

Visitor and Community Survey Results for Kilauea Point National Wildlife Refuge and Lighthouse: Completion Report

By Natalie Sexton, Shana Cecile Gillette, Lynne Koontz, Susan C. Stewart, John Loomis and Katherine Wundrock



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1. Visitor and Community Survey Results for Kilauea Point National Wildlife Refuge and Lighthouse: Completion Report

By Natalie Sexton, Shana Cecile Gillette, Lynne Koontz, Susan C. Stewart, John Loomis, and Katherine Wundrock

Introduction

The U.S. Fish and Wildlife Service (USFWS) and the Central Federal Lands Highway Division of the Federal Highway Administration, U.S. Department of Transportation are currently pursuing the planning and potential design of an alternative transportation system (ATS) for Kilauea Point National Wildlife Refuge (Refuge or Kilauea Point NWR). The USFWS and CFLHD seek an alternative transportation solution that provides the highest quality visitor experience and is sensitive to biological and cultural resources and the needs of the local community. In planning the alternative transportation system, managers need to consider how an ATS would change factors such as visitor access, visitor experience, visitor willingness to pay, and visitor net economic benefits. The Policy Analysis and Science Assistance branch (PASA) at the U.S. Geological Survey Fort Collins Science Center is dedicated to studying relations between humans and the environment. The objective of PASA is to conduct studies to understand how humans are affected by environmental management decisions and how human activities impact use and conservation of natural resources.

To assist the planning process, PASA researched economic and visitor perception information required for adequate planning and design of an ATS. The objective of this research was to determine how current and proposed Kilauea Point NWR ATS planning strategies could affect:

- visitor access (e.g., provision of transit opportunities to the Refuge);
- visitor experience (e.g., how factors such as crowding affect visitor experience);
- visitor willingness to pay for specific services, such as a shuttle;
- net economic benefits resulting from visitation; and
- community resident attitudes and perceptions.

Assessing public perception and economic values for different public land management options can provide managers with valuable insights regarding advantages and disadvantages of management options prior to an agency drafting an ATS plan. Doing so can provide baseline data on visitor and community use, experience, preferences, and expectations. It also can provide managers with a better understanding of public acceptability of alternatives/future changes that may be proposed. This public participation process also facilitates the engagement of a variety of stakeholders in the Refuge planning process.

There is evidence that planning processes that include a broad array of stakeholders produce more comprehensive plans that are more likely to be implemented (Burby, 2003). The challenge is structuring public involvement in ways that are meaningful and productive for agencies and the public.

Studies of public involvement processes in environmental decision-making have shown that participants evaluate these processes in terms of both process and outcome. Thus, stakeholders seek qualities such as accessibility and the quality of deliberation (process components), and the extent to which their participation is satisfying (outcome) (Halvorsen, 2003). An accessible process is one that provides a comfortable and convenient setting and is respectful of participants' time. Deliberative processes include open discussion and a forum for respectful exchange of opinions, and an opportunity for learning. Finally, a satisfying process demonstrates that decision makers take public input seriously, and the results of citizen input are reflected in the final decision. Other process-focused measures of success in public involvement include the presence of learning opportunities, the development of relationships among group members, and a sense of efficacy (McCool and Guthrie, 2001).

Carr and Halvorsen (2001) drew on criteria proposed by Poisner (1996) to evaluate the effectiveness of public participation in environmental decision-making. One interesting finding of their research was that local participants in land-use decisions were not representative of the community. Women, young people, and those with lower income and education levels participated at a lower rate than their distribution in the community. The lesson is that public managers and planners must make special efforts to promote participation by a broad range of stakeholders.

In environmental planning processes, the public meeting is the forum typically used to collect citizen input. This is especially problematic for visitors to a Refuge. Attendance at public meetings is often inconvenient or impossible for occasional visitors to Refuges who usually live long distances from the relevant USFWS offices. In addition, those residents who most often attend meetings of this type may represent a vocal minority group that usually is not representative of the full range of community residents. Also, there is a limit in the type of scientific baseline data that can be collected through this forum.

Another tool that can be used to collect baseline information and input is a visitor or community survey. Conducting a survey is one way that the ATS planning team can reach out to the public and collect baseline data in support of the ATS plan. It is an effective supplement to a public meeting when detailed information on visitors or stakeholders is needed. Survey research applied to Refuge planning can help managers characterize current visitor services and experiences. It also can help managers understand how current and proposed management activities affect individuals in terms of their preference for services and experiences, and in potential changes in visitation patterns. Finally, high quality public involvement processes may increase trust in government (Burby, 2003) and provide satisfaction in terms of both process and outcome.

A survey questionnaire is a comprehensive tool for assessing public attitudes and preferences that allows many perspectives to be heard, as opposed to hearing solely from vocal minorities (as often happens at public meetings). In addition, attendance at public meetings is often inconvenient or impossible for occasional visitors to Kilauea Point NWR who usually live long distances from relevant USFWS and CFLHD offices. Similarly, a local community survey reaches those residents who typically may not participate in ATS planning meetings due to long-distance driving, time conflicts, or other reasons. Visitor and local community surveys can inform the ATS planning effort through a systematic and comprehensive collection of data from a representative base of visitors and community residents, thus providing evidence-based data for the planning and decision-making process.

As a result, in order to include the views of Refuge visitors and the local public in the ATS planning process, surveys were administered to Refuge visitors and local community residents.

Study Objectives

As part of the preparation of the ATS, social and economic issues, and potential impacts, must be addressed. Therefore, the objective of the visitor and local community surveys, and the economic analysis, was to quantify visitor and community resident perceptions, recreation use values, and the economic impacts such as local income and employment effects of potential ATS management options. Survey respondents were asked to provide information on the type of economic and social benefits they derive from Kilauea Point NWR. Respondents also were asked to provide their perceptions on access to the Refuge, on the Refuge experience, and indicate their willingness to pay for certain services and/or ATS options at the Refuge. Specific study objectives are listed below.

Objective 1: Quantify Visitor and Community Resident Experience of the Refuge (Section 2 of Report)

The purpose of this objective was to quantify visitor and local community perceptions regarding Refuge experience in the context of an ATS, including respondent characteristics, importance of activities, satisfaction with services, and preferences for management of services.

Objective 2: Quantify Community/Refuge Relationship and Community Quality of Life (Section 2 of Report)

The purpose of this objective was to quantify the community/Refuge relationship in terms of the importance of the Refuge to the community, the benefits and concerns residents had with being a neighbor of the Refuge, and how the community participated in decision-making. Another purpose was to identify satisfaction with Kilauea community living, including specific community characteristics.

Objective 3: Quantify Regional Economic Impacts Associated with Visitor Trip Spending (Section 3 of this Report)

The purpose of this objective was to estimate the current level of spending and associated regional economic impacts associated with Refuge visitation.

Objective 4: Measure Visitor and Community Resident Willingness to Pay (Section 4 of this Report)

The purpose of this objective was to measure the actual and potential dollar amount visitors would pay for current and proposed ATS options and Refuge entrance fees.

Objective 5: Quantify Visitor Perceptions Regarding Transportation Options and Access (Section 5 of this Report)

The purpose of this objective was to quantify visitor trip patterns and trip planning, and to identify visitor and community resident perceptions and preferences regarding visitor access and alternative transportation options.

Methods

Survey Development

In order to develop a survey that reflected the policy-relevant management issues to be addressed in the ATS planning process, background ATS planning documents and relevant research were assembled and read. Detailed discussions were held with USFWS and CFLHD personnel individually and in a formal site visit to the Refuge on May 14-21, 2003. The purpose of the site visit was to better understand the Refuge, its visitation, and the alternative transportation system planning process so that the survey instruments were designed to best suit the FWS and CFLHD needs.

Three populations were identified to be sampled: summer visitors, winter visitors, and community residents. Summer and winter visitors included any visitor to the Refuge not living in the town of Kilauea. Local visitors were identified as those living on Kauai, but not in Kilauea and non-local visitors were anyone visiting who did not live on the island of Kauai.

Separate surveys were developed for the three groups (local visitors, non-local visitors, and Kilauea residents) based on the identification of the key issues to be decided for the ATS, the range of possible management actions, and the social-economic information needed. USFWS and CFLHD personnel reviewed these survey instruments, and comments and suggestions were incorporated. The survey instruments were then peer-reviewed and were pre-tested for readability, clarity, and conciseness. The survey was tested with volunteers from the administrative, technical, and research divisions of the U.S. Forest Service and The U.S. Department of Agriculture. Volunteers were asked to take the survey and keep note of issues related to readability, clarity, conciseness, and design. Comments were reviewed and suggestions were incorporated when appropriate. The visitor and community surveys were then sent through the Department of Interior Generic Clearance for Customer Satisfaction Surveys for Office of Management and Budget (OMB) approval. OMB approval was received on 8/12/2003 (OMB, #1040-0001).

Survey Implementation

Visitor Survey

In order to capture differences in seasonal usage, the visitor surveys were administered during the peak summer and winter recreation seasons. Two contractors were hired to aid in survey administration at the Refuge. Visitation at the Refuge was fairly uniform across the week, with peak visitation occurring at certain times during the day. In order to achieve a fair representation of visitors during the peak seasons, contractors collected names and addresses over a five-week period, varying the days and times. The day, time, and parking capacity were noted at the top of each name and address sheet in order to provide a comparison among visitation periods. All days were sampled twice. In the summer sample, every fourth visitor was intercepted and asked to participate in the survey. The protocol was changed to every third person in the winter in order to arrive at the desired sample (1,000) within the five-week sampling period.

The survey interviewer approached visitors and explained the purpose of the survey. Then, visitors were asked to provide their name and addresses so that a survey could be mailed to them. As a token of appreciation, each visitor agreeing to complete the survey was given a souvenir postcard. A contractor entered visitor names and addresses into a database. To administer the survey, a step-by-step procedure called the Total Design Method (Dillman, 2000) was followed. This is a dependable process for survey sampling that maximized the quality and quantity of

responses for mail and telephone surveys. Specifically, the following steps were taken: 1) Each addressee was sent the survey package: the survey, a postage-paid return envelope, a cover letter explaining the study, and an incentive postcard of the Refuge; and 2) Over the course of the following seven weeks, one reminder postcard and two more survey packages were sent to those who had not responded.

Community Survey

The community resident survey was mailed to all Kilauea households. There were several reasons for choosing to send the survey to the entire local community. The local population of Kilauea was around 2,000 at the time of the survey, and as many residents as possible were needed to participate to ensure adequate final sample size. Also, because of the small population, there was concern that locals might perceive a random sample of residents as being exclusionary.

The mailing list for the community survey was obtained from the marketing research company, Survey Sampling Inc. (SSI) and from voter registration records. The participant list was then transferred into the survey database and checked for accuracy. The community surveys were mailed following the Total Design Method (Dillman, 2000) described above.

Data Entry and Analysis

A contractor was provided with all needed guidelines for the data entry procedures, including the survey codebooks and data entry forms. All data were entered into an Excel spreadsheet. The contractor was assisted with any coding or data entry questions or concerns that arose. The contractor kept a detailed spreadsheet noting any discrepancies. The data were analyzed using SPSS 13.0. Descriptive statistics were first run, followed by parametric, non parametric, and cross tabulations to identify any major differences or similarities in the response to survey questions between summer and winter visitors, and between visitors and community residents (where appropriate). IMPLAN modeling software was used to analyze the economic impacts associated with visitor spending. IMPLAN is a computerized database and modeling system that provides a regional input-output analysis of economic activity in terms of 10 industrial groups involving as many as 528 sectors (Olson and Lindall, 1996).

Results

Results for this study are presented in separate sections, as outlined in the Introduction. In addition to these sections, five appendices accompany this report. Appendix A of this report includes the summary data for all of the questions in the visitor survey, in the order as they appear. Appendix B includes the summary data for all of the questions in the community survey, in the order as they appear. Appendix C and D are the visitor and community survey instruments, respectively. Appendix E contains contingent valuation bid response distributions. It may be useful to reference these Appendices in conjunction with the report.

Response Rates

Visitor Survey

Summer visitors were intercepted (asked to participate in the survey, and their names and addresses collected) from August 4, 2003, through September 2, 2003. More than 1,000 Refuge visitors over a five-week period agreed to participate in the visitor mail survey. In total, there were 17 days of sampling that balanced week days and weekend days. There were 1,003 surveys mailed. Only five of the people contacted provided a written refusal to participate in the survey. Summer visitor survey distribution was completed in December 2003.

Winter visitors were intercepted from January 21, 2004, through February 13, 2004. More than 1,000 Refuge visitors over a five-week period agreed to participate in the visitor mail survey. In total, there were 17 days of sampling that balanced week days and weekend days. There were 1,004 surveys mailed. Winter visitor survey distribution was completed in May 2004.

In summer and winter, there were a small number of local visitors in the survey sample (<30). Because of the small sample size, visitor results presented for this report are based on non-local responses only.

Overall response rate for the visitor survey was 70 percent (Table 1-1). Considering the length and detail of the survey, this response rate is considered excellent and the margin of error on the sample size is quite low (< 4 percent for summer and winter and < 3 percent for the overall visitor sample).

Community Survey

The community survey was implemented between May and August of 2003, with survey distribution being completed in fall of 2004.

Initially, resident contact information was obtained from SSI for 746 households in Kilauea Town. This list proved to be unusable. It consisted of predominantly physical addresses as opposed to post office boxes and the bulk of the addresses (61 percent) were undeliverable by the Kilauea Post Office. After recognizing this problem, resident contact information was obtained from the Kilauea voter registration list. This new database was cross-referenced with the SSI database to ensure there was no duplication and to ensure (to the extent possible) that only one related person per household received the survey. Once databases were switched, no additional follow-ups were done with deliverable non-respondents from the initial database due to time and financial constraints.

Overall response rate for the community survey was 44 percent (Table 1-1). There were only 23 written refusals. Considering the length and detail of the survey, this response rate is acceptable and the margin of error (four percent) is quite low.

Table 1-1. Response rate for Kilauea Point National Wildlife Refuge visitor and community surveys.

	Summer visitors	Winter visitors	Total visitors	Community
Surveys distributed	1,003	1,004	2,007	1,2011
Undeliverable addresses ²	5	4	9	241
Respondents	665	727	1392	425 ³
Response rate (%)	67	73	70	44
Confidence interval (±) ⁴	3.8	3.6	2.6	4.1

¹Total number of surveys distributed for community was the sum of the number successfully distributed from the SSI database (74) and the total number distributed from the voter registration database (1127).

²Respondents whose addresses were undeliverable and whose surveys were returned as such. This number was subtracted from the number of surveys distributed when calculating the response rate. For the community survey, this number did not include the 61 percent undeliverable addresses from the initial SSI database, only the undeliverable addresses from the voter registration database. There were a small number of households who received and returned the survey from the initial SSI database mailing who also received a survey from the voter registration database mailing (though the database was cross-referenced to ensure this was minimized). For those cases, they were recorded as undeliverable as well (on the voter registration database) and as respondents on the SSI database.

³Number of respondents includes 74 from SSI database mailing and 351 from voter registration database mailing.

⁴The confidence interval was the plus-or-minus error figure related to the sample size and population size and was associated with the results. For example, if 55 percent of the sample choose an answer, it would be certain that had the entire relevant population been asked the question, between 50 percent (55-5) and 60 percent (55+5) would have picked that answer.

2. Visitor and Community Resident Experience

By Natalie Sexton and Susan C. Stewart

Interpreting the Data

Throughout this section, results are presented for the visitor and community surveys. Data from the visitor survey are referred to as "visitors" and data from the community survey are referred to as "community residents," even though community residents were asked about their visitation to the Refuge, and many had visited the Refuge. This was not to imply that community residents are not important visitors/users of the Refuge, but simply a way to refer to the results in a consistent manner throughout the report. Where meaningful differences exist between summer and winter visitors, those differences are highlighted. Likewise, where differences exist between visitors' opinions and that of community residents (for same or similar questions), those differences are highlighted.

Visitor and Community Resident Profile

Demographics for visitors and community residents are presented in Table 2-1. The majority of visitors and community residents surveyed were female. The average age of visitor respondents was 51 years old, with a minimum age of 19 and a maximum age of 86. Summer visitor average age was significantly less than winter visitor (47 years vs. 55; $\chi^2 = 110.62$, p < .001). The average age of community respondents was 50 years old, with a minimum age of 20 and a maximum age of 88.

Nearly three-quarters of visitors stated that they were employed (72 percent) and of those, 82 percent indicated that they worked full-time. Twenty-two percent of visitors (n = 284) indicated that they were retired. There were substantial statistical differences between seasons in the number of retirees, with about three times more visiting during the winter of 2004 (n = 217) than during the summer of 2003 (n = 67; $\chi^2 = 31.30$, p < .001). This corresponds to the age difference between seasons, with more older-retired people visiting the Refuge in the winter.

Similarly, 82 percent of community respondents (n = 324) stated that they were currently employed and of those, 80 percent (n = 245) indicated that they worked full-time. Sixteen percent of community residents indicated that they were retired.

Generally, most visitors had obtained a college education. Four years of college or technical school was reported as the highest level of education by the largest percent of visitors (43 percent, n = 551). This was also the average education level of visitors. Generally, residents of the town of Kilauea had greater than a high school education, and on average, had some college or technical education ($\chi^2 = 85.76$, p < .001).

¹ Chi Square (χ^2) is the statistic used to determine if there is a relationship between two variables. "p" is a measure of the significance of that relationship.

2-1

The average household income among visitors to Kilauea Point NWR was between \$75,000 and \$99,000, with the median in the same range. The average household income among community residents was significantly lower ($\chi^2 = 191.56$, p < .001), being between \$50,000 and \$74,999, with the median in the same range. However, according to the 2000 Census data, both the mean and median income of Refuge visitors and community residents is *above* that of the national average and median household income.

Regarding ethnicity and race, 97 percent of visitors (n = 1204) and 95 percent of community residents (n = 354) indicated that they were not Hispanic or Latino. For visitors and community residents, the most commonly stated racial origin was white (95 percent and 68.2 percent, respectively). However, as expected, there were significantly higher percentages of Asian, Native Hawaiian, or other Pacific Islanders in the community sample.

Table 2-1. Demographics of survey respondents.

Demographics	Visitors	Community
Male	41%	39%
Female	59%	61%
Average age	51	50
Worked full- or part-time	72%	81%
Retired	22%	16%
Highest education level	Four years of college	Some college or technical
-	or technical school	school
Mean household income	\$75,000-99,000	50,000-74,999
Race ¹		
White	94.6%	68.2%
American Indian	1.6%	2.1%
Black or African American	0.6%	0.7%
Asian	3.0%	20.5%
Chinese	(1.1%)	(3.5%)
Japanese	(0.7%)	(7.9%)
Korean	(0.5%)	(0%)
Filipino	(0.4%)	(7.9%)
Vietnamese	(0.2%)	(0%)
Asian Indian	(0.1%)	(0%)
Other Asian	(0%)	(1.2%)
Native Hawaiian or other Pacific Islander	0.2%	8.6%
Ethnicity Not Hispanic or Latino	97%	95%

¹Race percentages are number of responses, not number of respondents, as respondents could check more than one race. For visitors, n = 1308; for community residents, n = 431.

Community residents have a long history on Kauai and in the town of Kilauea (Table 2-2). On average, they have lived on Kauai for 22 years, with over half of respondents living on the island more than 15 years. Residents' families have inhabited Kauai an average of over two generations, with almost 40 percent of respondents stating they had been there for three or more generations. On average, community residents have lived in Kilauea for 17 years. The median number of years residents have lived in Kilauea is 10. Five percent of respondents indicated they had lived there longer than 50 years. Most residents of Kilauea surveyed were full-time residents. It was uncertain if this truly represented the composition of the community or was a result of sampling.

Table 2-2. Other demographics of community residents.

Demographic	Averages
Years lived on Kauai	22
Generations lived on Kauai	2.1
Years lived in Kilauea	17
Full-time resident	98%
Part-time resident $(n = 8)$	2%

Visitor Trip to Kauai

Visitor respondents were asked a number of questions regarding their trip in order to get a better understanding of where they were from, how they arrived on Kauai, and activities they participated in while on-island.

Visitors came to Kauai from a variety of places, though the majority of visitors (97 percent, n = 1315) indicated that they lived in the United States, with representation from all 50 states (Figure 2-1). The next most common country from which visitors came was Canada, followed by England.

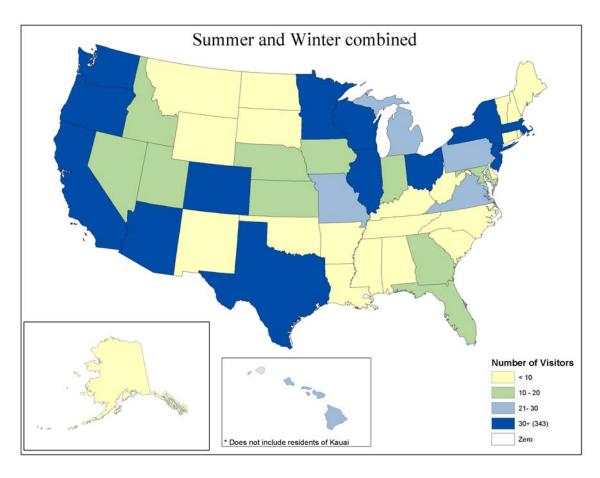


Figure 2-1. Residence of visitors to Kilauea Point National Wildlife Refuge.

Results indicated that repeat visits to Kauai were fairly infrequent (Table 2-3), with most respondents having visited the island only once in the past five years (69 percent, n = 923).

Table 2-3. Number of visits to Kauai in the past five years.

Times visited	% respondents
1	69%
2	16
3	7
4	3
5	3
More than 5	3

n = 1344

Generally, visitors were on Kauai as either their primary travel destination (72 percent, n = 956) or as an outing from another Hawaiian island (22 percent, n = 291). Almost all of the visitors surveyed (96 percent, n = 1299) indicated that they arrived on Kauai by commercial plane.

Visitors to Kilauea Point NWR reported that the average time they spent on Kauai during their most recent trip to the island was about nine days, however, reports varied from a minimum of four hours to a maximum of about four months. The modal, or most frequently reported amount of time spent on Kauai, was about one week.

Once on island, for the most part, visitors to Kilauea Point NWR used rental vehicles to travel during their visit (Table 2-4).

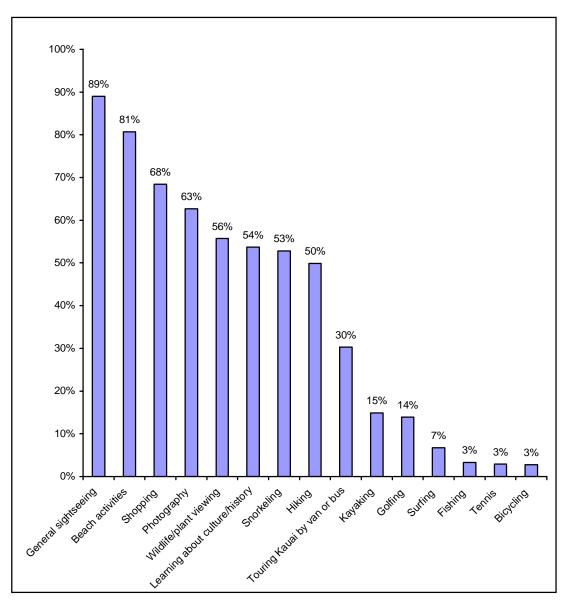
Table 2-4. Modes of travel used by Kilauea Point National Wildlife Refuge visitors during their trip to Kauai.

Mode of travel	Percentage of visitors ¹
Rental vehicle	90%
Walking	53
Boat	23
Helicopter	19
Private vehicle	12
Tour van/bus	7
Bicycle	2
Taxi	2
Other	2
Public transit	1

n = 1344

Overall, the most frequently reported activities in which visitors participated were general sightseeing and beach activities (Figure 2-2). Shopping, photography, wildlife and plant viewing, learning about Kauai's culture and history, snorkeling, and hiking were also frequently reported visitor activities. However, more summer visitors than winter visitors participated in snorkeling,

¹Responses do not add to 100% as respondents could choose more than one option.



n = 1346

Responses do not add to 100% as respondents could choose more than one option.

Figure 2-2. Activities visitors participated in while visiting Kauai.

surfing, and beach activities (Table 2-5), with higher participation in summer. This was likely due to the roughness and clarity of surf and sea in winter (as compared to summer).

Table 2-5. Activities with significant differences in participation by season of visitation.

Activity	Summer visitors (%)	Winter visitors (%)	χ2	р
Beach activities	87	75	27.62	< .001
Snorkeling	64	43	58.02	< .001
Surfing	11	3	31.46	< .001

Visitor and Community Resident Trips to Kilauea Point National Wildlife Refuge

The majority of visitors to Kilauea Point NWR had only visited the Refuge once, including the visit during which they were surveyed (Table 2-6). The average number of times visitors had visited was 1.5 times.

Kilauea community residents, in general, had not visited Kilauea Point NWR very often over the past five years. Across community respondents, 67 percent (n = 220) visited the Refuge five or less times. Though the average number of visits was 10.6, there was much variation in response (Table 2-6).

Table 2-6. Number of visits made to Kilauea Point National Wildlife Refuge by visitors and community residents in the past five years.

Times visited	Visitors (%)¹	Community residents (%) ²
0		12
1	75	10
2	14	11
3	4	13
4	2	4
5	2	13
> 5	2	36

 $^{^{1}}n = 1292$

Community respondents who had not visited the Refuge in the last five years were asked what would encourage them to visit the Refuge. The 94 responses (22 percent of respondents answered this question) were quite varied. The most frequently cited responses were having free admission for the residents of Kilauea Town and simply having more available time or finding time to make a visit. In some cases, respondents said that they forget that the option was available. Stated one respondent,

"I need to be reminded to do it, perhaps through signs in town or some other type of marketing."

Related to prompts for the Refuge was the expressed desire for events that directly involved the community or community residents. They might be encouraged to visit if there were an "[a]dvertised 'residents day' or an event that I could get involved in volunteer opportunity or 'open house'."

Another recurring response was the wish for increased access to the area, including being able to take in dogs, access to the lighthouse, having Crater Hill opened to the public or community residents or for the Crater Hill hike to be reinstated, or increased hours of operation, particularly during the evening and night. While there was the mention of additional access, some community residents indicated that they only go to the Refuge when they can "show to visiting friends," or in some cases, do not go into the Refuge but enjoy it from outside the entrance. One community member declared,

 $^{^{2}}n = 398$

"Many times I visit the lookout above the bay to the east of the lighthouse to see the ocean & view."

Community respondents were asked if they had attended any special events at the Refuge in the past year. There were not large percentages of community residents who participated in any of those activities in the past year. Only about a third of community residents attended the Ocean Fair, Lighthouse Day, and Holiday Craft Fair, while less than 15 percent reported attending the National Wildlife Refuge Week activities (Table 2-7).

Table 2-7. Special events at Kilauea Point National Wildlife Refuge attended by community residents in the past year.

Special event	% attended
Ocean Fair	30
Lighthouse Day	27
Holiday Craft Fair	27
National Wildlife Refuge Week activities	14

n = 358

Fifty-four percent of visitor respondents (n = 736) said the reason for visiting Kilauea Point was that it was one of many equally important reasons or destinations for their visit to Kauai. Forty-four percent of visitors (n = 579) indicated that the Refuge was an incidental or spur of the moment stop on a trip taken for other purposes, and one percent of visitors (n = 17) stated that going to the Refuge was the primary purpose of their visit to Kauai. More winter visitors than summer visitors indicated that the visit to the Refuge was one of the reasons for visiting Kauai (as opposed to a spur of the moment stop; ($\chi^2 = 35.13$, p < .001).

