls ensure that it stays the way it is now.

Wicked Good

We will definitely come back for a longer visit. Thank you.

Please don't charge a fee to step onto the island. The ferry price is enough.

I think the island is beautiful, but not ecologically or culturally sustainable in its present form.

I just think it's nice that you let people come here to enjoy your lovely island.

We love the traditional day trips to Monhegan from our vacation spot in Tenant's harbor.

The blueberry pies were delicious!

Our children loved the fairy forts and enjoyed feeding the seagulls.

A blaze or two on the trail would be nice- can I volunteer next summer? :)

We also enjoyed cathedral woods trail and fairy house. Thank you.

Thanks for having us on your island home. Good luck protecting and preserving Monhegan!

The limit should correspond to capacity of the boats that bring day trippers. Although there were crowds today, it was a great trip- beautiful weather and everyone was pleasant and enjoying themselves. Also, maybe it seemed more crowded because this is August.

Don't build any more houses.

Isn't the number limited by the size of the boat from the mainland?

Very charming. Maybe better restrooms?

Enjoyed hymn sung on Sunday evening at community church. Need better identification signs for trails. Need a better map. Also need a middle marking of the trail map. For example: pulpit rock on parts 18 and 1 are as difficult as make out.

We had a wonderful time- as Mainers, we recommend no fee (or reduced fee) for in-staters
Don't change Trailing Yew

Don't charge fees for people who are contributing to island economy by staying at B and B's and cottages.

We feel fortunate to be visitors here-

Everyone on island- very pleasant Hiking was fantastic- re: signs for specific trails

This makes me feel the island doesn't want us ie: too many people, etc. We take the hint and may stay away. (Sorry, I think this has a chilling effect)

In my judgment, any limitation should be to preserve the natural environment. Any fees charged for access should be dedicated to that end.

Better sign on trails (big to brighter color)

Trails need more marking with distances and difficulty.

Pickup trucks are a little aggressive when driving.

Part of the charm of the island is it not being a vacation destination with fees like Disney World. I have a problem with that. Perhaps if you were to do a fee only for a certain period of greatest traffic, that is different than all the time.

Beautiful day. Lovely experience. Thank you!

1. The people who drive the trucks are not very friendly. 2. A fee coupled with the ferry ride makes a "day trip" to the island expensive. 3. The trails should be marked.

We hiked and it was lovely. Encountered no one beyond Cathedral Trail. The Chowder Festival Event looks like there's a long community spirit. I hope the land trust effort can succeed in

keeping year round residing affordable.

I feel that there were many friendly locals on the island, with wonderful advice and insight to life on Monhegan. However, I almost felt unwelcome at times. I felt a sense of frustration by some of the locals. Is there too much tourism?

We had a very enjoyable, relaxing visit!

Not all businesses are welcoming to visitors. Some "residents" feel they have a special right over the island. It is unfortunate that these people do not recognize that they were new once and that the day trippers who give us headaches are a key source of revenue.

Paying to use a "public" restroom is a poor idea. It promotes people to take "nature hikes" going outside on the trails, and we don't want that. More public restrooms needed. Friendly locals...Not!

In general the local people were rude and unfriendly.

To be honest, some of the business personnel were not very friendly. This is a lovely place- but I feel like visitors are "not wanted" and I feel pretty awkward about that.

Great people- fantastic and challenging trail!

Great Black Raspberry Ice Cream at Inn Store!

You're using a lot of natural resources to conduct this survey.

Who are you people?

I did a lot more hiking than I expected (around the entire island) and was surprised at how few people I encountered, I truly enjoyed this.

We love it- marking trails better is the only improvement needed.

1) increases traffic on the island will put a higher demand on: Trails and trail maintenance, more waste to deal with, will need to increase logistics runs to mainland to support more people on island 2) will be back next year! I can help with trail maintenance.

I love this place and have come for years. Sometimes for just the pleasure of visiting for a week or two. Sometimes also to take a sensing awareness workshop. I'd hate to see the island over run or seem crowded so early action is better than late.

I love Monhegan and have come here for 10 years (not every year) and it really struck me this year how it feels kind of over-run. Good luck in trying to preserve this special place!

A piece of heaven!

Too many trucks! I thought motorized transport was restricted.

I love your island but I do think you may have to limit access. We have been turned off by the crowds at Yosemite, Grand Canyon, etc. Thanks.

I don't like these kinds of surveys especially since someone is even thinking about charging \$ to "step on the island."

Monhegan House dinner excellent -disappointed with Fish & Maine- overpriced for quality- won't stop there again - latte superb! (Emporium) -Novelty loved! -studios tough to get to due to times open

I wish the trails were marked more than they are...

Monhegan House is great. Great food, great people, great service!

We love Monhegan.

Too many trucks.

A beautiful place to visit and very friendly people.

Wonderful- I will recommend selectively because it is so special.

This place needs a Starbucks, Lower prices.

Provide tapes of trails throughout season for purchase to raise funds

Retain and preserve the character by keeping # of boats at present or lower levels the visitation can be maintained or controlled

Could use an additional restroom

Great Day

Extremely enjoyable experience

More toilet facilities

The island is beautiful as it is.

Monhegan is spectacular but we can see that too many people per day + night would be a problem. The fee if charged shouldn't be elitist- not too high- an experience for everyone no matter the pocketbook.

Enjoyed the visit very much! Beautiful, peaceful scenery and enjoyed the arts.

Keep it the way it is!

You might consider the conservation efforts promulgated in the Adirondacks of NY where they balance the interests of both residents, visitors, and the natural ecosystem.

We Love It!

No fees. I would not return here if you charge fees. Put donation boxes. This is part of America. We should be free to come & go as we please!

I didn't care for signs saying "no children". I found it kind of offensive. Other than that it was once again a beautiful, memorable experience. Considering the times the ferry arrives some places could be open earlier/better times.

We Love it, keep it as is, we enjoy the quiet.

We got sick on the boat.

Beautiful place.

Truck travel on the village roads seems excessive these days- particularly the three at 1:00am this morning. When we started coming here 20 years ago, it was like stepping back in time- magical. It is no longer that way.

I would like to visit (for a short but flexible time) in the winter.

Everything was wonderful, except for the lack of bathrooms.

It's unique! Don't change a thing! Ok- maybe even more flowers.