On average, visitors reported spending close to two hours at the Refuge. This was also the modal time reported spent at the Refuge. The average stay reported by survey respondents was different than the 40 minute average stay time that was reported by the traffic count study conducted by Parson's Brinkerhoff (PB) in March and August 2003 (Parson's Brinkerhoff, personal communication). PB recorded license plates as cars entered and left the Refuge on two days in the two seasons. There were two possible explanations for the differences in numbers. First, the PB study and this study were conducted over different lengths of time and each average had a different margin of error associated with it. Second, in the visitor survey, respondents were asked to recollect their visit after they had visited, and there is a possibility that there may have been some recall bias. However, the surveys were sent to respondents between two and four weeks after their visit.

For the most part, visitors came to the Refuge with family groups (72 percent, n = 761; Table 2-8). Friends or a combination of family and friends were the next most frequently cited group types. There was a significant difference between summer visitors and winter visitors regarding the type of group with which they visited ($\chi^2 = 52.60$, p < .001), with more winter visitors traveling with friends, or a combination of friends and family, than summer visitors. The average visitor group size was three, but the most often cited number of people in a group was two.

Visitor respondents were asked to indicate where they stayed the night before visiting the Refuge. These responses can be found in Table 2-9.

As shown by Figure 2-3, the most common way in which visitors learned of Kilauea Point NWR was through travel guidebooks (48 percent, n = 613), followed by visitor brochures and highway signage.

Table 2-8. Type of group with which respondents visited Kilauea Point National Wildlife Refuge.

Group type	% respondents
Family	72
Friends	18
Family/friends	11
Commercial tour group	2
Organized club or group	1
Business/company trip ¹	< 1

Categorized according to open responses to the "other" category. n = 1060

Table 2-9. Place visitors stayed the night before visiting Kilauea Point National Wildlife Refuge.

Overnight stay	% respondents
Poipu	23%
Kapaa	21
Princeville	21
Lihue	17
Hanalei	5
Waimea	1
On a cruise ship	2
On another Hawaiian island	1
On an airplane	< 1
On the U.S. mainland	< 1
Other	7

Visitor and Community Member Experience at the Refuge

Visitors and community residents (who had visited the Refuge in the past five years) were asked a series of questions related to their experience while visiting the Refuge. These questions were targeted at the following areas:

- understanding the importance that activities had on their decision to visit the Refuge,
- understanding the importance and satisfaction regarding visitor services provided on the Refuge,
- describing the aspects of the Refuge that bring visitors and community residents back, and identifying those aspects that could be enhanced; and
- understanding how certain existing features should be managed to maximize visitor and community resident experience at the Refuge.

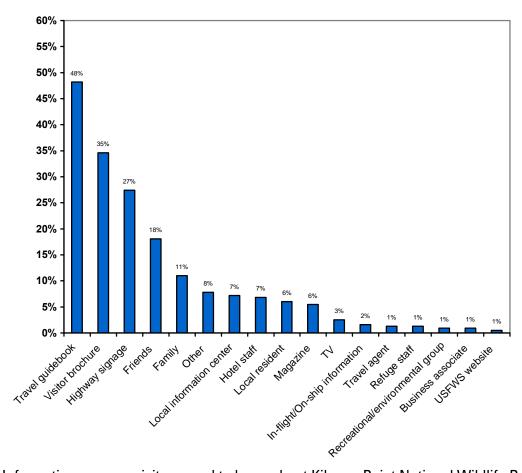


Figure 2-3. Information sources visitors used to learn about Kilauea Point National Wildlife Refuge.

Importance of Activity

Stakeholders were asked the importance of specific priority public use activities as identified by the Refuge Improvement Act —wildlife observation, photography, and interpretation and environmental education— and other compatible activities available at the Refuge. Respondents also were asked about two motivations for visiting the refuge: experiencing a serene environment, and being in natural and undeveloped lands. Certainly, the argument could be made that an activity such as wildlife observation also could be a motivation for other activities (such as hunting or photography). Consequently, it was best not to interpret these "importance of activity" ratings as implying that some activities were more important than others, but that some activities were more important to a larger number of respondents than others.

Most activities listed in the survey were ranked as "important" or "very important" in a majority of respondents' decision to visit Kilauea Point (Table 2-10; Figure 2-4). The highest percentages of visitors ranked viewing scenic overlooks and visiting an historic landmark/lighthouse as "very important" or "important" to their decision to visit the Refuge (93 percent, n = 1316; and 85 percent, n = 1323, respectively). There was a significant difference between summer and winter visitors on the importance of viewing whales and/or dolphins (F = 68.89, p < .001). This is not surprising, since this is an activity limited primarily to the winter

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² "F" is the F-test, also called the F-ratio. It is used in analysis of variance (ANOVA) testing to test the significance of differences between variable means.

months. In addition, 30 percent or fewer visitors indicated that participation in environmental education programs, and purchasing books and mementos while visiting, were less important activities.

For community residents, the most important activity in the decision to visit Kilauea Point NWR was the opportunity to view native seabirds (92 percent rating as "very important/important"); followed by viewing scenic overlooks (91 percent) and visiting a historic landmark/lighthouse (79 percent; Figure 2-4, Table 2-10). All but two of the other activities (purchasing books about the natural history of the area and purchasing mementos at the gift shop) were listed by more than half of respondents as "important" or "very important."

There were some significant differences in importance of activity between visitors and community residents. These included viewing native seabirds (F = 79.42, p < .001), purchasing books about the natural history of the area (F = 131.52, p < .001), being in natural, undeveloped lands (F = 73.12, p = .000), and participating in environmental education programs (F = 112.02, p < .001). In all instances, community residents rated these activities as more important to their Refuge experience than did visitors.

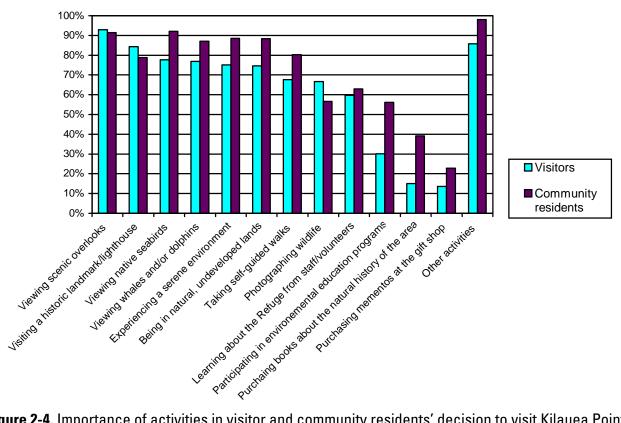


Figure 2-4. Importance of activities in visitor and community residents' decision to visit Kilauea Point National Wildlife Refuge.

Table 2-10. Importance of activities in visitor and community residents' decision to visit Kilauea Point National Wildlife Refuge.

	Visitors			Com	munity residents	
	Very important/ important (%)	Somewhat important/ not important (%)	Mean score	Very important/ important (%)	Somewhat important/ not important (%)	Mean score
Viewing scenic overlooks of the coastline	931	7	3.6	91	8	3.6
Visiting a historic landmark/lighthouse	85	15	3.3	79	21	3.2
Viewing native seabirds ²	78	22	3.2	92	7	3.6
Viewing whales and/or dolphins ³	77	20	3.1	87	12	3.5
Experiencing a serene environment	75	23	3.1	89	10	3.5
Being in natural, undeveloped lands ²	75	24	3.0	88	9	3.5
Taking self-guided walks with interpretive signs	68	30	2.8	80	18	3.2
Photographing wildlife	67	31	2.9	57	40	2.7
Learning about the Refuge from staff/volunteers	60	37	2.6	63	35	2.8
Participating in environmental education programs ²	30	63	2.0	56	40	2.6
Purchasing books about the natural history of the area ²	15	80	1.6	39	58	2.2
Purchasing mementos at the gift shop	14	83	1.5	23	74	1.8
Other activities $n = 56$	87	9	3.4	98	2	3.9

Where percentages do not add up to 100% across a row, the remaining respondents indicated they had no opinion as to the importance of an activity.

²There were typical statistically significant differences between visitors and community residents in importance of these activities to their Refuge experience: viewing native seabirds (F = 79.42, p = .000), purchasing books about the natural history of the area (F = 131.52, p = .000), being in natural, undeveloped lands (F = 73.12, p = .000), and participating in environmental education programs (F = 112.02, p = .000).

There was a typical statistically significant difference between summer and winter visitors on importance of viewing whales and/or dolphins (F = 68.89, p < .001).

Importance of and Satisfaction with Services

Respondents were asked to rate the importance of (on a scale of 1-4, with 1 being not important and 4 being very important) and their satisfaction with (on a scale of 1-5 with 1 being poor and 5 being outstanding) various services provided at the Refuge. Comparing the importance and satisfaction ratings for visitor services can help to identify how well the services are meeting visitor expectations. There are several ways to make this comparison. One way is via the importance-performance framework (Martilla and James, 1977; and Tarrant and Smith, 2002), where mean scores for importance and satisfaction were charted (Figure 2-5). This framework combines importance and satisfaction (or performance) into one model. It allows consideration of how visitors value an attribute, at the same time considering their satisfaction with the attribute. It is tool that can be used to prioritize management decisions related to services and features. For example, a service with a "low" satisfaction rating that is very important to visitors should be given more attention than a service with a "low" satisfaction rating that is not at all important to visitors.

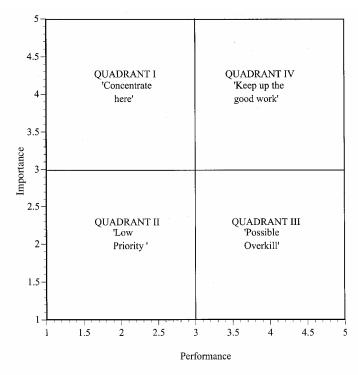


Figure 2-5. Importance-performance framework (Martilla and James, 1977).

It was evident by the high percentages (Table 2-11 and Table 2-12) that most of the services are important to a large portion of visitors and community residents. The one exception was that only a small number of respondents considered the existence of appealing items at the gift shop as important.

When asked about satisfaction with the features that were rated as important, most visitors and community residents rated their satisfaction with those services as outstanding or good (Tables 2-11 and 2-12).

There was a minimal difference in importance and satisfaction ratings between summer and winter visitors regarding information on bird watching, whale watching, and/or wildlife photography (for importance, F = 19.17, p < .001; for satisfaction, F = 14.00, p < .001). These

differences likely stemmed from season-specific activities that Refuge visitors come to do (e.g., whale watching in the winter).

The last columns in Tables 2-11 and 2-12, and Figures 2-6 and 2-7, compare importance and satisfaction using the importance-performance framework. For visitors, only two features/services did not fall in the "keep up the good work" quadrant. The presence of appealing gift shop or bookstore items was an area where current efforts may be "possible overkill" for both visitors and community residents. This suggests that efforts toward providing appealing gift shop or bookstore items could be reduced without negatively affecting visitor experience.

Table 2-11. Visitor importance-satisfaction with services provided at Kilauea Point National Wildlife Refuge.

Activity	Importance = very important/important (%)	Mean importance ¹	Satisfaction = outstanding/ good (%)	Mean satisfaction	Rating ²
Condition of the natural environment	97	4.5	95	4.4	Keep up the good work
Refuge grounds well-maintained	96	4.3	87	4.5	Keep up the good work
Wildlife viewing opportunities	95	4.5	95	4.4	Keep up the good work
Lighthouse well-preserved and maintained	93	4.3	88	4.4	Keep up the good work
Educational kiosks or signs about the Refuge and its wildlife	85	4.0	89	4.1	Keep up the good work
Information on bird watching, whale watching, and/or wildlife photography ³	83	4.0	94	4.1	Keep up the good work
Natural history information about the site	82	3.9	86	4.1	Keep up the good work
Lighthouse and Refuge easy to find	82	4.0	79	4.2	Keep up the good work
Reasonable entrance fees	81	3.9	81	4.3	Keep up the good work
Helpfulness of Refuge staff	81	4.0	81	4.4	Keep up the good work
Adequate number of parking spaces	78	3.8	52	3.6	Keep up the good work
Access for people with physical disabilities or walking difficulties	51	3.5	62	4.0	Low priority
Appealing gift shop or bookstore items	32	2.7	67	3.8	Possible overkill
Other services/features $(n = 32)$	88	4.5	73	3.7	Keep up the good work

¹Importance scale is a 4-point scale. Mean scores converted here to 5-point scale to more easily compare to 5-point satisfaction scale.

²Rating is based on importance-performance framework (Martilla and James, 1977) where satisfaction is plotted on x axis and importance is plotted on y axis, and the graph is divided into quadrants (top right = "keep up the good work," bottom right = "possible overkill," bottom left = "low priority," and top left = "concentrate here.")

³Minimal significant difference exists between summer and winter visitors regarding importance and satisfaction (for importance, F = 19.17, p < .001; for satisfaction, F = 14.00, p < .001).

Table 2-12. Community resident importance-satisfaction with services provided at Kilauea Point National Wildlife Refuge.

Activity	Importance = very important/important (%)	Mean importance¹	Satisfaction = outstanding/ good (%)	Mean satisfaction	Rating²
Condition of the natural environment	99	4.8	87	4.3	Keep up the good work
Refuge grounds well-maintained	98	4.7	91	4.4	Keep up the good work
Wildlife viewing opportunities	97	4.7	89	4.4	Keep up the good work
Lighthouse well-preserved and maintained	96	4.5	87	4.2	Keep up the good work
Educational kiosks or signs about the Refuge and its wildlife	88	4.2	77	4.0	Keep up the good work
Information on bird watching, whale watching, and/or wildlife photography	81	4.0	77	4.0	Keep up the good work
Natural history information about the site	87	4.2	78	4.0	Keep up the good work
Lighthouse and Refuge easy to find	70	3.8	78	4.1	Keep up the good work
Reasonable entrance fees	82	4.1	72	3.9	Keep up the good work
Helpfulness of Refuge staff	87	4.2	80	4.2	Keep up the good work
Adequate number of parking spaces	75	3.8	60	3.5	Keep up the good work
Access for people with physical disabilities or walking difficulties	77	4.2	69	4.0	Keep up the good work
Appealing gift shop or bookstore items	42	2.9	63	3.7	Possible overkill
Refuge special events	61	3.5	68	4.0	Keep up the good work

¹Importance scale is a 4-point scale. Mean scores converted here to 5-point scale to more easily compare to 5-point satisfaction scale.

²Rating is based on importance-performance framework (Martilla and James, 1977) where satisfaction is plotted on x axis and importance is plotted on y axis, and the graph is divided into quadrants (top right = "keep up the good work," bottom right = "possible overkill," bottom left = "low priority," and top left = "concentrate here.")

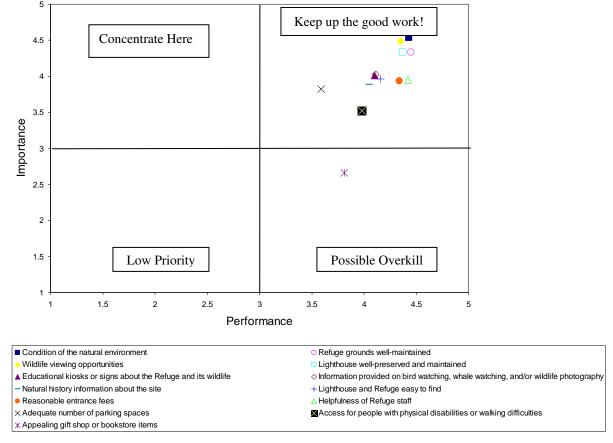
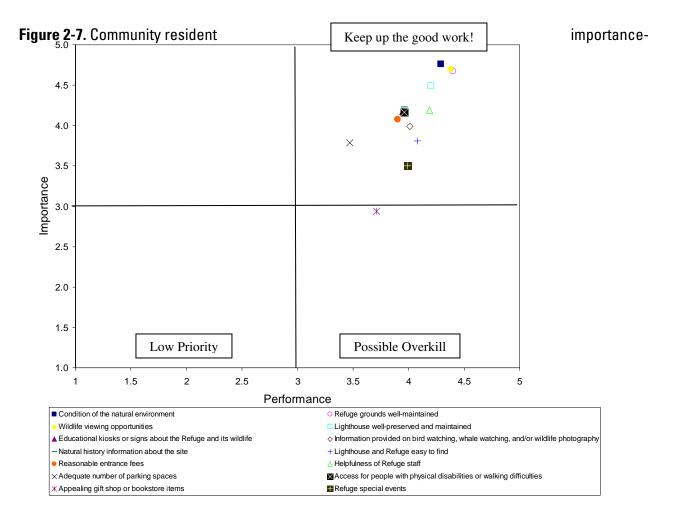


Figure 2-6. Visitor importance-satisfaction ratings with services provided at Kilauea Point National Wildlife Refuge.



satisfaction ratings with services provided at Kilauea Point National Wildlife Refuge.

Factors that Would Bring Visitors and Community Residents Back

In an effort to enrich the results regarding importance of activity and importance-satisfaction of services, visitors and community residents were asked to respond to two open-ended questions: "What would bring you back?" and "What would enhance your experience?" Sixty-eight percent of visitor respondents (n = 934) and 63 percent of community residents (n = 266) answered the above open-ended questions. The responses to these questions are qualitative and should be interpreted as such; however they can inform the quantitative results of this study and provide anecdotal insight. The verbatim responses are available in Appendix A and B.

Reactions of Kilauea Point visitors and community residents to the question "What would bring you back?" were largely positive and enlightening. Patterns indicated that both groups enjoyed the scenery and the view of the coastline, in addition to the calm, clean, peaceful environment. One visitor replied,

"The serenity and calmness of the area for people and wildlife to co-exist at the refuge will bring me back. The beautiful landscape and scenic views of the coastline is another plus."

Bird watching and wildlife observation were activities that proved to be meaningful to the visitors and community residents alike, particularly viewing albatross, sea turtles, whales, and

dolphins. Numerous visitors added that the voluntary use of binoculars was appealing, as one person explained,

"The binoculars were a delightful tool to use in our visit. I wouldn't have thought to bring any, but they enhanced the educational experience. Someone was thinking."

The staff and volunteers were described as enthusiastic, friendly, informative, knowledgeable, and available to answer questions. Others praised the freedom and ability to enjoy the Refuge at their own pace.

Community resident responses mirrored these feelings, adding that the company of visitors would bring them back. Some mentioned that it was simply the "Aloha Spirit" or the pure enjoyment of "just being there" that would bring them back. Members of the community have been going there since they were young and now the Refuge serves as a place that they can bring their children, ultimately reliving their childhood memories and sharing the historic value of the lighthouse with others. As one community resident said,

"We bring our grandchildren to see the refuge and lighthouse...it is important for their learning of nature and history in the island of Kauai,"

Lastly, the environmental education opportunities and tours, and the historical significance encompassing the region, were features mentioned that would bring visitors and community residents back to the Refuge, with community residents specifically expressing interest in tours, class trips, and community-based events.

Factors That Would Enhance Refuge Experience

When asked, "What would enhance your experience?" there was a wide range of responses from visitors and community residents. Fifty-two percent of visitor respondents (n = 711) and 51 percent of community residents (n = 216) answered the above open-ended question. The responses to this question are qualitative and should be interpreted as such; however they can inform the quantitative results of this study and provide anecdotal insight. The verbatim responses are available in Appendix A and B.

The most frequent requests were for visitors to have access to the lighthouse and regain the right to use the trails within the Refuge. One visitor replied,

"Being able to make a reservation to go inside the lighthouse and easier access to information about the lighthouse, such as its keepers and history, would enhance our experience,"

Similarly, the most common suggestion from community residents was for residents and visitors to regain access to Crater Hill and other hiking trails, perhaps even down to the ocean, and to reinstate access inside the lighthouse. Members of the community would like to see the lighthouse in working order more often and suggested letting the light shine. Some individuals wished that residents and Kilauea community residents would not have to pay full admission to enter the Refuge and commented that they would like to be able to walk into the Refuge on foot rather than drive.

Educational activities were also of interest to respondents. Many expressed interest in participating in hikes or guided tours within the Refuge. Suggestions included opening trails down to the beach and through the nesting grounds for visitors to explore. Those who would prefer a guided visit suggested,

"It is difficult to recognize birds when they fly, or really appreciate the experience without someone experienced, to talk about his/her passion."

Numerous people implied that there was an importance and a desire to have small group lectures, films, audio tours, or interactive displays about the history and wildlife. Seeing more wildlife was a common theme, however, most seemed to realize that viewing wildlife depends on the weather and time of year. It was suggested that the Refuge provide an illustrated guide-pamphlet explaining the best time to view birds and animals, and to provide more telescopes and binoculars for public use. Some community residents expressed interest in having more educational material, specifically information on the history of the lighthouse and Refuge, native plants, the environment, and wildlife in the region. Suggestions for providing this information included the use of audio tours, workshops, seminars, signage, and allowing both guided and self-guided tours. Community respondents also indicated they would like to see more native fauna.

"It is a beautiful spot unlike any others in the world; the uniqueness of it is enough," expressed one individual.

Community respondents said that they would enjoy more access to educational material, such as: mailings, newsletters, brochures, special interest programs, and activities.

To improve the facilities, both groups suggested the addition of shaded areas, seating, and picnic areas would be highly desirable for resting and relaxing in the pristine environment. One visitor commented that there were too few stools that children could use for viewing. Comments from visitors regarding the accessibility for handicap or disabled persons were very positive; others suggested better signage surrounding the Refuge and more parking or a shuttle bus. Additional visitor requests included: a larger Refuge, less people, more staff and volunteers, and the availability of food and beverages. One individual from the community would like to have a person welcoming the visitors at the entrance. Conversely to the above discussion, some visitors would not change a thing:

"Change nothing, it was a wonderful place filled with beauty and pleasant people and it was refreshing to not be expected to pay large amounts of money to enter."

Visitors stated that if any change occurred, they would like to see the Refuge open earlier and close later so they would have the opportunity to enjoy it more. Others in the community would be interested in having night visits available as well, providing the opportunity to watch the sunset and/or stargazing. Still others hoped that the Refuge would simply be open longer hours. Many community residents suggested no changes: "Great balance as a tourist attraction and Refuge," stated one community resident. Another mentioned, "Enjoy it as is - I think the lighthouse is lovely, the Refuge is beautiful. I think things are good."

Management of Services

Respondents were asked how they felt features and services should be managed at the Refuge. The majority of visitors and community residents felt that most features listed should be left as is (Table 2-13). The exceptions to this were access to the lighthouse and visitor impacts on wildlife. Both visitors and community residents were evenly split on providing *more* access to the lighthouse (45 and 46 percent, respectively) or leaving access as is (46 and 47 percent, respectively). Visitors and community residents also were split fairly evenly on management of visitor impacts on wildlife, with community residents feeling slightly more strongly about

minimizing impacts (43 percent of visitors chose to increase efforts to restrict visitor behavior that was harmful to wildlife; 53 percent of community chose this option). In addition, community residents also were split on environmental education activities and naturalness. Nearly 60 percent of community residents felt environmental education activities should be increased at the Refuge and around 40 percent felt more natural conditions should be restored.

Table 2-13. Visitor and community resident preferences for management of services at Kilauea Point National Wildlife Refuge.

	Visitors			Community		
Feature	Less	Leave as is	More	Less	Leave as is	More
Facilities	2	87	11	2	84	14
Visitor numbers ¹	5	79	15	7	69	25
Services	1	78	21	2	72	27
Information signs	6	73	21	11	67	21
Naturalness ²	5	71	25	6	54	39
Environmental education activities	1	67	33	1	41	59
Visitor impacts on wildlife ³	2	55	43	4	43	53
Access to lighthouse	9	46	45	7	47	46

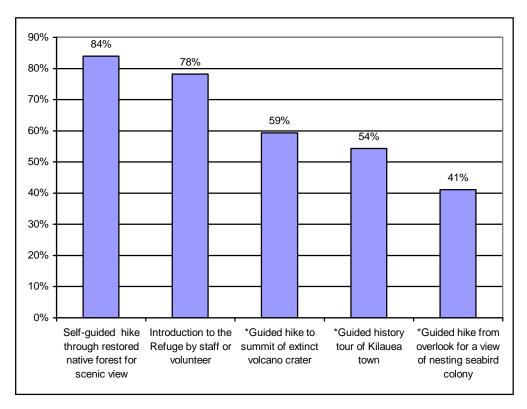
¹This statement was worded restrict (listed under "less" in the table)/encourage more ("more" in table) visitation to the Refuge.

Preferences for Access

Visitors were asked whether they would spend more time at the Refuge given a variety of different options for learning more about or seeing more of the Refuge and/or surrounding areas. Three of these options (a guided history tour of Kilauea Town, a guided hike to view a nesting seabird colony, and a guided two-hour hike to the summit of an extinct volcano crater) were suggested with fees attached to them. The range of fees was randomly distributed across surveys. In addition, respondents were asked if they would spend more time at the Refuge if an introduction to Kilauea Point was given by a staff member or volunteer, or if a self-guided hike to a scenic view of the lighthouse were offered free of charge. The results of these options are shown in Figure 2-8 and Figure 2-9. In general, most visitors would spend more time for the free options: an introduction to the Refuge and a self-guided hike through a native forest for a scenic view. For fee activities, visitors were willing to pay only \$5-7 for activities (only a few dollars more than the current \$3 entrance fee), except for a guided hike to the summit of an extinct volcano crater.

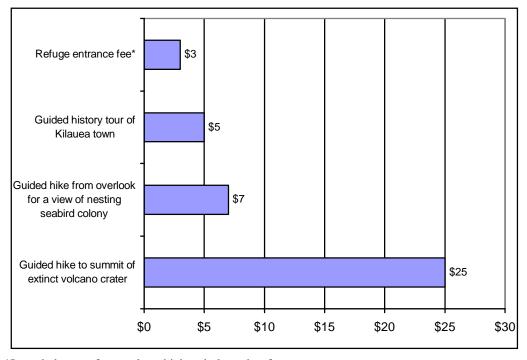
²This statement was worded restore more natural conditions (listed under "more" in table)/allow more landscape alterations ("less" in table).

³This statement was worded: Increase efforts to *restrict* visitor behavior that is harmful to wildlife (listed under "less" in table)/ decrease efforts to *restrict*... ("more" in table).



^{*}Service would be offered for a fee

Figure 2-8. Percent of visitors who would spend more time at the Refuge if options were offered.



^{*}Intended as a reference by which to judge other fee amounts

Figure 2-9. Amount of money that greater than 50% of respondents would be willing to pay for a given option.

Community/Refuge Relations

Community residents were asked a series of questions regarding the importance of the Refuge to residents and their community. They were asked about their attachment to the Refuge as a place, about their trust in the Refuge and the USFWS, and benefits and concerns with being a neighbor to the Refuge,

Place Attachment

With a shift from utilitarian management to an ecosystem or landscape approach to public land management, there has been an effort to understand the emotional and symbolic meanings associated with natural places or landscapes, and the attachments people form with these places (Williams and Stewart, 1998). This attachment or meaning may be personal or shared publicly. Williams identified two dimensions of place attachment—"place dependence" and "place identity" (Williams et al 1992; Jorgensen and Stedman, 2001). In addition to these two dimensions, a third dimension called "place tradition"—the importance of place to family tradition or heritage—was tested. All three aspects of place attachment were tested in the community survey.

Community residents appeared to be somewhat indifferent, although their perceptions of the Refuge as a meaningful place leaned toward the positive. About half of the mean scores were around the neutral point and half were in the mild agreement range (on a five-point agreement scale, where 1= strongly disagree, and 5= strongly agree; Table 2-14). An exception, which tended to be higher, was the place-tradition statement, "It is important to me that my children and my grandchildren will be able to visit the Refuge." In addition, the statement "Because of my experiences here, I will definitely come back," received high agreement ratings, though not part of the place-attachment measure.

Although community residents feel a sense of attachment to the Refuge, it does not appear to be a compelling one. Clearly, on an island that abounds with scenic beauty, residents are not solely dependent on the Refuge for the activities in which they participate or as a place with which to identify. Local residents do seem to recognize the Refuge, however, as an important place for current and future generations to spend time.

Trust in the Refuge and the U. S. Fish and Wildlife Service

Respondents were asked to rate their agreement with three statements related to trust in the agency and the Refuge staff (Figure 2-10). Overall, community residents mildly agreed (mean scores falling between 3.4 and 4.2) with all three statements. These answers give an indication that community residents are trustful of Refuge staff and USFWS, however not overly so. This is an important consideration when interacting with the local community in the ATS public involvement process.

Benefits and Concerns of Being a Neighbor of the Refuge

Community residents were asked, "What is the biggest benefit to being a neighbor of the Kilauea Point National Wildlife Refuge/Lighthouse," and "What is the biggest concern of being a neighbor...?" Seventy-seven percent (n = 329) of community respondents provided a response on the "benefits" open-ended question and 72 percent (n = 305) provided a response on the "concerns" question. The responses to these questions are qualitative and should be interpreted as such; however they can inform the quantitative results of this study and provide anecdotal insight. The verbatim responses are available in Appendix B.

 Table 2-14.
 Community resident place attachment to Kilauea Point National Wildlife Refuge.

Statement	Mean agreement score	Strongly/mildly agree¹	Strongly/mildly disagree	Unsure
Place dependence	3.25			
No other place can compare to this area.	3.62	57	14	29
This area is the best place for what I like to do.	3.33	38	17	45
I wouldn't substitute any other place for doing what I do here.	3.21	34	20	46
I get more satisfaction out of visiting this place than visiting any other.	3.04	26	23	51
Doing what I do at this Refuge is more important to me than doing it in any other place.	3.04	26	25	50
Place identity	3.72			
This Refuge means a lot to me.	3.94	68	5	27
I am very attached to the Refuge.	3.88	66	6	28
I feel this Refuge is a part of me.	3.56	50	12	38
I identify strongly with the Refuge.	3.51	48	11	41
Place tradition	3.67			
It is important to me that my children and my grandchildren will be able to visit the Refuge.	4.60	91	1	8
The Refuge provides me a sense of connection to past and future generations.	3.80	62	7	31
Coming to places like this Refuge is an important part of my family tradition.	3.78	60	10	31
Coming to places like this Refuge was an important part of my childhood.	3.34	41	21	38
This place is special because it is where my family and I spend time.	3.33	38	16	46
This place is special because it is where my friends and I spend time.	3.15	31	23	46
Because of my experiences here I will definitely come back	4.13	78	4	18

¹Mean scores on 5-point Likert scale, where 1= strongly disagree and 5 = strongly agree.

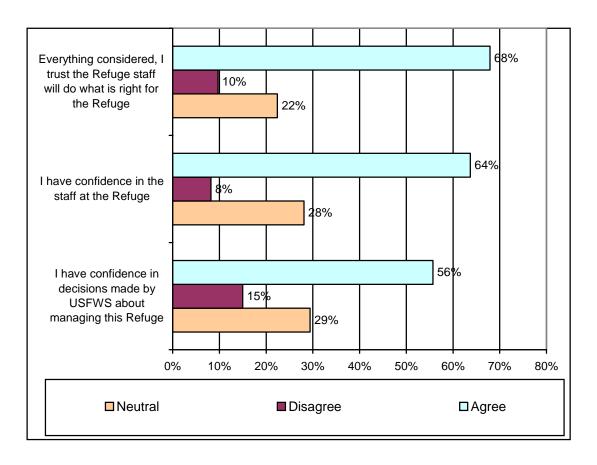


Figure 2-10. Community resident agreement with statements related to trust in Refuge staff and U.S. Fish and Wildlife Service.

Community residents did see many benefits to being a neighbor of the Refuge, including it being a beautiful place to view wildlife and to take visitors. The key words reiterated in their responses to the question were *preservation* and *access*. Respondents specifically enjoy the convenience of having a protected, undeveloped preserve for flora and fauna close by and, in some cases, just minutes away.

"Knowing that there is a safe place nearby that protects and nurtures the natural world and her inhabitants is the biggest benefit to being a neighbor to the Refuge," expressed one member of the community.

Without having to travel long distances, locals can experience a beautiful piece of history and natural education. It is a point of interest and a place of recreation and leisure to take visitors and family. Finally, the respondents feel they benefit from having the Refuge in their neighborhood because it enhances the value of the community and small town economy. One community resident stated,

"Part of our island is being preserved and shared back with the community."

The Kilauea community was then asked: "What is the biggest concern of being a neighbor of the Refuge?" As the Refuge grows, the residents said their first concern was traffic. If the

numbers of tourists increase, they fear that traffic, noise, and speeding also would increase. One resident commented.

"The newly paved road has resulted in more speeding cars, posing a danger to those of us who walk to the lookout."

Also, many people are concerned that the Refuge will become too crowded and congested and/or too expensive. If visitation patterns increase, some individuals expressed concerns for pollution, urban development, and negative environmental impact. The community appears resolute about keeping the Refuge simple, natural, and protected. As one resident stated, they do not want the Lighthouse to become another "all-American amusement park." Many of the responses comprised the general theme that if visitors increased then there was risk of compromising the natural beauty, and losing wildlife habitat and public access to the Refuge and its surrounding public lands. Residents appear uneasy about tourist disrespect and insensitivity for the natural environment, suggesting that dogs and cats could perhaps invade the Refuge, injuring the nesting birds, and/or the visitors could trash the Refuge as a result of over-development and accompanying increased visitation. Though respondents showed a concern for conservation, some community residents would promote visitation. However, it is evident that the community is not willing to increase public access if, in effect, they would lose access to public lands and experience an increase in restricted areas.

Community Quality of Life

Respondents were asked a series of questions regarding their satisfaction with community living in general, land use planning, and participation and communication about these issues.

When asked about overall satisfaction with community living, residents of Kilauea Town are satisfied with living in the community, with 84 percent being either "somewhat" or "very satisfied." Over three-quarters of residents feel things were going well for them in the town of Kilauea. Growth and development was listed as the most likely problem (47 percent) that might negatively affect respondents' quality of life in Kilauea. Interestingly, drugs and affordable housing (issues of concern at recent Kilauea Town planning meetings) were listed under "other" option on this question, but only by a handful of respondents.

However, when asked to rate the importance of, and satisfaction with, specific community aspects, opinions were more mixed and much dissatisfaction appeared. Using the importance-performance framework, these characteristics are presented below in Table 2-15 and Figure 2-11. Residents had the lowest satisfaction with the availability of affordable housing. That issue received a high importance score, yet a mean satisfaction score between poor and adequate (1.6), and 62 percent rated their satisfaction as poor. Clearly, community expectations regarding public transit are not being met, though it appears a somewhat less important issue than housing. Related to transit were walkways and paths. This issue appears to have as much disparity between importance and satisfaction as did affordable housing. In addition, opportunities for well-paying jobs, and number of stores and shops, are unsatisfactory aspects of community living. Parks and open space, and low risk of catastrophes were on the line between "keep up the good work" and "concentrate here." The importance of these issues is uncertain, however, because neither fell clearly in the "keep up the good work" quadrant, attention may be warranted.

Table 2-15. Community resident importance-satisfaction ratings regarding community aspects of Kilauea Town.

Community aspects	Importance = very important/important (%)	Mean importance¹	Satisfaction = outstanding/ good (%)	Mean satisfaction	Rating ²
Scenic beauty	97	4.7	81	4.2	Keep up the good work
Historic character	75	3.9	52	3.5	Keep up the good work
Length of commute	66	3.9	42	3.4	Keep up the good work
Quality of schools	85	4.6	44	3.3	Keep up the good work
Absence of air/noise/light pollution	97	4.7	50	3.3	Keep up the good work
Low crime rate	99	4.9	51	3.2	Keep up the good work
Parks and open space	96	4.7	37	3.0	Uncertain
Low-risk of natural catastrophes	66	3.7	29	3.0	Uncertain
Number of stores and shops	88	3.1	36	2.9	Concentrate here
Opportunities for well- paying jobs	66	3.8	11	2.1	Concentrate here
Walkways/bike paths	85	4.3	14	2.1	Concentrate here
Public transit that is reliable and convenient	65	3.7	11	2.0	Concentrate here
Affordable housing	83	4.3	8	1.6	Concentrate here

¹Importance scale is 4-point scale. Mean scores converted here to 5-point scale to more easily compare to 5-point satisfaction scale.

²Rating is based on importance-performance framework (Martilla and James, 1977) where satisfaction is plotted on x axis and importance is plotted on y axis, and graph is divided into quadrants (top right ="keep up the good work," bottom right ="possible overkill," bottom left ="low priority," and top left ="concentrate here.")

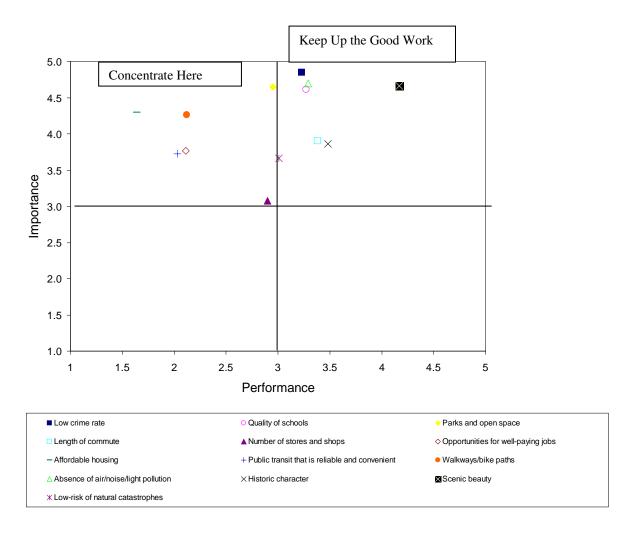


Figure 2-11. Community resident importance-satisfaction ratings with community attributes of Kilauea Town.

Land Use Planning Communication and Participation

In communicating with the public, it is important to understand how individuals participate in natural resource decision-making and ways in which they commonly obtain information on these topics. In an effort to better understand these issues, visitors and community respondents were asked about their participation in natural resources issues. Community residents also were asked about the sources on which they rely for information about land use and development issues.

The highest percentages of community respondents reported that they got most of their information about land use and development issues from a mix of printed (newspapers, 69 percent) and interpersonal communication (friends, 62 percent; neighbors, 41 percent; Figure 2-12). Though lower, there is some use of electronic media (radio, 40 percent; television, 30 percent).

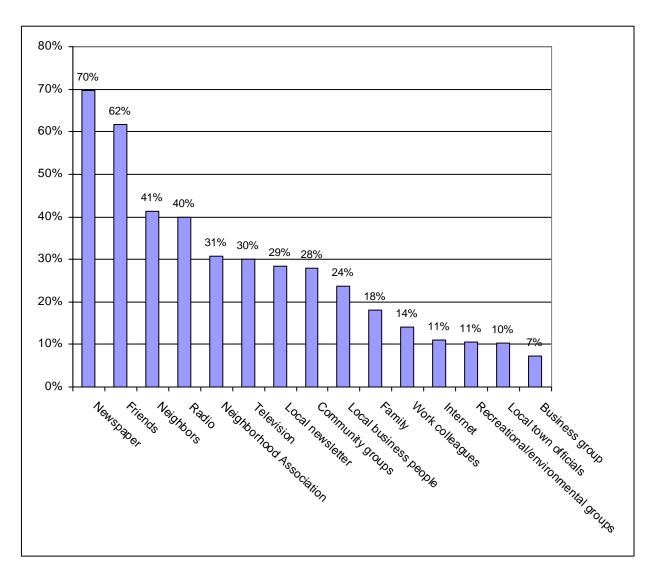


Figure 2-12. Sources community residents use to obtain information on local land use or development issues.

When asked which natural resource or environmental decision-making activities they had participated in within the last five years, the largest percentage of visitors indicated that they had signed a petition (81 percent, Table 2-16). Other frequently cited activities were attending a public hearing or meeting (50 percent), and joining a special interest group (47 percent). Community residents also had high participation in petition signing (79 percent) and public meeting/hearing attendance (67 percent). Less common participation activities for both groups included writing an editorial letter to a newspaper.

Table 2-16. Participation in natural resource decision-making.

Participation activity	Visitors (%) ¹	Community (%) ²
Signed a petition	81	79
Attended a public hearing or meeting	50	67
Joined a special interest group	47	35
Contacted or wrote a U.S. Senator or State legislator	39	43
Contacted or wrote a state or federal agency	33	37
Wrote a letter to the editor of a newspaper	14	17

 $^{^{1}}n = 1075$

Discussion

Visitors Trip to Kauai

Kauai is the sole destination for most non-local visitors, with very few repeat visits. While on Kauai, they participate in a variety of activities in line with Refuge activities (general sightseeing, photography, wildlife/plant viewing, and learning about the culture/history of the area). Most Refuge visitors are first-time visitors, both to the island and to the Refuge. They stay on the island about a week in duration, which provides opportunity to visit the Refuge during their visit. Most visitors are from the United States, while the next largest contingency coming from Canada.

Visitor and Community Resident Trips to Kilauea Point National Wildlife Refuge

Most visitors to the Refuge are first-time visitors. Only 10 percent have visited more than two times. For about half of the visitors surveyed, the Refuge was one of many equally important reasons for coming to Kauai. About 44 percent of visitors surveyed indicated the Refuge was an incidental or spur of the moment stop, this being more prominent with summer visitors than winter visitors. Visitors appear to learn about the Refuge from guidebooks and brochures. In addition, summer visitors tend to be relying on highway signs. Few visitors learn about the Refuge from magazines, recreational/environmental groups, or travel agents, which might counter the expected. It was unclear whether visitors are simply not using these forms of media, or if information about the Refuge is not highlighted in these outlets. Also, word-of-mouth (from friends and family) does not appear to be a major source of information about the Refuge.

Though community residents have more opportunity to access the Refuge than do first-time visitors, they visit infrequently. Most have visited fewer than five times in the past five years, and over 10 percent of those surveyed had not visited at all during that time frame. In addition, community respondents did not widely attend any of the special events held at the Refuge in the past year. However, about a quarter of residents do visit much more regularly (>10 times over the past 5 years).

Visitor/Community Experience at the Refuge

The most important Refuge activities for visitors are the scenic overlooks and the lighthouse experience. However, nearly all of the activities we asked about are "important" or "very important" to the majority of visitors. Aside from whale and dolphin watching in winter, summer and winter visitors place similar importance on activities they participate in while at the Refuge.

 $^{^{2}}n = 380$

They also are equally satisfied with services offered at the Refuge. For all services inquired about, the Refuge and its staff are meeting expectations. Community residents also are quite satisfied with Refuge services. About half of visitors and community residents would like to see *more* access to the inside of the lighthouse, and visitor impacts to wildlife minimized to the extent possible. It is uncertain if this indicates understanding of the Refuge System mission of "Wildlife First," or if there is simply a desire to preserve this place of scenic beauty. In addition, though community residents are satisfied with current environmental efforts, they would like to see more programs and activities.

There appears to be an overall "keep up the good work" attitude reflected in the ratings from visitors and community residents, with room for making a "good thing better" in some areas. This result appeared to reflect the positive experiences both visitors and community residents have at the Refuge, not only with the scenic beauty of the place, but also with the services provided.

Only one service, the opportunity to "shop" (purchasing books and mementos and the availability of gift shop and bookstore items), does not appear to be important to a majority of visitors or community residents.

Community/Refuge Relations

Although community residents do not visit the Refuge often, they seem to identify (though not strongly) with the Refuge as a meaningful place. They consider it an important place for current and future generations, even though they indicated it was not an important part of their own childhood or a place they regularly spend time. This may indicate that the Refuge holds some intrinsic values for community residents that are not tied to direct use. Kilauea residents also see many benefits to being a neighbor of the Refuge, including it being a beautiful place to view wildlife and to take visitors. Having a protected natural area in close proximity to the community is viewed as a substantial benefit. Concerns with being a neighbor of the Refuge include traffic and tourist congestion in town, limited access to parts of the Refuge, and fear of increased tourist visitation to the Refuge negatively impacting the naturalness of the site. Residents appear to be basically trustful of the Refuge staff and the USFWS.

Community Quality of Life

Residents of Kilauea town are satisfied overall with living in their community. However, there are several aspects of community life in Kilauea they would like to see improved. Affordable housing and opportunities for well-paying jobs are two areas where it appears expectations are not being met. Also identified as areas for community improvement are convenient and reliable public transit, and walkways and bike paths. As was evidenced by the large turnout at public meetings related to these topics, community residents indicate that they actively participated in natural resource decision-making, primarily by attending public meetings and signing petitions. In addition, nearly half of residents have contacted or written a U.S. Senator or State legislator regarding natural resource or environmental issues. Community residents are well educated and had a long history on Kauai and in Kilauea Town. They use a mix of printed and interpersonal communication, relying on newspapers and friends and neighbors (the "coconut wireless") for their information on land use and development issues. These factors are important to consider when developing strategies for effective public participation processes and communication.

3. Visitor Trip Spending

Lynne Koontz and John Loomis

Spending associated with Refuge recreational activities can generate considerable economic benefits for the local communities near a Refuge. A tourist usually buys a wide range of goods and services while visiting an area. Major expenditure categories include lodging, food, supplies, and gasoline. A region (and its economy) is typically defined as all counties within a 30-60 mile radius of the travel destination. Only spending that takes place within this local area is included as stimulating changes in economic activity. Kilauea Point NWR is located near the town of Kilauea on the island of Kauai and consists of only one county. As a result, Kauai County comprised the economic region for this analysis.

To determine the impacts of visitor spending within the local economic impact area, only spending by those living outside of the local area (hereafter referred to as non-local visitors) was included in the analysis. The rational for excluding spending by local Kauai resident visitors was two-fold. First, Kauai was the main focus of the impact analysis: it was the impact area. Money flowing into Kauai from outside is considered new money injected into that economy. Second, if Kauai residents visit the Refuge more or less often, they will correspondingly change their spending of money elsewhere in the local area, resulting in no net change to the local economy. These are standard assumptions made in most regional economic analyses at the local level.

The annual visitation estimates for the Refuge were based on 2004 visitation data from the USFWS Refuge Management Information System (RMIS). Personnel at each Refuge reported the RMIS information; estimates were based on counts of visitors entering the visitor center/office and general observation, as well as other methods. According to the RMIS report, there were 472,720 total Refuge visits in 2004. This estimate included visitors stopping at the overlook (outside the Refuge gate), on-site visits to the Point (inside the Refuge gate), and special event visits (inside the Refuge gate). While visitors that only stop at the overlook are technically on Refuge lands, only visitors that entered the Refuge gate (315,125 visits) for the visitor spending analysis were included. Overlook visitors were excluded because the length of stay at the overlook is often very short and they do not actually "visit" the main area of the Refuge. Table 3-1 shows the average number of visits to the Refuge by non-local visitors (based on 98 percent of visitors being non-local, based on survey data).

Table 3-1. Annual visitation and percentage of nonlocal visitation to Kilauea Point NWR.

Annual refuge visits (excludes visits to the overlook)	% of nonlocal visits	Annual nonlocal Refuge visits (excludes visits to the overlook)		
315,125	98%	308,192		

Kilauea Point NWR Visitor Spending Allocation

Because Kilauea Point NWR is one of many visitor attractions available on Kauai, it is important to account for the differing motivations visitors have for coming to Kauai and the importance of visiting KPNWR in relation to their overall trip purpose. Table 3-2 shows the breakdown of non-local KPNWR visitors by their response to the survey question about their trip purpose. As shown in Table 3-2, approximately 1.3 percent of visitors indicated that visiting KPNWR was the primary purpose of their visit to Kauai. A majority (55 percent) of visitors indicated that visiting the Refuge was one of many equally important reasons for visiting Kauai, and 44 percent indicated visiting the Refuge was just an incidental or spur of the moment stop on a trip taken for other purposes (Table 3-2). Table 3-2 reports the corresponding number of Refuge visits and time spent on Kauai by trip purpose.

Table 3-2. Breakdown of non-local Kilauea Point NWR visitor survey respondents by trip purpose.

Trip purpose	Percent of visits	Annual # of Refuge visits	Number of days spent on Kauai
Primary	1%	4,006	8.3
Equal	55%	170,122	9.4
Incidental	44%	134,064	8.0

Respondents were asked to "indicate the amount you and members of your group with whom you shared expenses (e.g., other family members, traveling companions) spent on your most recent visit to Kauai." For each respondent, reported expenditures were divided by the number of persons in their group that shared expenses in order to determine the spending per person per trip. This was then divided by the number of days spent on Kauai to determine the spending per person per day for each respondent. Table 3-3 illustrates the average amount Kilauea Point NWR visitors spent during their most recent visit to Kauai for each visitor trip purpose. Because the amounts and types of spending by winter and summer visitors were similar, the spending estimates in Table 3-3 show the combined average of summer and winter visitors. Not every group had expenditures in every category, so the numbers reported in Table 3-3 represent an average across all visitors for each trip purpose, including some who had no expenditures in that category. Table 3-3 shows that, on average, visitors spent the most on hotels, restaurants, and rental cars. Visitors whose Refuge visit was one of many equally important reasons for coming to Kauai spent more days on Kauai and thus spent more per person per trip as compared to visitors whose Refuge visit was their primary or incidental reason for visiting the island. The total amount of spending per person per day ranged from \$132 for primary trip purpose visitors to \$127 for equal trip purpose visitors to \$133 for incidental trip purpose visitors.

Table 3-3. Average amount visitors to Kilauea Point NWR spent during most recent visit to Kauai by trip purpose type.

	Primary tri visitor sp		Equal trip purpose visitor spending		Incidental trip purpose visitor spending	
	\$ Per Person per Trip	\$ Per Person per Day ¹	\$ Per Person per Trip	\$ Per Person per Day	\$ Per Person per Trip	\$ Per Person per Day
Rental car	168.85	23.71	150.29	17.16	123.92	17.09
Gasoline	29.56	4.25	25.12	2.99	20.71	2.95
Hotels/motels	203.02	27.20	407.54	47.34	375.31	48.56
Time share costs	12.50	0.54	7.90	0.83	3.42	0.73
Restaurants	243.31	31.40	180.33	22.38	190.18	24.15
Groceries	66.59	7.97	92.56	9.13	70.28	8.77
Supplies/souvenirs	154.32	16.63	85.71	10.01	97.79	11.03
Refuge bookstore	8.61	1.33	5.62	0.89	3.38	0.73
Refuge entrance fee	3.02	0.54	3.00	0.45	3.03	0.45
Guided tour of Kauai	3.13	0.31	7.37	1.42	8.06	1.83
Boat/helicopter tours	85.63	12.67	62.23	9.14	77.81	10.46
Equipment rental	14.84	1.43	6.22	0.71	7.89	0.86
Golf or tennis fees	23.44	2.97	15.01	1.67	14.43	1.73
Massage/yoga/spa	0.00	0.00	5.11	0.57	8.34	0.76
Excursion fee	8.96	0.93	16.20	2.61	20.94	2.89
Total spending	\$1,025.76	\$131.89	\$1,070.20	\$127.30	\$1,025.50	\$132.98

¹Spending per person per day is based on an 8-hour visitor day.

When allocating visitor spending for an economic impact analysis, attributing all trip expenditures made in Kauai to the Refuge visit may very well overstate the impacts of the Refuge if visitors are stopping there en route to other sites or as part of a longer trip (Loomis and Caughlan, 2004; Stynes, 1999). Therefore, total trip expenditures were only attributed for visitors who indicated that visiting the Refuge was the **primary purpose** or sole destination of their trip to Kauai. The way in which spending was determined for visitors whose Refuge visit was an equally important reason for visiting Kauai or was an incidental purpose of their island visit are summarized in Table 3-4. Spending for visitors that indicated visiting the Refuge was **one of many** equally important reasons for visiting Kauai was allocated to account for the following: 1) all expenditures for the Refuge entrance fee and the Refuge bookstore were attributed since these expenditures are directly related to visiting the Refuge; 2) spending categories related to other types of recreational activities on Kauai were not attributed because they are **not** related to visiting the Refuge. These were the categories of boat/helicopter tours, equipment rental, golf or tennis fees, massage/yoga/spa, and excursion fees (Table 3-3); and 3) for all other expenditure categories, only a portion (based on the amount of time spent at the Refuge) was attributed because visiting the Refuge was one of multiple reasons for visiting Kauai for equal purpose visitors. In Table 3-3, the amount of spending per person per day was based on an 8-hour visitor day. Survey results indicate that a visit to the Refuge averaged approximately two hours (1/4 of an 8-hour visitor day) for winter and summer visitors. Therefore, equal trip purpose visitors were attributed with two hours of spending. For individuals on **incidental or spur of the moment stops** at the Refuge, only

expenditures for the Refuge entrance fee and for the Refuge bookstore were attributed, since these expenditures were directly related to visiting the Refuge.

Table 3-4 illustrates the expenditures that were fully and partially attributed to visiting the Refuge by visitor trip purpose. Actual expenditure amounts for the Refuge bookstore and the entrance fee (provided by Refuge personnel) were used in place of the survey estimates.

Table 3-4. Spending attributed to visiting KPNWR in the economic impact analysis.

	Primary purpose visitors	Equal purpose visitors	Incidental purpose visitors
Full expenditures included in impact analysis	All trip expenditures reported in Table 3-3 (spending per person per trip)	Expenditures for Refuge entrance fee and Refuge bookstore (spending per person per trip)	Expenditures for Refuge entrance fee and Refuge bookstore (spending per person per trip)
	\$1,025.76 per person per trip	Refuge Bookstore \$5.62 Refuge Entrance fee \$3.00	Refuge Bookstore \$3.38 Refuge Entrance fee \$3.03
Portion of expenditures included in impact analysis (based on amount of time spent at the Refuge)		2 hours (1/4 of per person per day expenditures in Table 3-3) worth of spending for the following categories: 2 hrs of spending Rental car \$4.29 Gasoline \$0.75 Hotels \$11.84 Timeshare \$0.21 Restaurants \$5.60 Groceries \$2.28 Supplies/souvenirs \$2.50 Guided tour of Kauai \$0.36	

Economic Impacts Associated with Kilauea Point NWR Visitor Spending

As shown in Table 3-3, each visitor usually buys a wide range of goods and services while visiting Kauai. As more visitors come to an area, local businesses will purchase extra labor and supplies to meet the increase in demand for additional services. The income and employment resulting from visitor purchases from local businesses represent the *direct effects* of visitor spending within the economy. In order to increase supplies to local businesses, input suppliers also must increase their purchases of inputs from other industries. The income and employment resulting from these secondary purchases by input suppliers are the *indirect effects* of visitor spending within the local economy. The input supplier's new employees use their incomes to purchase goods and services. The resulting increased economic activity from new employee income is the *induced effect* of visitor spending. The indirect and induced effects are known as the secondary or multiplier effects of visitor spending. Multipliers capture the size of the secondary effects, usually as a ratio of total effects to direct effects (Stynes, 1998). The sums of the direct and secondary effects describe the total economic impact of visitor spending in the local economy.

The economic impacts associated with spending by Refuge visitors are estimated by the following equation:

Number of Refuge visitors * average spending * regional multiplier = economic impact

Economic impacts are typically measured in terms of number of jobs lost or gained, and the associated result for employment income. Economic input-output models are commonly used to predict the total level of regional economic activity that would result from a change in visitor spending. IMPLAN is a computerized database and modeling system that provides a regional input-output analysis of economic activity in terms of 10 industrial groups involving as many as 528 sectors (Olson and Lindall, 1996). The IMPLAN modeling system was used to derive the multipliers that capture the secondary (indirect and induced) effects needed to determine the economic impacts of visitor spending. The IMPLAN Kauai County level data profile for the year 2000 was used in this study. The IMPLAN employment data estimates are comparable to the U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Information System data (U.S. Department of Commerce, 2003) for the year 2000. IMPLAN's regional purchase coefficients were adjusted to better reflect typical non-local visitor spending patterns.

Spending related to visiting the Refuge by the current number of non-local Refuge visitors (as reported in Table 3-1), accounts for almost \$9 million annually in Kauai. The resulting impacts of non-local visitor spending on the Kauai economy are presented in Table 3-5. As shown in Table 3-5, it is estimated that the direct and secondary effects would generate over \$4.9 million in personal income and 185 jobs annually in Kauai. Most of the personal income and job impacts are in the eating and drinking industry, lodging industry, the car rental industry, other service based industries, and the federal government sector (due to the entrance fee). In 2000, Kauai County total personal income was estimated at \$1,410,114,000 and total employment was estimated at 36,874 jobs (U.S. Department of Commerce, 2003). Therefore, spending associated with visiting Kilauea Point NWR represents approximately one-third of one percent (0.4 percent) of total income and one half of one percent (0.5 percent) of total employment in the overall Kauai County economy.

Table 3-5. Economic impacts of non-local Kilauea Point visitor spending in Kauai County.

KPNWR	Primary purpose visitors	Equal purpose visitors	Incidental purpose visitors	Total
Percentage of nonloca V	Visitors			
	1.3%	55.2%	43.5%	
Spending in Kauai Cou	nty (attributed to visiting th	e Refuge)		
	\$3,460,514	\$5,090,798	\$386,208	\$8,937,520
Direct effects of visitor	spending			
Income (\$/year)	\$1,142,631	\$1,887,569	\$200,727	\$3,230,927
Jobs	52.1	70.6	4.7	127.5
Indirect and induced ef	fects of visitor spending			
Income (\$/year)	\$639,886	\$997,846	\$62,508	\$1,700,240
Jobs	21.7	33.7	2.1	57.5
Total effects of visitor s	pending			
Income (\$/year)	\$1,782,517	\$2,885,415	\$263,235	\$4,931,167
Jobs	73.8	104.4	6.8	185.0

Discussion

Although the economic impacts associated with Refuge visitation are somewhat limited in terms of the general local economic activity at the county level, Refuge visitation is very important to the economy of Kilauea town. Any decrease in visitation associated with a change in Refuge management will not have a significant economic effect on Kauai County but could have a substantial impact on the town of Kilauea. The IMPLAN model is a county level model, impacts at the town level could not be addressed.

4. Net Economic Benefits of Visiting Kauai and the Refuge

Lynne Koontz and John Loomis

While visitor spending and associated income and employment represents local economic effects, they do not measure the benefits to the visitors themselves. The benefits to the visitors are measured by how much the visitor would pay over and above their existing costs. This net willingness-to-pay (WTP) is the standard measure of benefits in benefit cost analysis (Sassone and Shaefer, 1978; Loomis and Walsh, 1997).

Valuation of Visit to Kauai

To estimate a visitor's personal benefits from a visit to Kauai, a dichotomous choice contingent valuation question was used. Contingent Valuation (CVM) is a method that uses a simulated or hypothetical market to determine how much more than the current costs visitors would pay for their trip experience. The method is recommended for use by federal agencies performing benefit cost analysis (U.S. Water Resources Council, 1983). As suggested by the National Oceanic and Atmospheric Administration panel on contingent valuation (Arrow, and others, 1993), a dichotomous choice format question was asked. In this case, the visitor had only to decide whether the trip was worth more than the added cost written into the question. The specific question asked was:

As you know, some of the costs of travel such as gasoline often changes. If the **total cost** of this most recent trip to Kauai had been \$_____ **higher**, would you have made this trip?

Check one: YES NO

The blank was filled in with one of 11 different dollar amounts. The dollar amounts ranged from a low of \$10 more to \$450 more. The range was chosen based on past visitor surveys. Specifically, the bid design drew upon a successful CVM dichotomous choice survey conducted in Rocky Mountain National Park (Richardson and Loomis, 2005) and Grand Teton National Park (Loomis and Caughlan, 2004). It was believed that the surveys were similar enough to use essentially the same bid design. The goal was to have a dollar amount low enough that nearly all visitors would answer yes, and a dollar amount high enough that nearly all visitors would answer no. The remaining dollar amounts were \$20, 30, 50, 70, 90, 125, 175, 250, and 350.

Since respondents simply answered "Yes" or "No" to a single dollar amount, it is necessary to estimate a statistical model to infer what their maximum WTP was for visiting Kauai. Specifically, if a respondent answered "Yes" to \$10, their WTP was greater than \$10. How much more they might pay had to be determined by evaluating the percentage of "Yes" responses at each dollar amount across the full range of dollar amounts asked of the sample. This involves estimating a multiple regression, with a particular distribution known as the logistic distribution. The logistic distribution was chosen because it limits the range of the dependent variable of the regression to

between zero and one. Since the survey responses (and the estimated probabilities that a respondent will pay) must be between zero and one, this is an appropriate statistical distribution to use. The logistic distribution is the most commonly used statistical distribution for estimating WTP from a dichotomous choice CVM question. The basic format of the simple logistic regression is:

(1) $log(Yes/1-Yes) = B_0 - B_1(Dollar Bid Amount)$

where B_0 is the intercept or constant term and B_1 is the slope coefficient on the dollar amount visitors were asked to pay. It was expected that as the dollar amount visitors were asked to pay increased, the probability that they would pay that amount would decrease, hence the negative sign on the B_1 coefficient. Using the logit coefficients, the mean net WTP is calculated as:

(2) Mean WTP= $(natural log(1+exp(B_a)))/B_1$.

Appendix E presents the response proportions for saying yes or no at each bid level for winter and summer visitors. Table 4-1 presents the results of the simple logit regressions as well as the mean WTP per person per day for the overall trip to Kauai. The T-statistics indicate whether the coefficients are significantly different from zero. T-statistics larger than 1.965 indicate significance at the five percent level, while T-statistics larger than 2.56 indicate statistical significance at the one percent level. As can be seen in this table, the coefficients on the bid amount are negative and statistically significant at the one percent level. This indicates that the higher the dollar amount respondents were asked to pay, the lower the probability they would pay. This demonstrates that respondents seriously considered the amount of money they were asked to pay, as those asked to pay the higher dollar amounts are less likely to continue to visit. Winter group size averaged 2.6 people, while summer visitor groups averaged 2.7 people. The length of trip was 9.4 days for winter visitors and eight days for summer visitors.

Table 4-1. Logistic regression coefficients and mean net (willingness to pay) for Kauai trip.

	1	Winter visitor	s	Summer visitors			
Variable	Coefficient	T-statistic	Probability	Coefficient	T-statistic	Probability	
Constant	3.540	13.231	0	4.14956	11.2327	0	
Bid	-0.006085	6.69997	0	-0.00618	5.2105	0	
Likelihood ratio statistic	46.06		0	27.98		0	
Mean WTP per group trip	\$586			\$674			
90% Confidence interval for mean WTP per group trip	\$506.63 - \$704.69			\$565.40 - \$883.88			
Mean WTP per person per trip	\$225			\$250			
Mean WTP per person per day	\$23.98			\$31.25			
n=	669			604			

These figures indicate that the typical winter visitor will pay about \$225 more per trip or \$24 more per day to visit Kauai, while summer visitors will pay about \$250 more per trip or \$31 more per day.

Valuation of Visit to Kilauea Point NWR

At the time of this study, the Refuge charged a \$3 entrance fee via an "honor system." Similar to the WTP question about total trip costs for visiting Kauai, the same type of contingent valuation questions were asked about: 1) still visiting the Refuge if the Refuge entrance fee were to increase; and 2) visiting the Refuge if the Refuge were to charge a fee that included off-site parking, shuttle with a tour guide, and the entrance fee. The rational for asking these questions was to estimate the visitor personal benefits from visiting the Refuge and to see if a guided shuttle would increase or decrease those benefits. These questions were included on the community and visitor surveys.

For the increased Refuge entrance fee question, the respondent had only to decide whether visiting the Refuge was worth more than the added cost written into the question. The specific question asked on the visitor survey was:

The current Refuge entrance fee is \$3 per person. If the Refuge fee were to increase to \$_____ would you have still made this most recent visit to the Refuge?

Check one: YES NO

The blank was filled in with one of 11 different dollar amounts. The entrance fee dollar amounts ranged from \$5 to \$90. The remaining dollar amounts were \$7, 9, 12, 15, 20, 25, 35, 50, and 70. Appendix E presents the increased Refuge fee response proportions at each bid level for visitors and community residents.

Table 4-2 presents the results of the dichotomous choice CVM logit model for paying an increased Refuge entrance fee. For summer and winter visitors and community residents, the intercept and bid slope coefficients are statistically significant at the one percent level. The negative sign on the bid slope coefficient indicates that the higher the dollar amount the visitor was asked to pay, the lower the probability they will pay that entrance fee amount. For the Refuge entrance fee, the mean WTP is \$13.58 per person for winter visitors, \$10.44 per person for summer visitors, and \$11.09 per person for community residents.

The probabilities that visitors and community residents will pay the Refuge entrance fee at the different fee amounts are shown in Figure 4-1. Based on the WTP survey results, if the fee was to increase from \$3 to \$5, approximately 60 percent of summer visitors and 53 percent of winter visitors will pay the \$5 Refuge entrance fee. Only three percent of community residents will pay a \$5 fee to visit the Refuge, indicating that 70 percent of local Kilauea residents either will not visit the Refuge because of the entrance fee or will not pay the \$5 fee when they do visit the Refuge (because they may have a Kamaina Pass; a local discount pass). As shown in Figure 4-1, the fee amount where half of the visitors will and half will not be willing to pay to visit the Refuge is \$6.49 for winter visitors and \$8.07 for summer visitors. These amounts are lower than the mean WTP amounts in Table 4-2 because there are some visitors that were willing to pay the higher end bid amounts for the entrance fee, thus driving up the mean WTP amounts. While there is a higher probability that more summer visitors will pay an entrance fee in the \$5-\$8 range, there is a lower probability that they will pay entrance fees that are higher than \$20, as compared to winter visitors or community residents.

Table 4-2. Logistic regression coefficients and mean net willingness to pay for Refuge entrance fee.

	W	inter visito	rs	Summer visitors		Community residents			
Variable	Coefficient	T-statistic	Probability	Coefficient	T-statistic	Probability	Coefficient	T-statistic	Probability
Constant	0.4509	2.805	0.005	1.034	4.717	0	-0.6694	2.659	0.0078
Bid	-0.0695	8.223	0	-0.1282	8.217	0	-0.0373	3.583	0.0003
Likelihood ratio statistic	149.45		0	194.43		0	20.45		0
Mean WTP per person	\$13.58			\$10.44			\$11.09		
90% Confidence interval for mean WTP per person	\$12.14 - \$15.46			\$9.41 - \$11.71			\$8.64 - \$16.74		
n=	688			624			276		

Probability of Paying Increased Refuge Entrance Fee

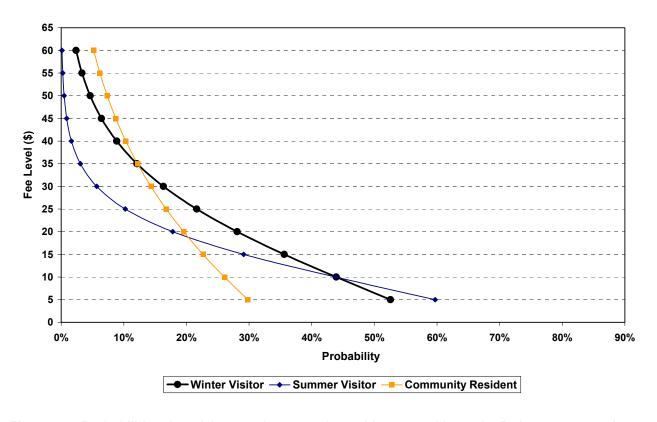


Figure 4-1. Probabilities that visitors and community residents would pay the Refuge entrance fee at the different fee amounts.

For the question about charging a fee that would include a shuttle with a tour guide and the entrance fee, the specific question asked on the visitor survey was:

If the Refuge were to charge a fee of \$____per person that included parking at an off-site area, a shuttle to the Refuge with on-board tour-guide commentary, and the Refuge entrance fee, would you have made the trip to the Refuge?

Check one: YES NO

In order to compare the value a guided shuttle would add to the visitor's trip to the Refuge, the same increased dollar amounts that were suggested in the entrance fee question were used.. Appendix E presents the shuttle fee response proportions for saying yes or no at each bid level for visitors and community residents.

Table 4-3 presents the results of the dichotomous choice CVM logit model for paying for a shuttle, guide, parking, and Refuge entrance fee. For summer and winter visitors, the intercept and bid slope coefficients are statistically significant at the one percent level, the community residents are statistically significant at the five percent level. The negative sign on the bid slope coefficient indicates that the higher the dollar amount the visitor was asked to pay, the lower the probability they will pay that fee amount. For the Refuge entrance fee that would include a shuttle and guide, the mean WTP is \$17.24 per person for winter visitors, \$14.27 per person for summer visitors, and \$8.95 per person for community residents. These amounts are higher than the mean WTP amounts for only the Refuge fee (without a shuttle and guide) by \$3.66 for winter visitors and \$3.83 for summer visitors. However, community residents mean WTP for the Refuge entrance fee that would include a shuttle, guide, and off-site parking is \$2.14 less than the mean WTP for the entrance fee only.

Table 4-3. Logistic regression coefficients and mean willingness to pay for shuttle, guide, parking, and entrance fee.

	Winter visitors			Summer visitors			Community residents		
Variable	Coefficient	T-statistic	Probability	Coefficient	T-statistic	Probability	Coefficient	T-statistic	Probability
Constant	0.9668	6.002	0	1.628	7.6470	0	-0.5547	2.1845	0.0289
Bid	-0.0748	9.218	0	-0.1267	9.4588	0	-0.0507	4.1784	0
Likelihood ratio statistic	196.76		0	258.77		0	32.84		0
Mean WTP per person	\$17.24			\$14.27			\$8.95		
90% Confidence interval for mean WTP per person	\$15.63 - \$19.20			\$13.08 - \$15.67			\$7.21 - \$12.39		
n=	671			604			323		

The probabilities that visitors and community residents will pay a fee for a shuttle, tour guide, and the Refuge entrance at the different fee amounts are shown in Figure 4-2. Based on the WTP survey responses, approximately 73 percent of summer visitors, 64 percent of winter visitors, and 31 percent of community residents will pay a \$5 fee that includes a shuttle, tour guide, parking,

and the Refuge entrance fee. This is an 11 percent and 13 percent higher probability for both winter and summer visitors, respectively, as compared to paying the fee that only includes entrance to the Refuge. As shown in Figure 4-2, the fee amount where half of the visitors would and half would not be willing to pay the entrance fee that would include the shuttle and guide to visit the Refuge is \$12.93 for winter visitors and \$12.85 for summer visitors. These amounts are lower than the mean WTP amounts in Table 4-3 because there are some visitors that were willing to pay the higher end bid amounts for the fee, thus driving up the mean WTP amounts. Similar to the WTP question for the Refuge entrance fee only, there is a higher probability that summer visitors will pay the lower fee amounts for a shuttle with guide (below \$12) but a higher probability that more winter visitors and community residents will pay fee amounts above \$30.

Probability of Paying for Shuttle with Guide

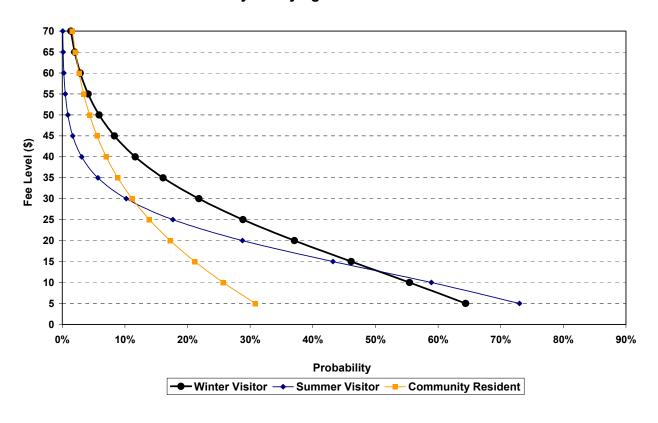


Figure 4-2. Probabilities that visitors and community residents would pay a fee that includes a shuttle, tour guide, and entrance fee at the different fee amounts.

Discussion

WTP questions were asked to estimate the visitor personal benefits from visiting the Refuge and to see if a guided shuttle would increase or decrease the benefits associated with visiting the Refuge. A survey respondent had the same bid amount for the WTP question about increased Refuge entrance fee and for the WTP question about a fee that included the entrance cost, shuttle, and guide. As a result, the net increase in value that a shuttle with an interpretive guide would add to the visitor's trip experience was determined. This information can help the ATS team determine if the benefits of a shuttle system outweigh the costs associated with operating and maintaining the shuttle.

Table 4-4 shows the mean WTP fee that would only include entrance to the Refuge and the fee that would include entrance to the Refuge along with a shuttle and interpretive guide. The shuttle and guide increases the mean WTP by \$3.66 for winter visitors and \$3.83 for summer visitors. This indicates that having a shuttle and guide would increase the net value of visiting the Refuge for summer and winter visitors. However, the mean WTP by local community residents for the fee that would include the shuttle and guide is \$2.14 lower than the WTP for the fee that would only include the Refuge Entrance. This indicates that the local community residents are less willing to pay and less likely to visit the Refuge if they have to pay to take a shuttle (Table 4-4). Figures 4-3, 4-4, and 4-5 show graphical comparisons of the probabilities for paying the Refuge entrance fee with and without a shuttle and guide for winter, summer, and community residents, respectively. As shown in Figure 4-3, the probability that winter visitors will pay is higher for the fee that would include the shuttle and interpretive guide as compared to the fee that would only include entrance to the Refuge. Similar to winter visitors, the probability that summer visitors will pay is higher for the fee that would include the shuttle and interpretive guide as compared to the fee that would only include entrance to the Refuge (Figure 4-4).

Table 4-4. Mean willingness to pay per person for the Refuge entrance fee.

	Winter visitors		Summe	visitors	Community residents		
	Refuge entrance only	Refuge entrance with shuttle & guide	Refuge entrance only	Refuge entrance with shuttle & guide	Refuge entrance only	Refuge entrance with shuttle & guide	
Mean WTP per person	\$13.58	\$17.24	\$10.44	\$14.27	\$11.09	\$8.95	

Winter Visitor Probability of Paying Fees

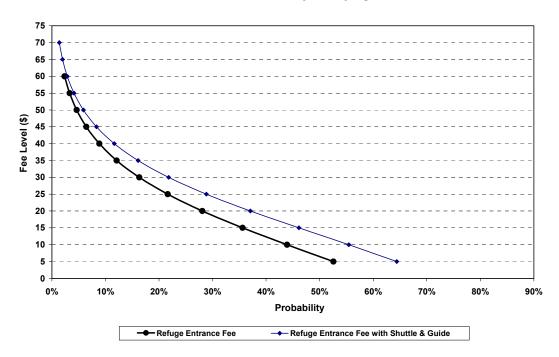


Figure 4-3. Probability of winter visitors paying the Refuge entrance fee with and without shuttle and guide.

Summer Visitor Probability of Paying Fees

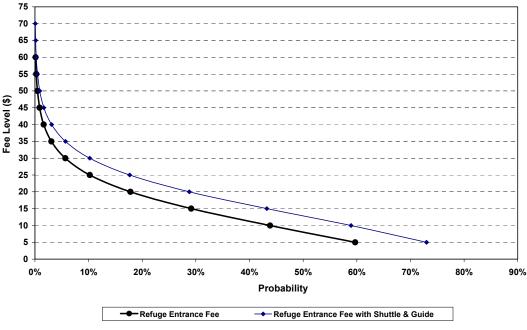


Figure 4-4. Probability of summer visitors paying the Refuge entrance fee with and without shuttle and interpretive guide.

As shown in Figure 4-5, for a fee of \$9, there is a 27 percent probability that community residents will pay either the fee that only includes entrance to the Refuge or the fee that also includes the shuttle. For fees below \$9, the probability is slightly higher that more community residents will pay the fee that includes the shuttle and guide as compared to the fee that only includes entrance to the Refuge. At fees higher than \$9, the probability is higher that more community residents will pay the fee that only includes entrance to the Refuge as compared to the fee that includes the shuttle and guide (Figure 4-5).

Community Member Probability of Paying Fees

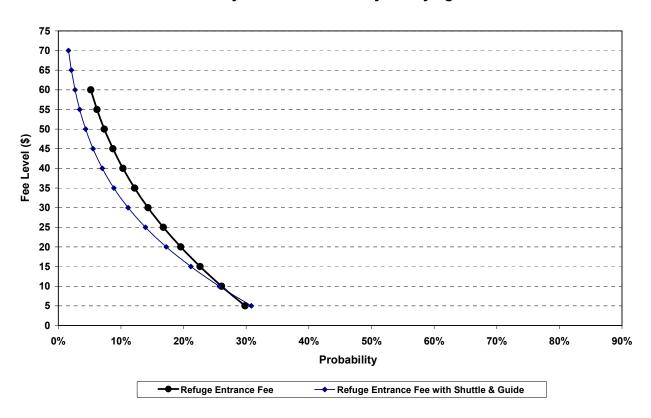


Figure 4-5. Probability of community residents paying the Refuge entrance fee with and without shuttle and interpretive guide.

5. Visitor Trip Behavior and Transportation Options

By Shana Cecile Gillette

Introduction

In the General Plan for the County of Kauai (2000) that provides future guidance for land use and county planning, the island's natural beauty, environment, and rural character are stated as "essential" to Kauai's future as a tourist destination. Out of all the islands, Kauai attracts the most visitors interested in nature-based travel. More than 80 percent of visitors to the island visit Kauai's resource parks such as Haena, Kokee, Na Pali, and the Refuge. In fact, more than 80 percent of all visitors to Kauai's resource parks were are out-of-state (Carter and Burgess, 2002).

Resource managers on Kauai face the challenge of balancing the growth in nature-based tourism with preservation of the island's scenic beauty. While Kauai has the highest percentage of visitors who sightsee (95 percent), go on helicopter tours (26 percent), and backpack (30 percent), the island has the lowest percentage of visitors who use public transportation (one percent). Across all islands, the rental car remains the top choice of transportation, with the majority of visitors taking self-guided tours (76 percent; DBEDT, 2003).

Kauai residents are reported to to have mixed feelings toward renewed growth in tourism for primarily two reasons: 1) over-congestion of the beaches, parks, and trails; and 2) increased traffic on the roads (Knox and Associates, 2004).

The transportation section of this study was designed to better understand the travel behavior of visitors to KPNWR and their perceptions and attitudes related to Refuge transportation options. In conjunction with the visitor survey, a community survey assessed resident perceptions of tourist-related congestion, irritants, and benefits as well as community interest in transportation options for visitation to KPNWR. A more thorough understanding of visitation patterns will help management minimize visitor impacts on both the Kilauea community and the Refuge while continuing to enhance the visitor experience.

Transportation Options

Most visitors to Kilauea Point NWR drive to the Refuge in a rental car, the main mode of transportation for all visitors on the island. During the peak winter season, visitors arriving during hours of high visitation might find the parking lot full and space limited in the temporary overflow parking area. The capacity of the Refuge's parking lots is the Refuge's limiting factor for visitation. If all parking is full, visitors are turned away.

The reliance that visitors have on the rental car as the preferred form of island transportation makes it challenging to introduce alternative transportation options as a visitor demand management tool. The automobile has a significant influence on visitor trip patterns. A car provides individuals and groups with flexibility in route selection, choice of travel time, and on-board storage (Turnball, 2000). The trip choices that visitors make on vacation often reflect automated driving choices that visitors have carried with them from the frequent, habitual automobile trips

they make at home (Garling, Fugii, and Boe, 2001). Visitors to Kauai, for example, if they are only on the island for a few days, may chain together a series of stops in a trip to maximize activity time.

Introduction of different transportation options into trip itineraries usually necessitates more careful and thorough planning by the traveler (Verplanken and others, 1997). Automobile travelers tend to do minimal planning for vacations. Instead, they rely more on word-of-mouth information and information supplied en route, such as highway signs (National Parks, 1999). Unfamiliarity with public transportation or past unpleasant experiences with mass transportation also make it difficult for travelers to ascertain short-term benefits in switching to another form of transportation.

The willingness of Kilauea Point NWR visitors to consider transportation and access options was assessed through a series of questions on the following issues:

- Visitor perceptions of crowding: If visitors perceive crowding as a problem, it is thought that such a perception might influence their support of alternative transportation and access options to alleviate crowding and improve the quality of visitor experience.
 - How does visitor perception of crowding differ at different times during the day at the Refuge?
 - o How does parking capacity affect visitor perceptions of crowding?
- Visitor preferences for transportation and access to the Refuge:
 - Would visitors support restricted access to the Refuge as an option? Does visitor willingness to consider alternative transportation differ if that transportation mode is linked to public transportation?
 - How does visitor preference for wait times vary for intermodal connections or access to the Refuge?
 - o How important are factors such as dependability, comfort, cost, and efficiency in visitor decision-making?
- Visitor experience with public transportation and park transportation in particular: Park transportation differs from public mass transportation because unlike mass transit, it is part of the overall park visitor experience. As part of that experience, visitors often desire a different design for the shuttle vehicle (e.g. larger windows) and on-board commentary from the driver.
 - o How frequently do visitors use public transportation? If they do not use it often, why? Have they ever used park transportation?
- Community perceptions of transportation options: Kilauea community support for transportation and access options is important because the town serves as a gateway community to the Refuge and visitors use roads through the town to gain access to the Refuge.
 - What preferences do community residents have regarding transportation options?
 - o How do those preferences connect with community needs and interests?

Visitor Perceptions of Crowding

Overall based on survey results, visitors do not perceive crowding to be a problem at the Refuge. In both winter and summer, there were no significant associations between parking capacity and visitor perceptions of irritants related to crowding (such as noise, difficulty parking, and litter). In the summer season, there were no significant associations between parking capacity and visitor perceptions of crowding. For this study, parking capacity was determined by a quick assessment of cars in the parking lot during the sampling period (Table 5-1). Parking lot capacity

was recorded in increments of every tenth person sampled. When the field researcher switched to a new sample sheet, which was every tenth respondent, the Refuge parking capacity was noted. The extent to which the Refuge reached parking capacity or exceeded it, varied by the season and by the time (Table 5-2).³

In the winter sample, parking capacity was exceeded more frequently than in the summer. When the survey was conducted, overflow parking was not observed during the summer season. In the winter season, overflow parking occurred throughout the day. During the winter season, overflow parking occurred primarily between 11 a.m. and 1 p.m. In the summer, capacity parking occurred primarily between the same hours, from 11 a.m. until 1 p.m.

The association between parking capacity and crowding appears more significant in the winter season due to the Refuge reaching parking capacity or exceeding it. 4 Overall, visitors do not perceive crowding to be a problem at the Refuge, but when parking capacity is exceeded and overflow parking occur in the winter, visitors do perceive some crowding in the parking areas. More than 65 percent (n = 177) of the winter respondents considered the parking lot to be "somewhat" to "very crowded," and more than 52 percent had "somewhat" to "a lot of" difficulty parking. These reactions may now be part of the summer Refuge experience as well. In the summer 2004, Refuge staff noted that parking was more frequently reaching capacity and overflowing into the temporary parking areas due to higher visitation levels than in the past when this survey was conducted. 5

However, even when parking capacity was exceeded in the winter and the overflow parking lot was being used, the majority of respondents did not perceive any other problems related to crowding. It is possible that parking is still acting as a limiting factor for visitation, keeping visitation to a level that is below most visitor thresholds for crowding (when the overflow parking areas were full, Refuge visitors were turned away).

Table 5-1. Description of parking capacity.

Parking capacity	Description
≤ 50%	Parking lot is less than or equal to half full.
51-75%	Parking lot is greater than half full, but less than or equal to three-quarters full.
76-100%	Parking lot is greater than three-quarters full, but less than or equal to being completely full.
50% overflow	Parking lot is full, overflow parking on temporary lot is less than or equal to half full
51-100% overflow	Overflow parking is greater than half full, less than or equal to being completely full.

 $^{^{3}}$ (for season) Pearson's R = -.337, p<.001; (for time) Cramer's V = .120, p<.001

⁴ Cramer's V = .431, p<.001

⁵ Personal communication with Refuge staff, February 2005.

Table 5-2. Description of parking capacity by season and time visited.

Time (hours		Parking capacity				
Season	when Refuge is open)	≤50%	51-75% capacity	76-100% capacity	≤50% overflow	51-100% overflow
	10-11 AM	16.0%	12.3%	18.6%	15.0%	7.5%
	11-12 AM	20.0%	16.8%	24.8%	32.5%	35.8%
Winter	12-1 PM	16.0%	22.8%	9.3%	10.8%	22.4%
willei	1-2 PM	13.0%	18.7%	15.5%	15.0%	16.4%
	2-3 PM	11.0%	19.4%	16.1%	18.3%	7.5%
	3-4 PM	24.0%	10.1%	15.5%	6.7%	10.4%
Column	ı total	100% $n = 100$	100% $n = 268$	$ 100\% \\ n = 161 $	100% $n = 118$	$ 100\% \\ n = 67 $
	10-11 AM	12.8%	12.8%	14.6%	.0%	.0%
	11-12 AM	25.5%	16.7%	28.3%	.0%	.0%
Summer	12-1 PM	17.4%	17.2%	20.3%	.0%	.0%
Julilliel	1-2 PM	17.0%	24.1%	11.3%	.0%	.0%
	2-3 PM	14.0%	16.3%	9.4%	.0%	.0%
	3-4 PM	13.2%	12.8%	16.0%	.0%	.0%
Column	ı total	100% $n = 235$	100% $n = 203$	100% $n = 212$.0% n =0	.0% n =0

Visitor Preferences for Transportation and Access to Refuge

The USFWS and the FHWA are exploring methods for improving visitor access and transportation needs at the Refuge because of concerns over traffic congestion and parking problems caused by too many vehicles during peak visitation periods. A series of questions to measure visitor preferences for different transportation options were included on the survey instrument for this study.

Visitors Unlikely to Visit if Access Restricted; Somewhat Likely to Visit if Shuttle, Off-site Parking, or Interpretation Is Provided

Both summer and winter visitor respondents expressed a low likelihood that they would visit the Refuge if restrictions, increased fees, or public transportation were the only options available. In both seasons, visitors reported that it is "unlikely" to "somewhat likely" that they would visit if Refuge management implemented reservations, parking fees, or made the Refuge accessible through public transportation (mean score < 2.0). Visitors are "likely" to "very likely" to

consider visiting the Refuge if a dedicated shuttle is provided with off-site parking, if educational programs are offered, or if visitation is limited per hour (mean score >2.0).

The lack of interest in public transportation options by visitors to Kilauea Point NWR may be connected to past experience. Nearly 60 percent of all Refuge visitors sampled indicated they did not use public transportation in their everyday life, and they cited inconvenience (39 percent as one of the main reasons. Visitor support for both educational programs (offered at off-peak hours to encourage visitation at less crowded times) and on-site/off-site parking options might reflect interest in actions that allowed for visitor self-regulation and self-selection.

To examine how trip purpose is related to the likelihood of visitation if transportation and access options are implemented, a series of one-way ANOVAs were conducted to see if there were significant differences in preferences between summer visitors who planned a visit to the Refuge (n = 307) and visitors who arrived at the Refuge on the spur of the moment (n = 329), since in the summer sample these two groups were equally well represented. Differences were found between the two groups for most transportation options. However, for most options, the differences between the means were statistically different but of no practical significance. The means plots revealed the largest and most relevant differences between the means for two options: 1) required reservations by phone or email to visit the Refuge, and 2) refuge only accessible via the shuttle option with off-site parking.⁶

Summer visitors who stop at the Refuge on the spur of the moment are less likely to visit the Refuge if reservations are instituted or a shuttle is put in place. The difference between these two groups can possibly be explained by the nature of trip planning. Visitors who do not incorporate the Refuge in their trip planning might be less supportive of options that would restrict spontaneous travel behavior by requiring visitors to either plan ahead and/or adjust their travel schedules.

Reliability, On-time Service, Low-cost Fare, and Parking: Factors in Decision to Take a Shuttle

The purpose of a Refuge shuttle is similar to that of many shuttles that already operate in the National Parks System. Most shuttle systems in National Parks strive to be dependable, comfortable, cost-effective, and efficient. However, shuttle riders are not only riding the shuttle for a utilitarian purpose of mobility, but to enhance their visitor experience. In addition to the common goals of any efficient mass transportation system, therefore, resource park shuttles focus on engaging the visitor with the natural environment (National Parks, 1999).

The design of the shuttle parking facility also is considered an important factor in visitor satisfaction with the shuttle system. Visitors at times will need to wait for the next shuttle, even if the time between shuttle headways is fairly short (National Parks, 1999). Providing visitors with activities while the next shuttle is en route can help minimize the perceived wait. Refuge visitors listed parking near visitor services as an important third or fourth factor in their decision to take the shuttle (n = 595).

Reliability, on-time service, low cost of shuttle fare, and ease-of-parking were cited the most often by visitors surveyed as important factors in their decision to take a shuttle. Time, cost, and parking near the Refuge or visitor services were often mentioned together as important factors (15.1 percent, n = 1136). Time, easy access to parking, and cost were also a trio that was often cited together (38.4 percent). And when time, easy access to parking, and costs were mentioned, parking near the Refuge was an additional factor that was often cited (19.3 percent). On average, visitors

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⁶ Reservation F(610,612) = 58.18, p<.001 and Shuttle F(611,613) = 28.52, p<.001

aree willing to wait 20 minutes for a shuttle and 22 minutes for entry into the Refuge if access is restricted.

Community Perceptions of Transportation Options

Kilauea town is a gateway community to Kilauea Point NWR. The turnoff to the Refuge is also the turnoff to the town and the primary access route to the Refuge passes by the town and residential housing. Traffic congestion on this route (Kolo Road and Kilauea Lighthouse Road) to the Refuge was one reason this ATS study considered options for visitor demand management that would reduce the impact of heavy visitation on the quality of life in Kilauea. In conjunction with the visitor survey, a community survey assessed resident perceptions of tourist-related congestion, irritants, and benefits as well as community interest in transportation options for visitation to KPNWR.

Factors for Community Support of Shuttle: Homeowner Privacy Protected and Less Traffic Congestion

Overall, Kilauea community respondents to the survey do not believe that visitors contribute to problems in the community. However, for traffic safety and traffic congestion, opinion is more evenly distributed between traffic being "no problem" to a "big problem" in town (Table 5-3).

Table 5-3. Kilauea resid	ent nercention	of visitor impact	ts to certain	community features.
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Feature	No problem	Small problem	Moderate problem	Big problem	Does not apply	N
Disruption of daily activities	56%	23%	11%	4%	6%	393
Personal privacy	53	20	14	6	7	393
Traffic noise	40	26	19	10	5	400
Traffic congestion in town	30	25	22	21	3	395
Traffic safety	25	26	26	19	4	396
Other		8	33	54	4	24

A small number of respondents listed problems in the "other" category. Most of the other problems listed (22 out of the 24 comments received) were related to visitor traffic behavior and way-finding. Speeding on Kilauea Lighthouse Road, the need for better signage/directions to the Lighthouse, road wear, and turning around in residents' driveways were among the traffic problems that residents identified.

One of the potential irritants to community well-being is the attenuation of a sense of local community (Knox and Associates, 2004). More than 63 percent (n = 256) of community respondents expressed little support for a walking tour of Kilauea town if it would mean less privacy for homeowners along the tour route, and even if it would result in increased business from the tour for local shops.

However, if the option would benefit the community and not affect the privacy of homeowners, more residents are likely to support it. More than 62 percent (n = 254) of respondents expressed support for an environmental education center at the top of Crater Hill, even if such a center would mean less privacy for adjacent homeowners.

Community respondents are more mixed in their support of a shuttle to the Refuge, even if it means reduced traffic congestion on local roads. An equal percentage of residents oppose and support the shuttle option (Figure 5-1). There is a significant difference in support for the Kilauea walking tour and environmental education center between residents who are likely to support the shuttle and those who are not. Residents who support the shuttle also are more likely to support the Kilauea walking tour and the environmental education.

Homeowner privacy was one of the top-ranked factors in the decision of community respondents to support the shuttle system. More than 247 residents listed it as an important factor, second only in number to the reduction of traffic congestion on the Lighthouse Road (n = 266; Table 5-4).

One hundred twenty-four (56 percent) of the 220 people who ranked traffic congestion as a factor ranked it as the number one or number two factor that would encourage their support of a shuttle (Table 5-5). Following results of previously discussed questions in which community residents appear to place high importance on privacy, the second most cited factor in encouraging shuttle support was the preservation of homeowner privacy. Of the 209 people who ranked this as a factor, 115 (55 percent) ranked it as the first or second most important factor that would encourage their support.

The combination of factors also helps explain what community respondents consider important when contemplating a shuttle. More than one-quarter of respondents to the question cited the following three factors together as being important: homeowner privacy, less traffic congestion, and shuttle parking near the highway. Nearly as many (19 percent) appended a self-financing shuttle as an additional factor. Some of the residents (8 percent) are less concerned about privacy and more concerned about shuttle economics and traffic—ranking together congestion, parking near highway, self-financing shuttle, and economic benefits to the community.

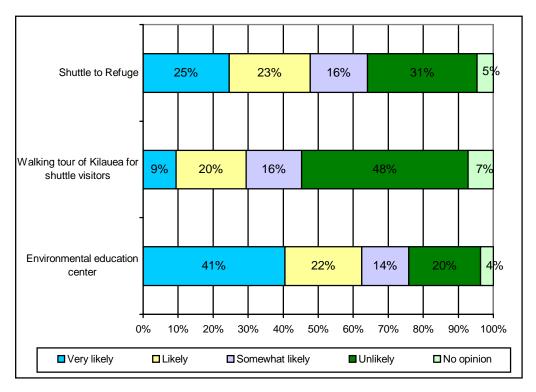


Figure 5-1. Likelihood of support for transportation options at Kilauea Point National Wildlife Refuge.

Table 5-4. Factors that would encourage community residents to support a shuttle system.

Factor	n
Traffic congestion on Lighthouse Road is reduced	266
Homeowner privacy is preserved	247
Shuttle system is self-supported through fees	225
Shuttle system benefits local economy	226
Off-site parking for shuttle is near the highway	209
Shuttle system is linked to other public transportation	173
Off-site parking for shuttle is near the Refuge	120
Other	26

Table 5-5. Rankings for factors that would encourage community residents to support a shuttle option.

Factor	Rank (n)			
	1 st	2^{nd}	$3^{\rm rd}$	
Homeowner privacy is preserved ¹	96	39	28	
Traffic congestion on Lighthouse Rd. is reduced ¹	77	70	45	
Shuttle system is self-supported through fees	33	46	44	
Off-site parking for shuttle is near the highway ¹	29	53	57	
Shuttle system benefits local economy ¹	26	31	54	
Shuttle system is linked to other public transportation	21	35	33	
Off-site parking for shuttle is near the Refuge	18	19	13	

¹Order in table changed from number of people who ranked the factor.

Latent Demand for More Pedestrian and Bicycle Paths

A latent demand for more pedestrian paths and more public transportation options may exist in the Kilauea community. Although most community respondents to the survey rely on their personal vehicles for commuting, and they had little experience with other modes of transportation, they expressed support and interest in more pedestrian and bicycle paths. More than three-quarters of all respondents to the community survey indicated support for Refuge management options that increase hiking opportunities at the Refuge and provide pedestrian and bike access to the Refuge with the potential completion of a Lighthouse Road pedestrian path.

The availability of pedestrian and bike pathways is important to community respondents in another context as well. In addition to providing a non-motorized link to the Refuge, residents believe pedestrian and bike paths to be integral to the quality of life in their community. More than 85 percent (n = 398) selected pedestrian/bike paths as a feature that is "very important" or "important" when selecting a town in which to live. They also are not satisfied with the current offerings in their community. Residents believe top priority for transportation funds should be for pedestrian and bicycle paths.

Visitor Trip Patterns and Behavior

Proximity and connectivity are two important aspects of trip choice that play an important role in the development of island day-trip patterns. Proximity is the distance that visitors need to travel between complementary activities. Connectivity is the directness of the route and the ease of movement between stops (Frank, 2000).

On Kauai, proximity to different visitor attractions can vary. A day trip that includes a visit to Waimea Canyon and to Anini Beach can be quite long. A trip that only includes a stop at Kee Beach and Kilauea Point NWR can be short in terms of trip length and complexity. Proximity is increased (and distance is decreased) when visitors decide to make stops at visitor attractions that are grouped in one geographic location. Connectivity between visitor attractions is determined by Kauai's road network around the island perimeter. Visitors to the North Shore have to retrace their steps if they want to visit the West Side.

As part of this study, visitors to Kilauea Point NWR were asked to indicate their day-trip pattern on the day that they visited the Refuge. Visitors marked on a map the order in which they made stops during that day. Visitors were encouraged to mention any attractions that they visited that were not on the map. From this data, it was possible to determine the role of proximity and connectivity in KPNWR visitor day-trip patterns and determine the complexity of most trips. The survey sampling strategy provided additional detail because visitors were surveyed over two seasons (winter and summer), during different days of the week, and at different times during the day. The resulting multi-day data made it possible to test how trip patterns varied by season, day, and time.

The decisions that visitors make prior to and during their visits to Kauai can help clarify why and how they select a specific trip pattern on the day that they visit the Refuge. In this study, a visitor day-trip pattern was defined as the order in which KPNWR visitors stopped at other visitor attractions on the day that they visited the Refuge.

Several aspects of trip planning were explored in the survey to help explain behavioral patterns behind trip selection. Refuge visitors were asked their reasons for visiting Kauai in general and the Refuge in particular. They answered survey questions about how they spent their time on Kauai, what type of transportation they used while they were on Kauai, and their choice of activities. Visitors also were asked questions about how they learned about the Refuge, and their length of stay on the island.

The length of time that visitors stay on the island can determine trip lengths and the selection of daytime activities that drive day trip choice. The length of time that visitors stay on Kauai varies from a few days to several months. In this study, Refuge visitors were asked to provide details on how long they stayed on Kauai, where they stayed prior to visiting the Refuge, and the duration of their visit to the Refuge.

The key research questions for visitor-trip patterns and planning were the following:

- 1. What role does proximity and connectivity play in KPNWR visitor-trip pattern formation?
- 2. How does Kilauea Point NWR fit within common day-trip patterns?
- 3. How are trip planning, traveler characteristics, and trip patterns associated?
- 4. Do trip patterns vary over a temporal framework?
- 5. How are factors such as length-of-stay related to visitor behavior?

Visitor Trip Patterns

Visitors surveyed expressed an interest in Kauai's natural beauty. More than half of Refuge visitors in the summer and winter seasons (summer = 57 percent, n = 584; winter = 52 percent, n = 600) reported participating in three or more outdoor activities: hiking, kayaking, surfing, biking, snorkeling, fishing, or wildlife viewing while on Kauai.

Refuge visitor participation in outdoor activities is reflected in the visitor selection of Kauai resource parks and natural phenomena as visitor attractions on Refuge trip itineraries. High visitor use of Kauai resource parks is supported by recent research on visitation at Kauai State Parks.

Three of the most popular parks on Kauai are among the five most popular State Parks in Hawaii. Haena, Wailua River, and Na Pali State Parks consistently receive high visitation and host mostly out-of-state visitors (Figure 5-2). Visitors to these parks list hiking, walking, and scenic views as primary reasons for their visits (Omni Trak, 2004).

Visitation Rates for State Parks: Summer 2003-Winter 2004

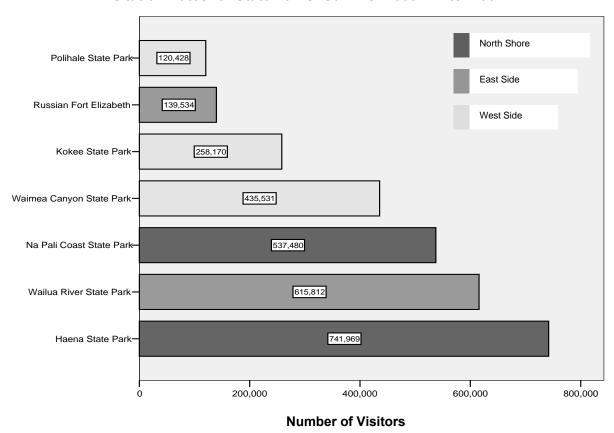


Figure 5-2. Visitation rates for State Parks in Kauai, Summer 2003-Winter 2004 (Omni Trak 2004).

As part of this study, Refuge visitors were asked to indicate their day-trip pattern on the day that they visited the Refuge. Visitors marked on a map of Kauai the order in which they made stops during the day. Visitor attractions such as Haena and Wailua River State Park were included on the map. Visitors were encouraged to mention any attractions that they visited that were not on the map.

The map was intended to make the question easy to answer in order to reduce response time for survey respondents. However, the question was still fairly time intensive and required respondents to recall from memory a day-trip pattern several weeks after it occurred. More than 20 percent of respondents did not answer the question. Also, some respondents did not include the Refuge on their trip itinerary for the day that they visited the Refuge. As a result of these differences in recorded data, the total population of respondents for the trip pattern data varies depending on what is being discussed.

Majority of Visitors Spent Day Trips on the North Shore, Started Day Trip at KPNWR

Based on survey data, the majority of Refuge visitors spend their time at visitor attractions on the North Shore on the day that they visit the Refuge. The next most frequent trip pattern is a trip that includes stops on the North Shore and East Side. The regions are defined as follows:

- North Shore: north of KPNWR
- East Side: South of KPNWR to Lihue (including Lihue and Kalapaki Beach)
- South Shore: between Lihue and Hanapepe (not including either town)
- West Side: from Hanapepe to Kalalau Lookout

For the purposes of this study, trip range is the term used to describe the range of regions that were included in the day trip. A North Shore day-trip range, for example, is a trip that only includesstops on the North Shore and no stops anywhere else on the island.

The term *trip chain* is used to describe the number of stops that a visitor makes during a day trip. This term is commonly used to define the stops that a traveler chains together in a sequence in order to take part in different activities across a geographical region. The term, perhaps, is used more broadly here to indicate the stops that the traveler has chained together in a day trip in order to view and/or participate in activities at different visitor attractions. In this study, three different types of trip chains were identified:

- 1. *Limited*: a trip chain that consists of 1-3 stops,
- 2. *Medium:* a trip chain that consists of 4-5 stops, and;
- 3. *Extensive*: a trip chain that consists of 6 stops or more.

In addition to defining the type of trip chain, it also was interesting to note where Kilauea Point NWR fit in that trip chain in order to determine the flexibility travelers have in their schedule to accommodate changes in transportation and access options at the Refuge.

The differences between summer and winter trip patterns regarding trip chains were moderately significant (Table 5-6). A limited day-trip chain of one to three stops was the most frequent pattern of trip chain for both Refuge summer and winter visitors.

There were no differences among winter and summer visitors in regional range of trip pattern. There was only one statistically significant difference between trip chains. For day trips that only took place on the North Shore, there was a difference in the proportion of the type of trip

chains between the two seasons. In the winter, the trip chains appear to be slightly longer, with 34 percent of the trip chains having four to five stops.

For the other regional ranges, the trip chains do not appear to differ between seasons. Overall, the majority of trips (more than 40 percent in each season) took place on the North Shore with the second most frequent regional range being a combination of stops on the North Shore and the East Side. Other combinations included a trip range of the North Shore and East Side with stops in one or both of the other regions. Of those other combinations, a small percent (~8.0 percent) were visitors who made the Refuge their sole stop on their day trip (Table 5-7).

Table 5-6. Percent of different type	s of trip chains for summer	and winter visitors.
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	Summer		Winter	
·	п	%	п	%
Limited (1-3 stops)	294	55.7	272	47.6
Medium (4-5 stops)	148	28.0	197	34.4
Extensive (6 or more stops)	86	16.3	103	18.0
Total (n)	528	100	572	100

Extended Day Trips More Complex, More Likely to Include Attractions on the West Side

For visitors sampled, the complexity of trip chains increased with the number of stops. More than 50 percent of trip complexity (doubling back along the route) occurred when the trip had six or more stops. Only 12 percent of all the short trip chains (one to three stops) were complex.

In addition to the sites provided on the map in the survey, other places were reported as stops on day trips, Kapaa, Lihue, Princeville, Poipu, Hanapepe, and Waimea were the towns that people included as stops on their trip itineraries. Other points of interest were the secret beaches, waterfalls, and the guava plantation.

Although the majority of all respondents answering the trip question stayed on the North Shore, each attraction on the map received some visitation. Waimea Canyon was cited as frequently as Kalalau Trail on visitor itineraries (Figure 5-4, a cumulative count of winter and summer seasonal stops on KPNWR visitor day trips). The three most frequently cited visitor favorite attractions were Kilauea Point NWR (41 percent, n=1089), Waimea Canyon (12 percent), and Kalulau Trail (11 percent) (Figure 5.4).8

⁷ Kapaa was the only respondent "write-in" that was included on the map because the other attractions were mentioned by less than 30 respondents.

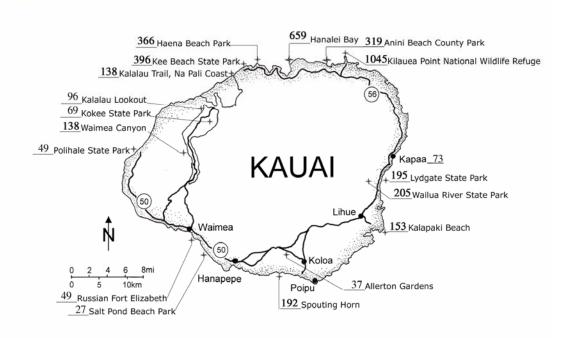
⁸ The number of respondents who checked Waimea Canyon or Kalalau Trail as favorite places was 128 and 119 respectively, nearly the same number of respondents who visited those sites.

Table 5-7. Distribution of trip range and trip chain in summer and winter seasons.

	% Day trip range n = 1101	% Trip chain	KPNWR stop in trip chain ¹
		Limited 70.9% <i>n</i> = 173	1 st stop (72.2%)
North Shore (summer)	46.2% $n = 244$	Medium 27.0% <i>n</i> = 66	1 st stop (75.8%)
		Extensive $2.0 \% n = 5$	2
		Limited $62.1\% \ n = 146$	1 st stop (73.1%)
North Shore (winter)	41.1% $n = 235$	Medium 34.2% <i>n</i> = 147	1 st stop (70.0%)
		Extensive $3.4 \% n = 13$	
		Limited $22.2\% \ n = 47$	
North Shore/East Side (summer)	15.3% $n = 81$	Medium 58.0% <i>n</i> = 106	
		Extensive $19.8\% n = 41$	
		Limited $25.7\% \ n = 29$	
North Shore/East Side (winter)	19.8% $n = 113$	Medium $52.2\% \ n = 59$	
		Extensive $22.1\% n = 25$	
	Other regional patt	erns	
North Shore/East Side and stops in other regions	Summer 11.0% $n = 58$ Winter 12.8% $n = 73$		
North Shore and stops in other regions (with no stops on East Side), Stops in other regions but not on the North Shore, and KPNWR only stop in day trip	Summer 27.5% $n = 145$ Winter 26.4% $n = 151$		

¹How KPNWR is most often cited in the order of the trip chain.

²Numbers too small to make a distinction between stops.



Note: The number of stops at KPNWR doesn't equal 1,100 because not all respondents indicated KPNWR as a stop on their itinerary. **Figure 5-3**. Total number of visitors (sum of winter and summer seasons) who included. these attractions on their day trip itineraries (n = 1100—number of respondents to the trip pattern question)

Overnight Stay and Range of Day Trips Associated

In both winter and summer samples, approximately 20 percent of Refuge visitors stayed overnight in Poipu, Princeville, or Kapaa. Slightly less stayed in Lihue (~17 percent). There was no significant association between where people stayed and the season.

The geographical location of each town, however, was associated to the trip range in the winter season. The most common trip ranges from all towns were either day trips that only included stops on the North Shore or day trips that included stops on the North Shore and East Side. A large majority of Kapaa visitors in the winter only made stops on the North Shore.

Poipu visitors made trips that included stops on the North and South Shores, and the East Side (9.1 percent, n = 197). Princeville visitors made the most visits that incorporated all four regions (10.4 percent, n = 154).

Visitors on an Extended Stay Took More Helicopter/Boat Tours and Participated in Three or More Outdoor-based Activities

A Refuge visitor's length of stay on the island is related to how he or she spends their time. More than half of winter and summer visitors who took helicopter or boat tours of Kauai (51 percent, n = 202 winter; 58 percent, n = 242 summer) were on the island for 18-24 days. Refuge visitors who stay longer on Kauai also participate in more nature-based outdoor activities (surfing, snorkeling, biking, hiking, wildlife viewing, kayaking, and fishing). Sixty-two percent (n = 142) of

⁹ (winter n = 638, summer n = 697)

winter visitors who participated in four or more outdoor-based activities stayed on the island 21-30 days.

Trip Planning of Kilauea Point National Wildlife Refuge Visitors

Information Use Varied by Trip Purpose and Life Stage

The use of information sources varies depending on trip purpose and life stage (the Hawaii Tourism bureau describes life stages as young, 18-34; middle-age, 35-54; and seniors, 55 and over).

In the winter, trip purpose had a statistically significant association with the number of information sources that people consulted. Visitors who had preplanned to visit the Refuge were more likely to use three or more information sources than visitors who decided to stop at the Refuge due to a "spur of the moment" decision. 10

In the summer season, a more even distribution of life stages made it easier to distinguish differences in information-gathering among age groups. In the summer, young people are more likely to use highway signs than seniors or middle-age visitors. 11 All ages appear to use guidebooks. The differences in information-seeking behavior by different age groups makes more sense when trip purpose is compared across age groups. Among the young, Kilauea Point NWR is primarily an incidental stop (67 percent, n = 135 summer), hence the use of highway signs to find out about the Refuge. Seniors are less likely than young and middle-age to make an incidental rather than planned stop (40 percent, n = 171 summer).

Also related to trip purpose is the number of different information sources cited. More than 60 percent (n = 257) of summer visitors who learned about the Refuge through three to four information sources visited the Refuge as part of their trip plan, whereas 34 percent visited the Refuge as an incidental stop.

Discussion

Trip Patterns

Proximity to the Refuge plays a role in the majority of Kilauea Point NWR visitor-trip patterns. Visitor preferences for limited day trips on the day that they visit the Refuge includes nearby stops on the North Shore. The Refuge is most often the first stop on limited day-trip itineraries. This not only allows for flexibility in a visitors' scheduling, but it provides the Refuge with a greater opportunity to introduce visitors to North Shore birds and plants, and discuss visitor impacts.

On longer trip itineraries that include six or more stops, the Refuge is more likely the fourth or fifth stop. Visitors who are on limited day trips have more flexibility in their itinerary to incorporate an alternative mode of transportation and other multi-modal opportunities into their schedule. When designing transportation alternatives and access options it will be important to communicate how these actions can contribute to the overall North Shore experience.

¹⁰ Pearson's R = -.142 p < .001 ¹¹ Pearson's R = -.112, p = .005

Trip Planning

Most visitors are likely to learn about the Refuge through a combination of typical traveler resources (reference guides, brochures, and word-of-mouth). They also rely on family and friends and local residents and businesses while en route. Refuge communication strategies that include local business owners and other local sources of information will help ensure that Refuge changes that may affect visitation are relayed.

Visitor information-seeking behavior is different depending on the travel context and traveler characteristics. Travelers who preplan their trip to the Refuge are more likely to use a variety of information sources. They are also more likely to support Refuge management and be open to options, such as a shuttle, to manage visitor impact on wildlife.

Visitors on extended stays are likely to include other modes of transportation in their itinerary to add to their visitor experience. Their schedules also may be more flexible to incorporate an alternative mode of transportation, such as transit, to the Refuge.

Visitors from different age groups seek out information in different ways. People under the age of thirty are more likely to visit the Refuge in the summer. Information campaigns during this season that account for this age distribution will be most effective.

Visitor and Community Resident Perceptions of Crowding

Parking demand varies by season, day, and hours at the Refuge. At the time of the survey, winter had a higher period of parking demand exceeding onsite capacity. If other access and transportation options are considered, it will be important to structure access and transportation alternatives to meet demand on a seasonal and daily basis.

Refuge management currently uses a passive control for managing visitor demand: parking availability predetermined how many people could be at the Refuge. If additional alternatives are considered, managers will need to understand how the alternatives will affect visitor numbers, onsite activities, length of stays, and resource protection.

Visitor Support for Transportation and Access Options

Most Refuge visitors will not likely visit the Refuge if it implements options that limit access. Refuge visitors are more likely to visit the Refuge if additional parking is provided off-site, educational programs re provided during off-peak hours, or a shuttle with off-site parking is provided.

If a shuttle to the Refuge is determined to be a viable transportation alternative, several factors will increase visitor willingness to use it: reliability, on-time service, a low-cost fare, and easy-to-find parking that is either near the Refuge or near visitor amenities. Results showed that visitors expect more from a shuttle ride than the utilitarian function of a mass transportation system. Because, if implemented, a shuttle would be the first introduction of visitors to the Refuge, the information/interpretation component of a shuttle is an important consideration.

Visitors surveyed are willing to wait for a shuttle from 10-20 minutes. Visitors expressed interest in educational programs as an incentive for visiting the Refuge at non-peak hours, although this willingness did not translate into willingness to wait longer for a shuttle. It is likely that some interpretation at the transportation hub would be welcomed.

Although visitors are interested in learning more about the town, residents are less interested in having more tourists in residential areas. In addition, visitor demand at a potential staging area hub or inter-modal transfer facility may be a concern for local residents who are concerned about maintaining a feeling of local community and protecting their privacy.

Community Support for Transportation and Access Options

Community respondents appear mixed in their support of the shuttle system. They are more likely to support the shuttle if resident privacy is protected, traffic congestion is reduced, and parking occurrs near the highway. Respondents cited additional factors that would make them more willing to support a shuttle: it would need to be self-sustaining and contribute to the town economy. These community preferences and concerns will be important as the Refuge moves forward with ATS planning.

Regarding access, residents would like more access to the Refuge through increased hiking opportunities, and more walking and biking paths in the community. Access options that allow more community access and feeling of community, while protecting the wildlife and habitat are the key to community support. Community residents also would like more opportunities to walk and bike. As new transportation alternatives are considered for the Refuge, walking and biking paths, circulation in the community, and inter-modal connections will be important issues in discussions regarding changes to the existing road network.

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Appendix A Kilauea Preliminary Visitor Report Statistics

The following appendix contains the information obtained from frequency counts of the raw data from the Kilauea Point National Wildlife Refuge visitor survey. The order of the tables follows that of the questions in the survey section by section. Summaries and verbatim comments of the open-ended questions contained in the survey can be found at the end of the frequency report.

Section 1

Question 1

Table 1. Number of visits to Kauai in the past 5 years.

Times visited	% respondents
1	68%
2	16
3	7
4	3
5	3
More than 5	3

n = 1344

Table 2. Number of visits to Kilauea Point NWR.

Times visited	% respondents
1	75%
2	14
3	4
4	2
5	2
> 5	2

Table 3. Transportation by which respondents arrived in Kauai

Transportation	% respondents	
Commercial plane	96%	
Cruise ship	2	
Air charter—group	1	
Private plane	1	
Boat charter—group	< 1	
Private boat	< 1	

n = 1344

Question 3

Table 4. Type of trip being taken by respondent when visiting Kauai.

Type of trip	% respondents
Vacation with Kauai as sole destination	72%
Outing from another Hawaiian island	22
Business travel	2
Part of larger travel plan to visit U.S. or other countries	4

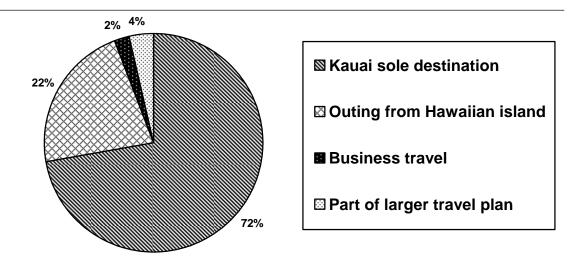


Figure 1. Type of trip being taken by respondent when visiting Kauai.

Table 5. Modes of travel used by Kilauea Point visitors during trip to Kauai

Mode of travel	Percentage of visitors
Rental vehicle	90%
Walking	53
Boat	23
Helicopter	19
Private vehicle	12
Tour van/bus	7
Bicycle	2
Taxi	2
Other	2
Public transit	1

Table 6. Other modes of travel during trip to Kauai

Other travel modes	n
Canoe/kayak	13
ATV/motorcycle	7
Bi-plane/private airplane/helicopter	3
Commercial airline	1
Hitchhike	1
Inner tube	1
Running	1

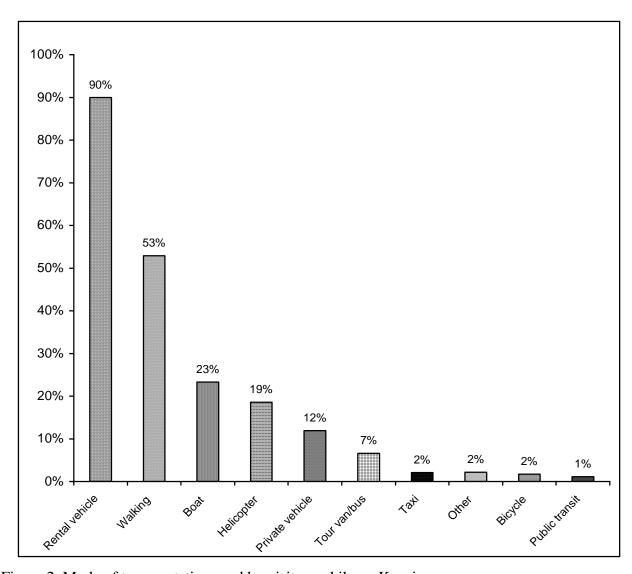


Figure 2. Mode of transportation used by visitors while on Kauai.

Some patterns in transportation emerged upon closer examination of the data. As indicated in Table 7, the largest incidence of travel mode was a rental vehicle only, followed by the combination of walking and a rental vehicle; and walking, boating, and a rental vehicle. Sixty-three combinations other than those listed occurred, but the remainder occurred across five or fewer respondents. Table 7 portrays a breakdown of the combinations of modes of travel with public transit. These combinations and data give further indication of not only the types of transportation that were being used, but the ways in which they were being utilized in conjunction with one another.

Table 7. Combinations of travels modes used by any one visitor while on Kauai.

Combination of travel modes	Respondents reporting combination
Rental vehicle only	447
Walking & rental vehicle	261
Walking, boat, & rental vehicle	118
Walking, rental vehicle & helicopter	79
Walking, boat, rental vehicle, & helicopter	59
Private vehicle only	52
Walking & private vehicle	34
Rental vehicle & helicopter	35
Rental vehicle & boat	31
Boat, rental vehicle, & helicopter	15
Walking, rental vehicle, & tour van/bus	14
Walking, boat, rental vehicle, & tour van/bus	14
Walking, boat, rental vehicle, helicopter, & tour van/bus	11
Walking, rental vehicle, & private vehicle	9
Walking, boat, & private vehicle	9
Bicycle, walking, & rental vehicle	8
Rental vehicle & tour van/bus	8
Walking, rental vehicle, helicopter, & tour van/bus	8
Rental vehicle & private vehicle	7

Table 8. Combination of public transit and other travel modes used by visitors to Kilauea Point NWR.

Combination of transit with other travel modes	Respondents reporting combination
Public transit only	1
Public transit & rental vehicle	1
Public transit, rental vehicle, & tour van/bus	1
Public transit, rental vehicle, & walking	1
Public transit, rental vehicle, walking, & other	1
Public transit, rental vehicle, walking, & tour van/bus	1
Public transit, rental vehicle, walking, private vehicle, & other	1
Public transit, rental vehicle, walking, & taxi	1
Public transit, rental vehicle, walking, & boat	2
Public transit, rental vehicle, walking, boat, & helicopter	1
Public transit, rental vehicle, walking, boat, helicopter, & taxi	1
Public transit, walking, & taxi	1
Public transit, biking, taxi, private vehicle, & tour van/bus	1

Table 9. Activities participated in while visiting Kauai.

Activity	Respondents participating
General sightseeing	89%
Beach activities	81
Shopping	68
Photography	63
Wildlife/plant viewing	56
Learning about Kauai's culture/history	54
Snorkeling	53
Hiking	50
Touring Kauai in tour van or boat	30
Kayaking	15
Golfing	14
Other activities	11
Surfing	7
Bicycling	3
Fishing	3
Tennis	3

n = 1346

^{*} Responses do not add to 100%. Respondents could choose more than one option.

Table 10. Other activities participated in while visiting Kauai.

Activities	n	Activities	n
Helicopter	18	Ultra light plane/ powered hang glider	2
Relaxing/resting	15	Walking	2
Scuba diving	14	Windsurfing	2
Dining out	13	Antique hunting	1
ATV/motorcycle tour	8	Watching sunsets	1
Time with friends/family	8	Boogie boarding	1
Horseback riding	8	Camping	1
Tubing	7	Family reunion	1
Attended wedding/got married	5	Gallery tour	1
Boat tour	4	Elderhostel group	1
Canoeing/kayaking	4	Fern Grotto	1
Luau	4	Geocaching	1
Botanical gardens/garden tour	3	Kauai museum	1
Business meeting	3	Painting	1
Looking at real estate	3	Running	1
Reading	3	Swimming	1
Back-country/backpacking	2	Theater	1
Bird watching	2	Craft Fair	1
Driving around/auto tour	2	Volleyball	1

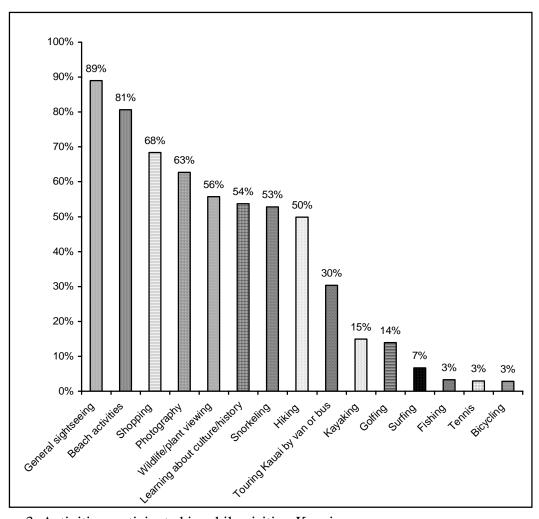


Figure 3. Activities participated in while visiting Kauai.

The average time a visitor to Kilauea Point NWR reported spending on Kauai during their most recent trip to the island was about nine days. The least amount of time spent was four hours, and the most amount of time spent was about four months. The modal, or most frequently reported amount of time spent on Kauai was about one week.

Table 11. Time spent at Kilauea NWR on the latest trip.

Time spent	n
Less than 30 min.	6
30 min. − 1 hr.	487
1 hr. 1 min. – 1 hr. 30 min.	125
1 hr. 31 min. − 2 hr.	471
2 hr. 1 min. – 2 hr. 30 min.	24
2 hr. 31 min - 3 hr.	117
More than 3 hr.	101

Table 12. Place visitors stayed before visiting Kilauea Point NWR.

Overnight stay	% respondents
Poipu	23%
Kapaa	21
Princeville	21
Lihue	17
Hanalei	5
Waimea	1
On a cruise ship	2
On another Hawaiian island	1
On an airplane	< 1
On the U.S. mainland	< 1
Other	7
1000	

 $\overline{n=1332}$

Table 13. Other places stayed before visiting Kilauea Point NWR

Place	n	Place	n
Kilauea	11	Aloha Country Inn	1
Anini Beach	9	Aston Islander	1
Haena	9	Between Lihue and Kapaa	1
Wailua	8	Camping	1
Anahola/Anahola Bay	7	Coconut Beach Hotel	1
Friend's home/private home	6	Hanapepe	1
Rental house- Kilauea/Kauai/Hanalei	5	Kaannapoli Beach	1
Bed & Breakfast	4	Kalaheo	1
Nawiliwili Harbor	4	Kauai	1
Kalapaki Beach	4	Kona	1
Maloaa/Maloaa Bay	3	Lae Nani Resort	1
Barking Sands	2	Lawai	1
Kalihiwai/Kalihiwai Ridge	2	Hanalei	1
Kapaa	2	Poipu Kai	1
Aloha beach resort	1		

Questions 8 & 9

For a discussion of these questions, please refer to the main report, Section 5, "Visitor Trip Patterns and Behavior."

Question 10

Table 14. Mode of transportation to attractions on Kauai

Mode of transportation	% respondents*
Rental vehicle	86%
Private vehicle	11
Walking	3
Tour van/bus	2
Boat	1
Helicopter	1
Bicycle	< 1
Public transit	< 1

^{*}n = 1332; some respondents chose more than one option.

Question 11

Table 15. Responses to whether visitors to Kilauea would use public transit to Visitor attractions on Kauai.

Would you use public	%
transportation if available?	
No	77%
Yes	23
n = 1309	

Table 16. Reason for not using public transit to visitor attractions on Kauai

Reason for not using public transit	%
I prefer personal transportation	78%
Does not fit my schedule	18
Too much time	9
Unreliable	9
I prefer a guided tour	2
Too expensive	1

^{*}n = 957; some respondents chose more than one option.

Table 17. Other reasons for not using public transportation to visitor attractions.

Reason	n
Prefer own schedule/flexibility	32
Already had/would have rental car	21
Disabled/special needs	6
Inconvenient/needs to be reliable	6
Traveling with children	5
Do not like crowds	4
Number of people in party	3
Depends on quality of transportation	2
Would want routes to airport/other places	2
Uninformed	1
Depends on travel companions/situation	1
Depends on location of accommodations	1
Friends provided transportation	1
Would use if no other vehicle were available	1
Only if parking lots are not built to hold the cars	1
Poor parking keeps crowds down	1
Have lots of equipment/gear	1

There was some discrepancy among the percentages due to five respondents indicating that they would use public transit, but also giving reasons for not using it. Their responses ranged across the six possible responses. One individual submitted positive responses that, in his/her opinion, the lack of public transportation would bring: keeping crowds at the Refuge down due to lack of parking in the current situation.

Question 12

Table 18. Purpose of trip to Kilauea Point NWR.

Trip purpose	% respondents
One of many equally important reasons or destinations for visit to Kauai	55%
Incidental stop on trip taken for other purposes or destinations	44
Primary purpose of visit to Kauai	1
n = 1332	

The average visitor group size at Kilauea Point NWR was about three, but the most often cited number of people in a group was two.

Table 19. Type of group with which respondents visited Kilauea Point NWR.

Group type	% respondents
Family	72%
Friends	18
Family/friends	11
Commercial tour group	2
Organized club or group	1
Business/company trip ¹	< 1

¹Categorized according to open responses to the "other" category. n = 1060

Section 2

Question 1

Table 20. Primary place of local purchases.

Place	n
Kapaa	315
Lihue	295
Hanalei	287
Kilauea	208
Princeville	198
Poipu	168
Koloa	41

Questions 2 & 3

For a discussion of these questions, please refer to the main report, Section 3, "Visitor Trip Spending."

For a discussion of these questions, please refer to the main report, Section 4, "Net Economic Benefits of Visiting Kauai and the Refuge Visitor Trip Spending."

Question 5

Table 21. Responses to whether visitors to Kilauea Point NWR paid the Refuge entrance fee.

Paid fee	%
Yes	86%
No	14
n = 1320	

Table 22. Reasons for not paying the \$3 entrance fee to Kilauea Point NWR.

Reason	n
Used my pass	130
Other	26
Thought fee was voluntary	18
Not aware of fee	15
Did not have correct change/did not want to overpay	11
Too expensive	1
Did not want to pay	1

Table 23. Other reasons for not paying entrance fee.

Reason	n
Paid more than \$3	6
Included with another fee	5
Did not have enough money	4
Close to closing time	2
Did not go in far/not to lighthouse	2
Did not see where to pay/no one to collect	2
Waived fee to fill out survey/told did not have to	2
pay	
Had already seen point/go frequently	1
Visit did not meet expectations	1

For a discussion of this question, please refer to the main report, Section 4, "Net Economic Benefits of Visiting Kauai and the Refuge Visitor Trip Spending."

Section 3

Question 1

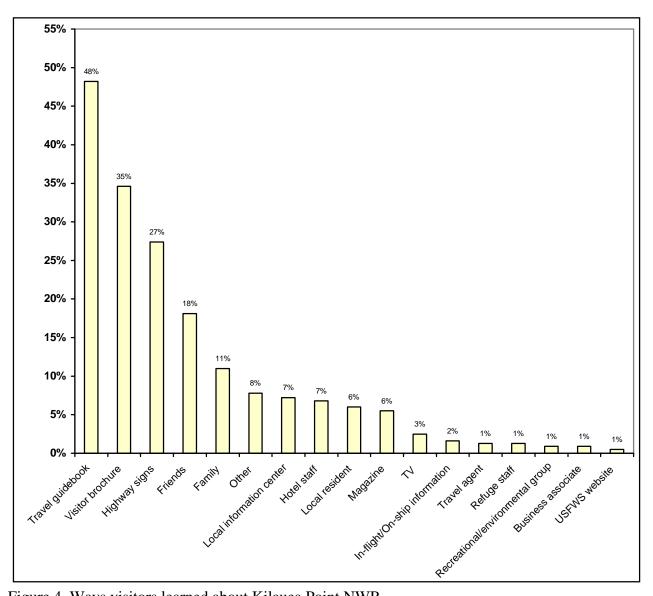


Figure 4. Ways visitors learned about Kilauea Point NWR.

Table 24. Other sources from which visitors learned about Kilauea Point NWR.

Source	n
Stranger/other tourist/word of mouth	6
AAA	1
Accident	5
Previous visits to Refuge/Kilauea/Kauai	45
Atlas/GPS/map	10
Bird magazine/periodical	2
Book	4
Camping at Anini State Beach	1
Curiosity	1
Internet	14
Love lighthouses/saw lighthouse	9
Tour guide	1

There were some patterns to responses to the question of how visitors learned about the Refuge. The largest number (n = 208) learned only from a travel guidebook. Other patterns emerging included learning only from signs (n = 99), learning only from a friend (n = 98), learning only from a visitor brochure (n = 88), learning from both a visitor brochure and a travel guidebook (n = 84), and learning only from family (n = 70).

Question 2

Ninety-eight percent of visitors (n = 1310) reported that their main mode of transport to visitor attractions was the same as that used to visit the Refuge. Of the 29 visitors who indicated that the two modes were not the same, 20 used a rental vehicle as their other mode.

Table 25. Importance of activities in respondents' decision to visit Kilauea Point NWR.

Activities	Importance					
	Very important	Important	Somewhat important	Not important	No opinion	n
Viewing scenic overlooks of the coastline	65%	28%	6%	1%	< 1%	1316
Viewing whales and/or dolphins	51	26	13	6	3	1291
Visiting a historic landmark/lighthouse	43	35	18	3	1	1323
Viewing native seabirds	39	35	17	6	2	1304
Being in natural, undeveloped lands	38	37	19	5	2	1307
Experiencing a serene environment						
Photographing wildlife	34	33	22	10	2	1305
Taking self-guides walks with interpreted signs	25	43	21	9	3	1299
Learning about the Refuge from staff/volunteers	19	41	28	9	3	1303
Participating in environmental education programs	8	22	32	30	8	1283
Purchasing mementos at the gift shop	3	11	28	55	4	1285
Purchasing books about the natural history of the area	2	13	32	48	5	1288
Other activities	70	16	5	4	5	56

Table 26. Importance of activities in respondents' decision to visit Kilauea Point NWR, collapsed.

Activities	Importance ^a			
	Very important/ Important	Somewhat important/ Not important	n	
Viewing scenic overlooks of the coastline	93%	7%	1316	
Visiting a historic landmark/lighthouse	85	15	1323	
Viewing native seabirds	78	22	1323	
Viewing whales and/or dolphins	77	20	1291	
Experiencing a serene environment	75	23	1307	
Being in natural, undeveloped lands	75	24	1304	
Taking self-guides walks with interpreted signs	68	30	1299	
Photographing wildlife	67	31	1305	
Learning about the Refuge from staff/volunteers	60	37	1303	
Participating in environmental education programs	30	63	1283	
Purchasing books about the natural history of the area	15	80	1288	
Purchasing mementos at the gift shop	14	83	1285	
Other activities	87	9	56	

^a Where percentages do not add up to 100%, the remaining respondents indicated they had no opinion as to the importance of an activity.

Table 27. Other activities important to visitors' decision to visit Kilauea Point NWR.

Activity	n
Landscape photography	9
Activity killing time/break from traveling	7
Guided hike/tour	5
Birding	5
Observing wildlife	5
Beaches/enjoying natural beauty/view	4
Hiking/trails	3
Learning experience for children	2
Bought video tape	2
Interaction with visitors/guides	2
Native plants	2
Exercising	1
Exploring lighthouse	1
Biking	1
Snorkeling	1
Family time	1
Nostalgia	1
Relaxing	1

Table 28. Most important activity to visitors of Kilauea Point NWR.

Activity	%	n
Visiting a historic landmark/lighthouse	30	373
Viewing scenic overlooks of the coastline	27	337
Viewing native seabirds	25	315
Viewing whales and/or dolphins	21	257
Experiencing a serene environment	5	58
Photographing wildlife	4	54
Being in natural, undeveloped lands	4	46
Learning about the Refuge from staff/volunteers	2	20
Other activities	1	14
Taking self-guided walks with interpreted signs	1	8
Participating in environmental education programs	< 1	4
Purchasing mementos at the gift shop	< 1	2
Purchasing books about the natural history of the area	< 1	1

Table 29. Importance of services or features to respondents' satisfaction with their visit to Kilauea Point NWR; collapsed.

Service/feature		Importance	
	Very important/ Important	Somewhat important/ Not important	n
Condition of the natural environment	97%	3%	1312
Refuge grounds well-maintained	96	4	1310
Wildlife viewing opportunities	95	5	1305
Lighthouse well-preserved and maintained	93	7	1310
Educational kiosks or signs about the Refuge and its wildlife	85	14	1301
Information provided on bird watching, whale watching, and/or wildlife photography	83	16	1311
Natural history information about the site	82	18	1298
Lighthouse and Refuge easy to find	82	17	1314
Reasonable entrance fees	81	18	1314
Helpfulness of Refuge staff	82	17	1306
Adequate number of parking spaces	78	21	1313
Access for people with physical disabilities or walking difficulties	51	26	1307
Appealing gift shop or bookstore items	33	64	1306
Other services/features	88	12	32

Table 30. Visitor satisfaction with services or features at Kilauea Point.

Service/feature	Satisfaction						
	Outstanding	Good	Average	Adequate	Poor	Does not apply	n
Refuge grounds well-maintained	52%	43%	4%	1%	< 1%	< 1%	1245
Helpfulness of Refuge staff	51	36	7	2	< 1	4	1234
Condition of the natural environment	50	45	5	1	< 1	< 1	1242
Wildlife viewing opportunities	49	40	9	2	1	< 1	1234
Reasonable entrance fees	47	42	9	2	< 1	1	1237
Lighthouse well-preserved and maintained	45	48	5	1	< 1	< 1	1240
Lighthouse and Refuge easy to find	33	53	9	3	1	1	1240
Information provided on bird watching, whale watching, and/or wildlife photography	33	47	14	3	1	3	1234
Educational kiosks or signs about the Refuge and its wildlife	30	51	14	2	1	2	1223
Natural history information about the site	26	54	16	3	< 1	2	1223
Access for people with physical disabilities or walking difficulties	20	32	11	3	1	33	1214
Appealing gift shop or bookstore items	17	45	20	6	1	12	1226
Adequate number of parking spaces	16	52	15	13	6	< 1	1242
Other services/features	49	24	3		21	3	33

Table 31. Importance of services or features to respondents' satisfaction with their visit to Kilauea Point NWR.

Service/feature	Importance					
	Very important	Important	Somewhat important	Not important	Does not apply	n
Condition of the natural environment	66%	31%	3%	< 1%	< 1%	1312
Wildlife viewing opportunities	65	30	4	1	< 1	1305
Lighthouse well-preserved and maintained	55	38	6	1	< 1	1310
Refuge grounds well-maintained	52	44	4	< 1	< 1	1310
Information provided on bird watching, whale watching, and/or wildlife photography	39	44	13	3	2	1311
Educational kiosks or signs about the Refuge and its wildlife	37	48	11	3	1	1301
Lighthouse and Refuge easy to find	36	46	14	3	1	1314
Reasonable entrance fees	35	46	15	3	1	1314
Helpfulness of Refuge staff	35	47	16	2	1	1306
Adequate number of parking spaces	32	47	17	4	< 1	1313
Natural history information about the site	31	51	15	2	1	1298
Access for people with physical disabilities or walking difficulties	24	27	13	13	23	1307
Appealing gift shop or bookstore items	6	27	39	25	3	1306
Other activities	75	13	9	3		32

Table 32. Other important services/features to Kilauea Point NWR visitors.

Service/feature	n
Binoculars	11
Guided hikes/talks	5
Film	3
Restroom facilities	2
Lighthouse information	2
Nene viewing	2
Safe environment for wildlife and visitors	1
Water and snacks	1
Friendly staff	1
Information on native plants	1
Picnic area	1
Author of book signing	1

Questions 6 & 7

A summary of the responses to these open-ended questions can be found on page A-39 of this appendix.

Table 33. Management of features at Kilauea Point NWR.

Feature		More features (%)	Leave as is (%)	Less features (%)	n
Access to		reatures (%)	18 (70)	reatures (70)	1307
Lighthouse					100,
8	Provide more access to the inside of the Lighthouse Leave as is Provide limited access to the inside of the Lighthouse	45	46	9	
Visitor impacts					1297
	Increase efforts to restrict visitor behavior that is harmful to wildlife Leave as is Decrease efforts to restrict visitor behavior that is harmful to wildlife	43	55	2	
Environmental					1248
education	More programs & interpretation Leave as is Reduce programs & interpretation	33	67	1	
Information signs	recover programs or merpremien			-	1298
	Provide more signs Leave as is Limit the number of signs	21	73	6	
Services					1292
	Provide more visitor info & staff Leave as is Provide less visitor info & staff	21	78	1	
Visitor numbers	Encourage more visitation	16			1293
	Leave as is Restrict visitation to the Refuge		79	5	
Facilities					1295
	Develop additional facilities Leave as is Remove some facilities	11	87	2	
Naturalness					1284
	Allow more landscape alterations Leave as is	5	71		
	Restore more natural conditions			25	

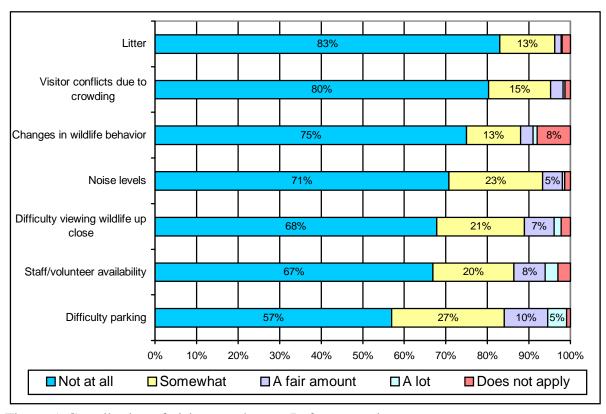


Figure 5. Contribution of visitor numbers to Refuge experience

Table 34. Mean ratings for the contribution of other visitors to issues.

Issue	$\underline{\mathbf{M}}^*$
Noise levels	1.32
Litter	1.15
Difficulty parking	1.61
Visitor conflicts due to crowding	1.21
Difficulty viewing wildlife up close	1.39
Changes in wildlife behavior	1.14
Staff/volunteer availability	1.42

^{*}Coded on a scale from 1 (not at all) to 4 (a lot).

^{*}Numbers for percentages less than 4% are not shown.

Question 10 & 11

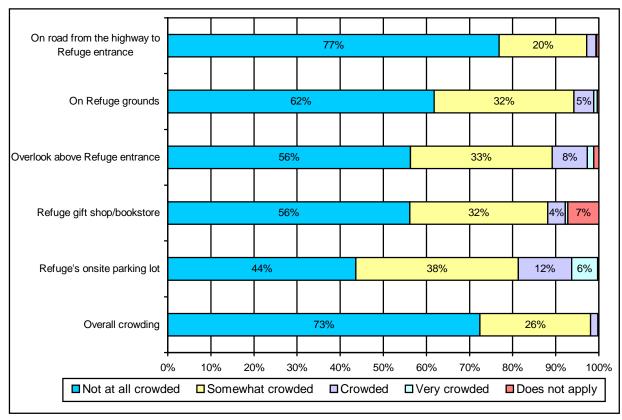


Figure 6. Visitor perceptions of crowding at areas in and around Kilauea Point NWR. *Numbers for percentages less than 4% are not shown.

Table 35. Mean crowding scores at areas around Kilauea Point NWR.

Area	O*
In the Refuge bookstore/gift shop	1.35
At the overlook above the Refuge entrance	1.52
At the Refuge's onsite parking lot	1.80
On the Refuge grounds	1.43
On the road from the highway to the Refuge entrance	1.25
Overall crowding	1.29

^{*}Coded on a scale from 1 (not at all crowded) to 4 (very crowded).

Section 4

Question 1

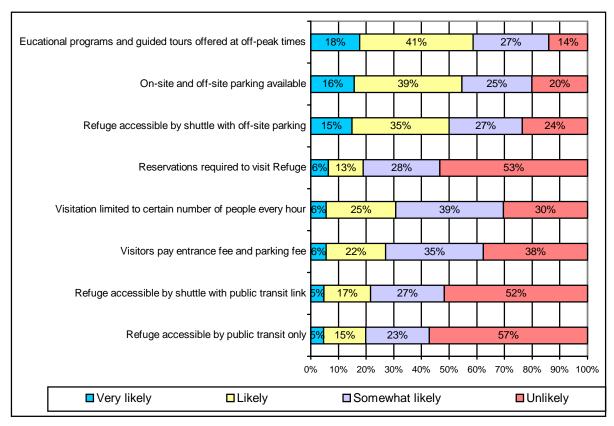


Figure 7. Likelihood of visiting Kilauea Point NWR if given management options were implemented.

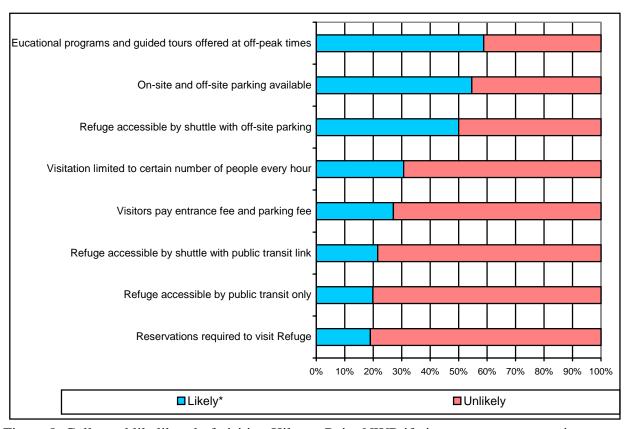


Figure 8. Collapsed likelihood of visiting Kilauea Point NWR if given management options were implemented.

^{*}Likelihoods have been collapsed into unlikely/somewhat likely and likely/very likely

Table 36. Mean likelihood of visiting Kilauea Point NWR if management options were implemented.

Option	O*
Reservations required to visit the Refuge	1.71
Visitors pay a parking fee in addition to an entrance fee	1.94
Refuge accessible by public transit only	1.66
Refuge accessible by shuttle that has a public transit link	1.74
Refuge accessible by shuttle with off-site parking	2.40
Visitation limited to a certain number of people every hour	2.05
Education programs and guided tours are offered at off-peak visitation times to encourage visitation at less crowded times	2.62
Both on-site and off-site parking available with a larger fee for on-site parking and a smaller fee for off-site and shuttle parking	2.49

^{*}Coded on a scale from 1 (unlikely) to 4 (very likely)

Question 2 & 3

For a discussion of these questions, please refer to the main report, Section 5, "Visitor Trip Behavior and Transportation Options."

Table 37. Factors affecting visitors' decision to visit Kilauea Point NWR if it were accessible only by shuttle.

Factor	n
Reliable and on-time service	997
Cost of shuttle fare	903
Off-site parking is easy to find	819
Off-site parking area is near the Refuge	663
Off-site parking close to visitor services	593
Quality of tour guide comments on board the shuttle	566
Opportunity to bike/walk into the Refuge	500
Off-site parking area is near the highway	406
Onboard shuttle storage for strollers, bikes, etc	168
Link to other public transportation	127
Other	40

Table 38. Ranks 1, 2, & 3.

Factor	Rank (n)		
	1 st	2 nd	3 rd
Reliable and on-time service	332	243	187
Cost of shuttle fare	236	183	174
Off-site parking area is near the Refuge ^a	181	127	114
Off-site parking is easy to find ^a	119	194	189
Opportunity to bike/walk into the Refuge ^a	77	83	92
Off-site parking area is near the highway ^a	72	70	82
Off-site parking close to visitor services ^a	66	108	112
Quality of tour guide comments on board the shuttle ^a	39	77	114
Other ^a	11	1	4
Link to other public transportation ^a	7	14	13
Onboard shuttle storage for strollers, bikes, etc ^a	4	14	18

a. Rank changed from number of people who ranked the factor.

For a discussion of these questions, please refer to the main report, Section 4, "Net Economic Benefits of Visiting Kauai and the Refuge Visitor Trip Spending."

Question 6

Table 39. Percentage of visitors who would spend more time at Kilauea Point NWR if a guided history tour of Kilauea were offered at given fee levels.

Tour fee	Would spend more time	Would not spend more time	n
\$1	77%	23%	171
\$3	66	34	178
\$5	59	41	191
\$7	53	47	178
\$10	46	54	171
\$12	41	59	181
\$15	40	60	177

Table 40. Percentage of visitors who would spend more time at Kilauea Point NWR if a guided hike to view a seabird colony were offered at given fee levels.

Hike fee	Would spend more time	Would not spend more time	n
\$5	55%	45%	175
\$7	53	47	180
\$10	42	58	189
\$12	40	60	176
\$15	43	57	177
\$20	32	68	184
\$25	24	76	178

Table 41. Percentage of visitors who would spend more time at Kilauea Point NWR if a guided hike to the summit of an extinct volcano crater were offered at given fee levels.

Tour fee	Would spend more time	Would not spend more time	n
\$5	70%	30%	176
\$10	70	30	179
\$15	64	36	192
\$20	62	38	175
\$25	57	43	184
\$30	46	54	181
\$35	47	53	179

Table 42. Percentage of visitors who would spend more time at Kilauea Point NWR if the following options were offered.

Option	Would spend more time	Would not spend more time	n
An introduction to the Refuge by Refuge staff	78%	22%	1252
or volunteer			
A self-guided hike through restored native	84	16	1280
forest for a scenic view of the lighthouse,			
Kilauea town, ocean, and mountains			

Section 5—

Question 1

Table 43. Use of public transit by Kilauea Point NWR visitors.

Frequency of transit use	% respondents
Never	59%
A few times a year	30
Almost every day	4
At least once per month	4
At least once per week	2

Table 44. Reasons that visitors do not use public transit.

Reason for not using public transit	% respondents *
Inconvenient	39%
Doesn't go where I need to go	31
Service not available	31
Takes too much time	19
Other	14
Not easy to get to	10
Can't take bikes or large packages	2
Too expensive	1

n = 858

Table 45. Other reasons for not using public transit.

Reason	n
Drive car/have own transportation	49
Do not need it/live in rural area/retired	28
Age related/additional needs (disabilities, child seats)	10
Does not match schedule/restrictive	8
Do not have it provided/does not apply	5
Always use rental for beaches	3
Only use when traveling	3
Ride bike	2
Walk	2
Store needed items in car	1
Company vehicle	1
Does not work for my line of employment	1
Not feasible	1
Crowded	1
Too lazy to bother	1

^{*} Percentages do not add to 100%. Some respondents chose more than one option.

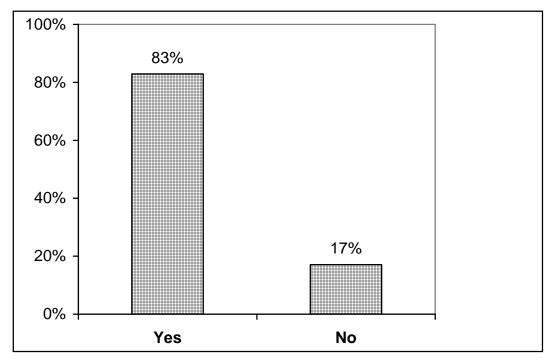


Figure 9.Have you ever used a transit shuttle or bus at a national park, national forest, or at another public facility?

Question 3

Table 46. Participation in natural resource decision making.

Activity	Participation
Signed a petition	81%
Attended a public hearing or meeting	50
Joined a special interest group	47
Contacted or wrote a U.S. Senator or State Legislator	39
Contacted or wrote a state or federal agency	33
Wrote a letter to the editor of a newspaper	14

Questions 4 & 5

The majority of visitors (97 percent, n = 1315) indicated that they lived in the United States, with representation from all 50 states (Table 45). The next most common country from which visitors came was Canada, followed by England.

Table 47. Visitors' state of residence.¹

State	n	State	n
Alabama	6	Montana	3
Alaska	6	Nebraska	11
Arizona	33	Nevada	14
Arkansas	3	New Hampshire	4
California	343	New Jersey	32
Colorado	42	New Mexico	6
Connecticut	8	New York	55
Delaware	4	North Carolina	10
District of Columbia	3	North Dakota	7
Florida	18	Ohio	33
Georgia	13	Oklahoma	8
Hawaii*	22	Oregon	34
Idaho	19	Pennsylvania	25
Illinois	45	Rhode Island	1
Indiana	13	South Carolina	3
Iowa	19	South Dakota	3
Kansas	13	Tennessee	8
Kentucky	8	Texas	40
Louisiana	5	Utah	18
Maine	3	Vermont	4
Maryland	15	Virginia	27
Massachusetts	31	Washington	90
Michigan	22	West Virginia	4
Minnesota	49	Wisconsin	31
Mississippi	1	Wyoming	1
Missouri	22		

^{*}Does not include residents of Kauai

 $^{^{1}}$ 97% of respondents (n = 1315) stated that they lived in the United States.

Table 48. Gender of respondents

Sex	Percentage
Female	59%
Male	41

n = 1323

Question 7

Table 49. Percentage of respondents by age category.

Age category	Percentage
18-24	1%
25-34	14
35-44	16
45-54	26
55-64	27
65-74	13
75-84	3
85 and above	< 1

n = 1307

Question 8

Table 50. Employment

Percentage
72%
22

n = 1308

Question 9

Table 51. Ethnicity of visitors

Ethnicity	Percentage
Not Hispanic or Latino	97%
Hispanic or Latino	3

Table 52. Racial origin of visitors.

Racial Origin	n
White	1238
American Indian	21
Black or African American	8
Asian	
15	14
9	9
6	6
5	4
3	3
1	1
Native Hawaiian or other Pacific Islander	2

Question 11

Table 53. Education among Kilauea NWR visitors.

Education	Percentage
Less than high school	< 1%
High school	9
Some college	21
College degree	27
Advanced degree	43

n = 1322

Question 12

Table 54. Number of members in visitors' households.

Number of household members	% respondents
1	8%
2	59
3	13
4	14
> 4	6

n = 1335

Table 55. Income of Kilauea Point NWR visitors.

Income	Percentage
Less than \$10,000	<1%
\$10,000 to \$14,999	<1
\$15,000 to \$24,999	2
\$25,000 to \$34,999	3
\$35,000 to \$49,999	8
\$50,000 to \$74,999	20
\$75,000 to \$99,999	21
\$100,000 to \$149,999	26
Over \$150,000	20

Kilauea Point National Wildlife Refuge & Lighthouse Visitor Survey: Summary and Comments from Open-Ended Questions

Participants visiting the Kilauea Point National Wildlife Refuge and Lighthouse who agreed to partake in the survey were asked a series of questions, but it was the open-ended questions that required a written explanation. To better clarify their experience, they were first asked, "What would bring you back?" and secondly, "What would enhance your experience?" These questions gave each individual the opportunity to provide a fuller response. The following represents categories reflecting general trends and answers.

Section 3, Question 6: What would enhance your experience at the Refuge?

When asked "What would enhance your experience?" there was a wide range of responses from visitors. The most frequent requests were for visitors to have access to the lighthouse and regain the right to use the trails within the Refuge. "Being able to make a reservation to go inside the lighthouse and easier access to information about the lighthouse, such as its keepers and history, would enhance our experience," replied one visitor. Many respondents expressed interest in participating in hikes or guided tours within the Refuge; suggestions included opening trails down to the beach and through the nesting grounds for visitors to explore the area. Those who would prefer a guided visit suggest, "It is difficult to recognize birds when they fly, or really appreciate the experience without someone experienced, to talk about his/her passion." Numerous people implied that there is an importance and a desire to have small group lectures, films, audio tours, or interactive displays about the history and wildlife. Seeing more wildlife was a common theme, however, most seem to realize this depends on the weather and time of year. It was suggested that Refuge provide a pamphlet illustrating a guide for the best time to view birds and animals, in addition to more telescopes and binoculars for public use. One visitor commented that the number of stools for children to use for viewing was lacking, while others suggest that benches and the availability of seating and/or picnic areas is highly desirable for resting and relaxing in this pristine environment. Comments regarding the accessibility for handicap or disabled persons were very positive, yet others suggest better signage surrounding the Refuge and more parking or a shuttle bus. Additional requests included: a larger Refuge, less people, more staff and volunteers, and the availability of food and beverages, while on the other hand, some visitors would not change a thing: "Change nothing, it was a wonderful place filled with beauty and pleasant people and it was refreshing to not be expected to pay large amounts of money to enter." Visitors stated that if any change occurred, they would like to see the Refuge open earlier and close later so they have the opportunity to enjoy it more.

Section 3, Question 7: What experiences have you had at the Refuge that would bring you back?

Reactions to the question "What would bring you back?" were largely very positive and enriching. Patterns indicate that the respondents enjoyed the scenery and the view of the coastline, in addition to the calm, clean, peaceful environment. One respondent replied, "The

serenity and calmness of the area for people and wildlife to co-exist at the refuge will bring me back. The beautiful landscape and scenic views of the coastline is another plus." Bird watching and wildlife observation were activities that proved to be awfully meaningful to the visitors, particularly that of the albatross, sea turtles, whales, and dolphins. Numerous people added that the voluntary use of binoculars was appealing, as one person explained, "The binoculars were a delightful tool to use in our visit. I wouldn't have thought to bring any, but they enhanced the educational experience. Someone was thinking." Additionally, the staff and volunteers were described as enthusiastic, friendly, informative, knowledgeable and available to answer questions. Yet, still others praised the freedom and ability to enjoy the refuge at their own pace. Lastly, the environmental education opportunities and the historical significance encompassing the region were features that would bring visitors back to the Refuge. "We bring our grandchildren to see the refuge and lighthouse...it is important for their learning of nature and history in the island of Kauai," a respondent replied.

Verbatim Responses

Section 3, Question 6: What would enhance your experience at the Refuge?

- longer opening hours. We came one evening earlier in the week & you were closed, so perhaps better advertising of opening times. 2) perhaps a telescope set up to view the birds on the cliff face opposite would be helpful & enable those who aren't bird
- A bit more parking spaces
- A few more benches under trees to rest or just sit and view
- A film on history of the locale
- A film on the wildlife & history of the refuge.
- A guided nature walk.
- A guided tour
- A guided visit walk. It's difficult to recognize birds when they fly, or really appreciate the experience without someone, experienced, to talk about his/her passion.
- A hiking trail that has good scenery along the way. Does not have to be a guided tour.
- A large photo (wall mural) of the view from the top of the lighthouse
- A little over rated. Beautiful yet not a lot to do
- A more "natural" trail to walk along (despite its restricted area)
- A more private & meditative experience would have been more enjoyable.
- A much larger area.
- A place to hide from the rain
- A place to sit & watch the birds for a longer time
- A pre-recorded audio/guided tour
- A restaurant; lunch and dinner with a scenic view
- A SHORTER QUESTIONAIRE [sic]
- A sign reminding people in the parking lot not to lock their keys in the car!
- A small restaurant to sit and have a bite and watch the birds & the ocean.
- A small theatre showing a documentary about the animals, plants & birds or a lecturer giving a talk with slides or a film (20 min.). A short history of the lighthouse & point.
- A tea shop.
- A telescope at the viewing areas & a souvenir penny smashing machine
- A tour inside the lighthouse. See the view from the top.
- A video of the surrounding area, maybe there was one we missed.
- A walking tour down to the beach
- A walking trail or hiking area

- Ability to go on more paths--too much closed off & not acceptable
- Access into lighthouse
- Access to hiking trails on the cliffs if this is refuge land
- Access to the interior of the lighthouse & a chance to see & learn about the clam-shaped fresnel lens.
- Access to the lighthouse
- Access to the top of the lighthouse
- Access to the top of the lighthouse
- Access to top of lighthouse
- Access to top of lighthouse; more nature walks; access to water
- Accessibility from highway to refuge
- Advance marketing, more high tech/hands-on stuff for kids
- All good
- Allow more time for our next visit, more access to lighthouse
- Allowed to go up in the lighthouse
- An earlier opening hour would have been nicer.
 Parking is good at the refuge, but poor at the overlook above the entrance.
- An umbrella to get out of the sun so i could stay longer
- As previously stated--a local brochure described a guided hike at the refuge. That was my main purpose in coming other than taking pictures. The refuge staff informed me that they no longer had a guided hike and there was no access to any trails.
- At the birds of prey center in boise, we have injured birds that cannot be returned to the wildthese can be viewed by the public. It's very popular.
- Audio tour
- Availability of trails into preserved area
- Background of the lighthouse. Brochure to be handed out upon paying fee
- Bathrooms near the lighthouse
- Being able to access the lighthouse
- Being able to bring a picnic and sitting back and enjoying the peacefulness.
- Being able to climb the inside of the lighthouse.
 Many nps lighthouses are capable of handling visitors but too few are open for such visits. This goes for f&wl site also! No good reasons to restrict access, in most cases.

- Being able to climb the lighthouse tower and view from atop. See mechanics of gears, drive, etc.
- Being able to climb the lighthouse. Beverages.
- Being able to come more often!
- Being able to enter lighthouse
- Being able to explore more areas along the cliffs
- Being able to explore the area around
- Being able to go in the lighthouse
- Being able to go in the lighthouse
- Being able to go inside and to top of lighthouse
- Being able to go inside the lighthouse and up in it.
- Being able to go into & up into the lighthouse
- Being able to go into (up) into the lighthouse.
 Being able to see whales--but we came at the wrong time of the year
- Being able to go into the lighthouse
- Being able to go to the top of the lighthouse
- Being able to go to top of lighthouse. Better views of birds--only saw three signs what birds looked like. I understand not getting too close, though.
- Being able to go up in lighthouse.
- Being able to go up inside lighthouse
- Being able to go up into lighthouse & see the lens & the view from there
- Being able to go up into the lighthouse
- Being able to go up into the lighthouse and seeing the lighthouse in use
- Being able to go up into the top of the lighthouse
- Being able to make a reservation to go inside the lighthouse and easier access to info about lighthouse keepers and history.
- Being able to see albatross babies in February
- Being able to see more wildlife
- Being able to spend more time there
- Being able to take a tour of the lighthouse, both up & down
- Being able to tour the lighthouse itself
- Being able to tour the whole lighthouse & see the view & seeing whales
- Being able to view the interior of the lighthouse.
 I understand it's only once a year you can go to the top. Was disappointed because i enjoy lighthouses.
- Being able to visit more often!
- Being able to walk up into the actual lighthouse & see the view from higher; trails around the cliffs, other areas of refuge--ones that wouldn't disturb birds
- Being allowed to walk up in the lighthouse;
 being able to see whales (there weren't any when i was there)

- Being at the refuge at an opportune time for more wildlife photography
- Benches
- Benches (secluded)
- Benches to rest & enjoy the view
- Benches to sit on
- Benches with views
- Better description of the light itself
- Better directional signs on turnoff. I went straight instead of left once on road--maybe a sign telling how many miles to refuge--as i thought i miss [sic] the turnoff.
- Better directional signs.
- Better gift shop with good posters, postcards, magnets etc to purchase
- Better management & scheduling of hikes
- Better parking
- Better parking availability
- Better parking, benches
- Better parking, though staff members were helpful with directing traffic
- Better parking.
- Better parking; more information about the marine life in the area & the times of year they can most likely be seen
- Better signage for parking
- Better signage on types of plants.
- Better signage showing way to refuge. Signs on 56 extremely poor. Sign at second turn poor.
- Better video-viewing environment--there was too much ambient noise to hear the sound.
- Better weather (it rained that day)
- Better weather--it was raining and overcast the day we visited. And, getting to see the inside of the lighthouse; we wanted to go up inside one and get the full experience.
- Bird poo cleaned off walkway
- Bookstore lacking historical information
- Bringing lunch & spending more time
- Cannot think of anything
- Can't think of a single thing
- Can't think of any
- Can't think of anything
- Can't think of anything
- Can't think of anythingCare for older people.
- Cart or tram to take people (especially older or disabled) to the lighthouse and then back to the parking lot.
- Chairs or benches to sit down

- Chairs to sit & enjoy the view for long periods
- Chance to walk on trails--those were closed
- Clean up the bird waste
- Cleaning up the duck/bird "poop"
- Climb to top of lighthouse
- Closer access to boobies with a guide
- Closer to wildlife
- Coming at a time when more wildlife could be seen
- Coming during the whale watching season
- Coming other than august so i could view the wildlife!
- Couldn't see where it lacked in any area
- Display of photos shot by visitors.
- Do not even think of charging \$90!
- Docent tours; hiking trails; seeing more whales
- Docents
- Docent-type guides
- Dolphins
- Don't know
- Don't change a thing
- Earlier opening
- Earlier opening
- Earlier opening time if you come by foot
- Easier access--better parking position
- Easier handicap access
- Educational videos about the lighthouse history as well as the area and its people.
- Entrance into lighthouse (minor); talking to staff longer.
- Everything was excellent the day we were there!
- Everything was nice-- guided tour opportunity would be great
- Everything was perfect.
- Everything was wonderful ****staff were superb
- Excellent as is
- Expanded educational classes for the environment and wildlife; possible picnic tables out by the parking area; more choices in the gift & bookstore
- Expanded walking areas
- Experience was great however, would have enjoyed access to the lighthouse.
- Fake, life-size replica of major birds in area
- Fewer people
- Fewer people, more wildlife
- Fine--we would not want to see it overdeveloped
- First visit was after hours--longer hours. It wasn't clear that you could drive down there.
- Flowers
- For it to be larger, less crowded
- Found this experience satisfying
- Free entrance fee

- Free gifts
- General comment about Kauai--the traffic conditions were very frustrating. I probably will not return as long as conditions remain as they are. If i do return i will stay at the resort and not go exploring.
- Getting into lighthouse to view frenzel [sic] lens
- Go into lighthouse
- Go up in lighthouse.
- Go up to top of lighthouse
- Going to the top of the lighthouse
- Going to the top of the lighthouse
- Going up in the lighthouse
- Going up into the lighthouse & of course if whales or dolphins were jumping out of the water
- Good as is.
- Great
- Great as is!
- Great as is!
- Great as is.
- Great experience--nothing
- Great the way it is.
- Great the way it is.
- Guide at lighthouse; more seabirds & animal life; less bird droppings or at least more cleaning! More souvenirs
- Guided tour
- Guided tour
- Guided tour of lighthouse
- Guided tour where ranger will explain the refuge
- Guided tours
- Guided tours, snack bar, seating
- Guided walks
- GUIDES EXPLAINING WHAT BIRDS HABITATE [sic] & WHY THE DIFFERENT NESTS
- Had wonderful time
- Handouts available about area/history
- Have more t-shirts for sale in all [doubleunderlined] sizes for adults & children. I wanted to buy a shirt but there were none in my size-m.
- Have whales come closer
- Having "golf cart" type of transportation around grounds for handicapped
- Having a guided tour of the upper part of the lighthouse (as well as the lower part). I think that would be fun to see
- Having a more organized tour regarding info about the lighthouse would be helpful
- Having clearer & closer views of the wildlife.
- Having it be whale season (seeing a whale)
- Having 'ranger-like' staff giving talks--not just the signs; i love educational stuff.

- Having scientific staff available.
- Having someone talk about the history of this area/attraction
- Hawaii, oddly, seems to have a dearth of shaded parking spaces
- Hiking into (with shuttle for those unable)
- Hiking trails?
- Hourly guided tours, especially if you could actually enter the lighthouse.
- Hula girls
- I [sic] was good.
- I can't think of a thing.
- I can't think of a thing--signs were clear & informative. Staff very helpful. Reasonable disabled parking
- I can't think of anything to add
- I can't think of anything.
- I can't think of anything. It met my expectations.
- I didn't really know that there were grounds to visit other than the area around the lighthouse.
- I don't have any suggestions.
- I enjoyed everything! I am not sure what would enhance my experience.
- I enjoyed it very much. Need access to cold water at the main view point where the tv is.
- I enjoyed my visit very much but if it would have been crowded it would have interfered # of people at a time may need to be regulated in the future
- I enjoyed the experience & didn't have any desire to change it.
- I feel the refuge was a great experience--i don't know if it's possible to have more hiking trails & guided tours of these trails.
- I forgot my binoculars
- I found the experience just fine overall. I would not like to see too many buses, etc., there as i think the wildlife & birds may go elsewhere.
- I had a great experience; not much else could have been done to enhance any future experiences
- I had no problem, but my brother has difficulty walking long distances. We had no 'handicapped' tag for our rental car, nor does he have one at home. I just felt badly that he had to walk such a distance to see what we came to see (and back again!).
- I had physical problems at the time.
- I have enjoyed the refuge during different seasons i have been to Kauai. Open area on holidays. We made 2 trips from poipu because it was closed on human rights day.
- I heard that the docents would lead birders up the hill (forget the name of hike). I was disappointed that these hikes have been

- cancelled. Please restore! Also, docents should be there with spotting scopes for tourists.
- I know you can't control it, but more wildlife. I didn't see any sea turtles this trip
- I like it the way it is
- I like it the way it is.
- I love the peaceful beauty of the refuge & the breath-taking scenery!
- I loved the guided walk that used to be available.
- I really enjoyed it as it was
- I think it was handled well
- I think it was outstanding & can't see any improvement
- I think it would have been nice to go up inside the lighthouse itself.
- I thought it was great!
- I thought it was perfect
- I thought it was really neat. I hope one day the [sic] rebuild the walking trails. Spoke to a man who use [sic] to give guided tours of the trails. He was very informative.
- I understand that some areas were closed off that day, but i think that a person's ability to walk with the animals (on paths, of course) is very under-rated. I liked how there were some "trails" with informative signs that allowed me to get into the fee
- I was very satisfied in all respects
- I went to the refuge because i wanted to see albatross & redfooted boobies. I suppose the experience could have been enhanced if one of each had volunteered to fly over & sit next to me!
- I wish i was able to go up the lighthouse.
- I wish we had visited during a time of year that whales, etc. Could be viewed from this fabulous vantage point
- I would have enjoyed a tour. Tours are apparently no longer offered.
- I would have liked to climb the lighthouse, but i understand that would be expensive to maintain safely.
- I would have liked to go up into the lighthouse
- I would have liked to have seen the top of the lighthouse on the inside. It was closed where we couldn't go into it
- I would like to be able to walk into more areas of the refuge (without disturbing wildlife of course). I would like to know more about the history of Kauai peoples, see the inside of the lighthouse, hear stories about happenings at the lighthouse, ship w
- I would like to see more hikes, even short ones
- I would love to have seen whales & dolphins

- I would not change a thing; the staff was very friendly & helpful; you are just beautiful people; god's chosen.
- I would prefer that the site remain undeveloped to any greater extent. The preservation of natural conditions for wildlife is very important to me. If anything interpretation can always be improved.
- I'd like to be able to climb the interior stairs of the lighthouse
- If i could visit Hawaii more often
- If i had a video/cassette/headset given to me along w/binochuars [sic], explaining what i was looking at/viewing.
- If i had realized that they had rental binoculars, i wouldn't have to buy them (good idea to rent binoculars!)
- If i had seen a whale
- If i had seen whales
- If i had spent more time. Bring my birding scope.
- If it were open later--we got there kind of late & had to leave before we wanted to.
- If the lighthouse was in working condition as it was designed and built
- If the original light was working.
- If the trails were open. Probably would have stayed longer. Would like to see more albatross & gooneybirds!
- If the walkway to lighthouse was washed off more often
- If they had a small snack & drink shop
- If we would have seen whales/dolphins
- If you could have a staff member give a guided tour, explaining the importance of the lighthouse, and the wildlife.
- Improved and additional parking
- In my opinion, the only thing that would have enhanced my experience & interest at the refuge would have been if we could have gone into the lighthouse there & been able to walk up the staircase to the top. I love lighthouses & was disappointed that we w
- In years past we particularly enjoyed the crater hill walk. We would like to see it reopen.
- Increasing the size of the refuge and having trails that allow visiting
- Info (more) on animals other than birds; trail down the cliffs to the ocean.
- Info center
- Info tours
- Interactive faq, more videos. Benches near the walkway
- It was a great experience. Elimination of duck/goose poop that was everywhere would enhance experience.

- It was a wonderful visit--the binoculars were greatly appreciated!
- It was already good.
- It was beautiful & informative
- It was enjoyable as it was--volunteers pleasant & helpful, walking, view beautiful wildlife interesting
- It was fine
- It was fine
- It was fine
- It was fine as is
- It was fine the way it was
- It was great
- It was great as it was.
- It was great experience[sic].
- It was great the way it is.
- It was great!
- It was great. Can't think of anything
- It was mentioned about a bus shuttle system, that would be great. More information about the birds, maybe a self-guided nature tour. The binders of information was rally cheesey, not professional at all
- It was nearly perfect
- It was perfect.
- It was pretty maxed out-we had wildlife & friendly staff
- It was quite warm on the day we attended--more shaded displays would help and benches/seats in shaded areas to watch and identify the birds and their nesting
- It was raining!
- It was very enjoyable as it was.
- It was very good, but i would like to have seen a whale.
- It was very hot and crowded. Some visitors were not considerate of others.
- It was very satisfactory
- It was wonderful
- It was wonderful and the volunteers were absolutely wonderful. Informative and very friendly. We really enjoyed our visit there.
- It would be nice to be able to go up to the top of the lighthouse
- It would be nice to be able to see more of the lighthouse itself.
- It would be wonderful if the refuge could be more natural; more areas to walk or hike. Not only are there too many cars, the refuge is getting crowded.
- It would have been nice to be able to go to the top of the lighthouse, but we understand if that might not be possible.
- It would have been nice to have been able to climb up the inside of lighthouse.

- It would have been nice to have seen more whales and seals.
- It's great the way it is.
- Keep it accessible
- Keep it as it is
- Keep lighthouse in top condition; maybe bring in naturalists and/or biologists (retired university people??) To give talks--show slides--about wildlife.
- Keep up the good work. More complete and authoritative (scientific/serious) books for purchase on site
- Keeping the natural setting for the wildlife well preserved
- Larger area, less people
- Larger parking lot
- Larger, more to see
- Learning more on history of the area
- Less bird poop
- Less crowds
- Less people
- Less people.
- Less people; early or late opening
- Less stupid people viewing birds (sorry i couldn't help myself)
- Less vehicular traffic
- Less wind which i realize you have no control over
- Lighthouse
- Lighthouse & viewing wildlife
- Lighthouse was expected (& satisfied) highlight of visit. Took photos of it & area surrounding it & of albatross flock on nearby hillside. No time for anything else.
- Lighthouse working at night
- Like to be able to go into lighthouse
- Lived up to expectations
- Longer hours, especially sunset
- Longer hours--we drove in to find out the refuge closed in 15 min.
- Longer open time in hot season
- Longer season for whale watching
- Longer walking/hiking opportunity, such as being able to hike from the upper parking lot (outside the main gate).
- Longer walks to the attractions would be alright for me. If parking were moved farther away, the adventure may be more of an experience.
- Look section 4 no. 6
- Make the refuge larger
- Maybe a little more in the gift shop
- Maybe have additional telescopes to view the birds
- Maybe less bird poop

- Maybe more info about the ocean there; the dolphins we were seeing...
- More access or opportunities to view & photograph wildlife.
- More activities
- More advanced tours for birders or naturalists.
 The ability to go up & see the fresnel lens vs.
 Just seeing pictures
- More and knowledgeable staff.
- More animals to view
- More areas accessible to the public
- More availability of staff to answer questions
- More availability to see the wildlife (tour going through took up much of whale watching area)
- More benches to sit on to be able to watch whales & birds
- More benches to spend a little time w/out having to stand.
- More binoculars
- More binoculars (high power)
- More binoculars available.
- More binoculars! Had to wait due to crowd.
- More books about wildlife--whales, dolphins, sea turtles. Hosing away bird droppings in viewing area.
- More details about lighthouse
- More details on the "manned" lighthouse era
- More docents/volunteers with information
- More educational information of wildlife
- More educational signs
- More educational signs
- More educational signs/brochures for younger visitors
- More environmental and historical education activities
- More exhibits.
- More exhibits--ability to climb the lighthouse
- More guided tours w/natural history & wildlife information
- More handicap parking
- More helpful refuge staff--to inform us about the natural history & preservation of the site
- More helpful staff. The staff was very informative, but not enough to answer so many visitors' questions.
- More info
- More info on lighthouse at the lighthouse. If there were signs w/info i did not see them.
- More info on signs; cold drinks, water fountain in main area or some shade available--it had to be 90+
- More info on the birds
- More info on the self-guided nature trail. Maybe recorded message to hear when you press a

- button. Being able to go up into the lighthouseour kids would have loved to do that.
- More info/activities in the museum/bookstore
- More information about refuge wildlife
- More information in pamphlet barn
- More information on birds
- More information on flora/fauna
- More information on geology/formation of ecosystem & putting it in time & scale perspectives
- More information on the wildlife, binoculars with a little more power to be able to see the birds
- More information on the wildlife--written-possibly some guides just walking around answering questions & suggesting good sites for viewing.
- More information signs about other stuff besides the birds
- More information--larger visitors center with interactive information for visitors
- More interactive displays about the history and wildlife of the region
- More interpretive help identifying seabirds & animals
- More knowledgeable volunteers to help identify birds; a better place to view slideshow/films before walking around--place now used too noisy with people doing other things in area
- More mounted binoculars for whale watching
- More natural wildlife exposure & education--we really wanted to do the walk & were very disappointed it was unavailable
- More on the lighthouse
- More parking
- More parking
- More parking
- More parking & handicap transport from parking to light house. Guided tours for handicapped persons.
- More parking area
- More parking spaces
- More parking spaces
- More parking. Access to the top of the lighthouse.
- More people in different areas explaining how & where areas of interest would be more people to point out things
- More places to just sit & enjoy the area
- More places to sit & enjoy view (& less wind)
- More places to sit & view ocean; better parking just outside of refuge to view lighthouse.
- More places to sit and enjoy the wildlife and views

- More places to sit and relax while enjoying the sites [sic].
- More places to sit down outside.
- More places to sit, lunch, unique tours. Picture opts. Point out just how special the refuge is to those of us who don't know.
- More powerful binoculars to view whales.
- More powerful telescopes to see albatross--they are magnificant [sic].
- More refuge staff available to provide tours
- More seating
- More seating
- More seating to rest in order to stay longer.
- More seating where scenic views can be enjoyed w/o people getting in the way
- More seating.
- More shaded areas as a break on lawn area
- More signage & more opportunities to see wildlife & surrounding area (guided tours--self & other) to learn more about wildlife & the natural habitat surrounding the area.
- More signs about wildlife and history. I missed whales but they were not in season. More photos in the lobby
- More space
- More staff to answer questions about wildlife
- More staff/volunteers to teach.
- More staff; longer hours (closed at 3:00pm!)
- More stuff in gift shop; more videos to view
- More telescopes for whale watching
- More telescopes to view the birds and ocean
- More things to do & see
- More time
- More time & more help spotting whales/dolphins
- More time to enjoy the beauty--that was our fault as we were on our way to north shore for the day.
- More time!
- More to see
- More trails on princeville side
- More trails to hike.
- More turn offs
- More vegetation & flowers
- More vegetation--flowers
- More viewing points
- More views of wildlife
- More walkways--scenic hikes
- More whales
- More whales or dolphins, but that isn't your problem
- More whales to see!
- More wildlife

- More wildlife but that's out of your hands.
 Perhaps, if possible better trails to set closer to water.
- More wildlife viewing opportunities
- More wildlife viewing, maybe staff out pointing things out like you experience at zoos. All we saw were a few birds that day and they were too far to tell which kind for the most part.
- My experience was "outstanding", but parking could be improved.
- My experience was excellent.
- My son enjoyed looking at the dolphins through binoculars, but having to wait for the one stool to stand on to look over the fence made him impatience (and the dolphins farther away).
 More stools for children to stand on would have been better
- My visit was perfect, what i expected
- Naturalist program at specific times like the guided tour but on special topics several times a week. I would come more than once a week for variety of programs.
- Nature trails. Information on places to view sea life (whales, dolphins, turtles, etc.)
- Need to schedule a trip in late winter or early spring for whale watching
- Needs more signs on the highway, etc. Helpful to finding it. We almost accidentally found our way there.
- Next time we come we would like sunshine not thunder and lightning along with 3" of h2o in 25 min
- Next time would spend more time at refuge.
- Nice rangers & attendees
- Nice restaurant &/or coffee house nearby (not on the premises).
- No complaints
- No fee entrance [sic].
- No rain
- No suggestions--i enjoyed the visit
- No wind & being able to go up to see the lens in the lighthouse
- Not much more--thoroughly enjoyable.
- Not much, it was pretty wonderful.
- Not much, it's pretty nice as it is
- Not much. It was very satisfying.
- Not much--we had a great time!
- Not sure
- Nothing all excellent
- Nothing but more time--we'll be back
- Nothing can enhance my experience. I had a great time wherever i went on your island.
- Nothing it was a wonderful place filled with beauty & pleasant people & it was refreshing to

- not be expected to pay large amounts of money to enter
- Nothing it was breathtaking. Excellent visit.
 Whales were playing. Birds were beautiful.
- Nothing more than what i experienced
- Nothing really. Just being able to maintain its natural beauty and non-commercial status is enough.
- Nothing that comes to mind
- Nothing, i thoroughly enjoyed it
- Nothing, it was quite nice! Thank you.
- Nothing, was very good.
- Nothing. It was a picture perfect day in paradise.
- Nothing. It was really perfect. One time we chatted with a lighthouse naturalist, another time someone there pointed out the albatross on a distant hill. The natural exquisite view & beauty are all you need. Enhancements of infrastructure will make the e
- Nothing. Very good as is.
- Nothing. We enjoyed our visit. We were just driving the area & saw the signs.
- Nothing--having binoculars available was great!
- Nothing--it was great
- Nothing--it was great!
- Nothing--the natural beauty & opportunities for our kids to experience wildlife up close are great
- Nothing--we really enjoyed our visit
- On our visit the refuge was not crowed so more access, trails, for viewing the birds & coastline would be a plus. With larger crowds this could be a problem.
- Only visited once; more wildlife near by
- Open a bit earlier. We came too early and then we came back. Better parking.
- Opening earlier (we had to come back)
- Opening up the little trail near the restroom?
- Opportunity to go in the lighthouse
- Opportunity to hike
- Oral history from a staff member
- Our experience was very enjoyable. We were told that we went on a good day--no crowds.
 Both times we have gone there have been no crowds--august during the week
- Overall good
- Overall good experience
- Overall, i thought it was a great experience. We learned lots from a great employee (no enhancement needed)
- Overall, this was a good experience. Parking was better in 2003 than 2002 because we were there during spring break. This august we visited on a weekday afternoon.
- Parking can be a problem during times when there are lots of visitors--it would seem that you

- should plan for parking away from the refuge and the use of shuttle bus.
- Parking needs to be better marked with signs. It is not clear that you can drive in the entrance.
- Perhaps a bit more wildlife
- Perhaps a separate area/room set aside for viewing the film
- Perhaps an audio message telling about the many animals on the posted boards around the lighthouse.
- Perhaps beach access
- Perhaps being able to go up inside the lighthouse
- Perhaps benches to sit & look out
- Perhaps if it had been possible to climb up in the lighthouse to see the lens more closely!
- Perhaps more info from volunteers, earphones that discuss area & history
- Perhaps restoring the area to a more natural landscape, particularly all the open-grass area, thereby also providing some shade with native bushes or trees that may have normally grown there.
- Periodic tours/presenters
- Picnic area; didn't see one.
- Places to sit & look out--& a lot less goose poop
- Places to sit & rest/reflect.
- Places to sit at table for coffee, snacks
- Places to sit down
- Possible guided tour. Didn't look into this though and may already be available
- Possibly having hours expanded, but do understand the reason to not conflict with wildlife
- Possibly some shaded sitting areas.
- Providing more staff & visitor information.
- Ranger talk or video. Visitor center away from lighthouse w/adequate parking. Use brochures instead of signs to describe birds. More parking away from current location--walk or shuttle to refuge.
- Really the only thing that might have been a little bit better was the parking lot @ the very beginning overlooking a scenic view--cliff--right before we went into the actual "refuge".
- Refuge staff being able to talk to us & give us more information about everything there
- Refuge staff members available outside gift shop to answer questions "in person"
- Refuge staff more accessible & available to answer questions and offer information about the refuge & wildlife
- Reinstate the 1 hr guided walking tour of the area!!
- Resting/seating availability
- Restrooms up by the lighthouse

- Return parking lots to natural state. Bus visitors in from distant parking lot
- Satisfied
- Satisfied with the way it is
- Scheduled talks by park personnel; tours by park personnel.
- Seating areas
- See attached page
- See more whales & birds.
- See more whales and dolphins
- See whales (different season)
- Seeing birds up-close; walking past nesting areas. A hike on a path through the actual nesting grounds, close up view of mammals. More contact with wildlife for children.
- Seeing dolphins and/or whales
- Seeing more animals (they were all in bushes)
- Seeing more whales
- Seeing more wildlife
- Seeing more wildlife
- Seeing more wildlife
- Seeing more wildlife
- Seeing more wildlife; more binoculars made available
- Seeing more wildlife--we only saw birds.
- Seeing the dolphins dance & spin again!
- Seeing the lense [sic] lit.
- Seeing the whales in the fall
- Seeing the whales, etc.
- Seeing whales
- Seeing whales
- Seeing whales
- Seeing whales & sea mammals/fish. Also nenes
- Seeing whales or dolphins
- Seeing whales!
- Seeing wildlife (whales, dolphins, etc.)
- Seemed just what i expected and wanted
- Self guided audio tour
- Self guided nature trails
- Shade/misting/picnic (no eating) tables being able to watch sunsets from lighthouse
- Shelter for viewing
- Short films, short lectures
- Short guided tours (free) or introduction to the area, telling me about the things (places, wildlife, topography) that i am seeing (or will see). Preferably by a guide
- Short tour from a refuge worker
- Show damaged birds in cages; able to go to top & bottom of lighthouse
- Signs on the main road should be bigger so that you don't miss the turn
- Small group lectures!

- So happy that transportation was available for our friend who has difficulty walking
- Some benches--nothing fancy--to be able to watch wildlife, ocean, just take a break
- Some shaded areas; more info about the lighthouse
- Someone to help us find and identify the animals listed--we really didn't see any of the wildlife.
- Speakers/radio giving information on the wildlife & history of the refuge
- Spending more time there. Going on the guided tours.
- Staff explanation & information outdoors to show you where to look/stand & tell you what you see/should see, etc.
- Structured, live presentations on history
- Taking a birdwatching tour
- The ability to get closer to the wildlife.
- The ability to visit the top of the lighthouse.
- The beautiful the nature
- The binoculars were very helpful.
- The experience was wonderful--enjoyed seeing a school of spin(?) Dolphins
- The gift shop should expand to include tourist souvenirs not related to the refuge, making it more interesting and definitely more profitable!!! Surprising how empty they look!
- The ground was a mess from the nene birds.
- The guides enhanced our trip and are important to those who know less than we do about birds, etc
- The lawn was always very heavy in duck droppings--cleaning up freq. Would be nice.
- The roadway within 1/4 mile of parking needs to be wider.
- The visit was most enjoyable
- There is nothing we would change. If there is any suggestion--perhaps a short 5-10 minute audio visual targeted toward children
- There isn't anything that i would change or eliminate from refuge. Kauai itself has been one of the islands left untouched.
- There was a monk seal on the beach below. No one was there to point it out, no scope to let you see it.
- To actually tour the lighthouse inside. Secure trails to or alongside of coastline.
- To be able to climb the lighthouse
- To be able to get closer to the nesting bird colony.
- To be able to go inside lighthouse
- To be able to go up in lighthouse
- To be able to go up in the lighthouse
- To be able to go up in the lighthouse
- To be able to go up in the lighthouse

- To be able to go up the stairs in lighthouse
- To be able to walk to the top of the lighthouse for the view
- To be closer or see wildlife that lives close to the water line
- To experience "all" birds--fishes--animals in one visit
- To get to see some whales and dolphins
- To get what you paid for, seeing birds & poo isn't worth \$3.00. The lighthouse was awesome. Can people go to the top?
- To have access to the inside of the lighthouse.
 The ability to hike around the area.
- To learn more about the sea birds. One staff member informed me of the courtship process & the distances flown to require food for newly hatched birds. Maybe add informational videos on birds.
- To see a whale or a dolphin. I suppose one has to visit during the right season.
- To see some more wildlife in the ocean while overlooking the water
- To see the whales
- To view lighthouse
- Tour of bird sanctuary. On our first visit we were privileged to do your tour
- Tour of the lighthouse, more displayed info on it
- Touring light inside lighthouse & exsplaining [sic] how important light was to shiping [sic] transportation & industry & relateing [sic] intenses [sic] where this lighthouse saved a boat or ship
- Tours of the lighthouse
- Tours of the lighthouse
- Trail to ocean
- Trails thru the preserve
- Uncertain
- Update buildings, gift/bookshop, better merchandise, offer walks to other viewing areas
- Very good
- Very good in fact we came two times to the refuge. Make no changes that would increase number of visitors at one time. Even if you have to give out slot times.
- Very good. Last thing done on island of Kauai.
 Only had 60 min
- Very informative and an enjoyable part of our stay on Kauai.
- Very pleased
- Very pleasurable, can view the beautiful coast, wildlife and of course the lighthouse (which is very nostalgic).
- Video about the area & habitat
- Video of history of lighthouse or a recording we could activate

- Viewing later than 4pm, but i can see the need to balance viewing w/impact on the environment
- Viewing more whales/dolphins
- Viewing scopes
- Visit again.
- Visiting again
- Visiting at a better time of year
- Walking guides
- Was excellent
- We did not get to see any whales or turtles. Not sure how you can "enhance" this. Maybe have "best time for viewing" guide.
- We didn't see any whales which we would've loved to see, but that's outside of your control
- We enjoyed watching the dolphins with your binoculars--even stronger ones would be great!
- We had a very good experience however a few more telescopes may have enhanced the experience.
- We had a wonderful talk about the area from a driver who took me up because i am disabled.
- We had a wonderful time. I can't think of anything specific that would have helped.
- We had great fun; beautiful area; couldn't be better.
- We have always had a wonderful time--very helpful staff/volunteers
- We like it as it is--keep up the good work!
- We like it just fine
- We like it very much the way it is
- We miss the guided walks through the nesting area. Is there anyway to reinstate those with very limited numbers of people?
- We plan on returning every year that we return to Kauai.
- We think the refuge is wonderful. We think the sights you get to see both scenic & animal life depend on the weather & the time of year you are visiting.
- We thought the lighthouse would be bigger & open for visitors to walk to the top & look out.
 Neither of us had been to a lighthouse before, and were expecting something a little different in that regard.
- We went b/c friends had see dozens of dolphins playing that morning--we didn't see any but saw a big sea turtle instead. Seeing the dolphins would have increased experiences. Even a video

- of dolphins playing around the lighthouse would have been cool
- We were there when you opened in the morning but suspect parking could be a major problem.
 Would come when the whales were "in season" to watch.
- We were unable to spend enough time there.
 Enjoyed the lighthouse and surrounding very much.
- We were very pleased by the staff and grounds!
 On that day we experienced the opportunity of observing a very large pod of dolphins--your staff offered binoculars
- We were very satisfied.
- We would have liked to climb to the top of the lighthouse
- We would have liked to see some whales. We visited in early sept. To my knowledge it was the wrong time of year. Oh well!
- Whale sighting
- Whales!
- Whales & lighthouse
- Whales up close! One had been playing right by the lighthouse before we arrived (according to the docent).
- Whales, dolphins and sea turtles
- Wish we would have seen wildlife
- Workers standing at points--directing your attention to something ordinary to Kauai, but may not be ordinary to other people not living in Hawaii. Wildlife conditioned to humans.
- Would have been fun to go up in the lighthouse
- Would have liked to have been able to walk on the nature trail
- Would have liked to have seen some whales but probably wrong time of year
- Would have loved to be able to watch the sunset form the lighthouse--seeing whales would have been exciting
- Would like to have seen more of inside of lighthouse, or more info on the lighthouse. More historical photos & information about lighthouse, its keepers & how they lived.
- Would love to have the bird hike back but realize it may have upset the nesting of the birds
- You have it all!
- Your [sic] doing a fine job

Section 3, Question 7: What experiences have you had at the Refuge that would bring you back?

- It was breathtaking
- The beauty of the area
- 1 member of our party was disabled. Very accessible & staff very helpful. Whale experience--awesome view/photo ops
- 1) the binoculars that could be signed out were great!!! We had brought only 1 pair & so we appreciated this!! 2) would like to come back in whale season 3) would love to identify more birds & watch them
- The scenic views. 2. The birds and wildlife. 3. The ability to enjoy the refuge at your own pace.
- 1.the helpful guides; 2.learn more of seabirds'
 3.seeing whales.
- A bird nesting quite near the fence line in back of the lighthouse
- A couple more short presentations on the natural history of the whole coastal area and cultural history too
- A great day
- A really pleasant place to visit. Every year different & enjoyable.
- Ability to go inside lighthouse
- Ability to view a beautiful place & see wildlife
- Absolutely everything--this refuge is a treasure!
- All
- All
- All of it, the well kept grounds, helpful staff, beautiful scenery, the beautiful birds that i photographed, it was great!
- All of the above
- All of the above
- All of the above.
- All of them. Fresh air, beautiful ocean, the birds and the people there.
- All of them--enjoyed it.
- All the wildlife, the view, the air
- All things considered, i would return.
- Animal sitings, lighthouse, views, beauty
- Appreciated the free use of binoculars
- As a montana boy who sees mostly mountains it was a joy to view the coastline again.
- As before, we had a seal, spinner dolphins & great staff
- Baby birds on the ground
- Beautiful
- Beautiful
- Beautiful & scenic
- Beautiful atmosphere; access for people with physical disabilities or walking difficulties
- Beautiful coastal scenery
- Beautiful coastline and birds, etc.

- Beautiful Kauai
- Beautiful natural environment & wildlife viewing
- Beautiful photos
- Beautiful photos.
- Beautiful scenery
- Beautiful scenery
- Beautiful scenery
- Beautiful scenery
- Beautiful scenery & the lighthouse
- Beautiful scenery, acceptable fee
- Beautiful scenery, birds, whales.
- Beautiful scenery, birdwatching
- Beautiful scenery, helpful staff. Saw dolphins.
 Birds & info about them interesting. Was good to have the loaner binoculars to see the dolphins
- Beautiful scenery, possibility of "watching" various animals & fishes
- Beautiful scenery, wonderful old lighthouse, natural surroundings, birds, whales, dolphins
- Beautiful scenery. Seeing baby birds in the holes they use for their nests.
- Beautiful scenery/photo ops
- Beautiful scenery; whale watching; good weather
- Beautiful scenic views
- Beautiful scenic views of ocean & coastline
- Beautiful setting & wildlife
- Beautiful sights & views; lots of birds.
- Beautiful site; multiplicity of birds.
- Beautiful spot; spinner dolphins
- Beautiful view
- Beautiful view and historic landmark at reasonable price.
- Beautiful view of the coastline makes it a great photography location. Also, the seabirds were very active here.
- Beautiful view, lighthouse history & whale watching & photography
- Beautiful view, scenery. Recommend to friends to visit when planning to go on vacation. We had a good time and enjoyed our trip.
- Beautiful view; great experience with birds/wildlife; i appreciate the well-kept environment!
- Beautiful views
- Beautiful views and a lot of bird waste on the grounds
- Beautiful views, helpful volunteers
- Beautiful views.
- Beautiful views. Interesting birds and signs/information about them

- Beautiful views--serene atmosphere--the birds
- Beautiful views--share w/my children
- Beautiful view--very interesting with whales jumping and all the different birds
- Beautiful weather, beautiful views
- Beautiful weather; clean, nice, informative facility
- Beautiful wildlife and view!
- Beautiful, photographic, loved all the animals
- Beautiful, serene once in a life time spot
- Beauty
- Beauty
- Beauty
- Beauty
- Beauty
- Beauty
- Beauty & historical significance of the place
- Beauty & staff helpfulness/friendliness
- Beauty of lighthouse & dolphins
- Beauty of scenery; whale watching
- Beauty of the area
- Beauty of the area
- Beauty of the area
- Beauty of the area!
- Beauty of the grounds and view, photo sites of the lighthouse.
- Beauty of the place
- Beauty of view; lighthouse.
- Beauty, peacefulness, hatching birds
- Beauty/serenity
- Beauty/wildlife
- Beauty--scenery
- Been 3 times. Will return. Birds/whales! Scenery is breathtaking! Visit in January for 3 years--late morning/early afternoon--number of visitors not a problem!
- Being able to see animals undisturbed
- Being able to see/watch the birds and wildlife as well as the native plants.
- Being in touch with nature and having the opportunity to be close to nature.
- Being left alone to explore...not being hounded by employees
- Best scenic view on the island
- Better parking & longer hours
- BEUTIFUL [sic] SCENERY
- Bird & whale watching
- Bird sanctuary was unexpected but very interesting--in addition to overall scenic beauty.
- Bird sighting & coastline viewing in nature state
- Bird sightings
- Bird viewing, whale & dolphin watching from shore
- Bird watching
- Bird watching

- Bird watching & the beauty of Kauai's coastline,
 & whale watching in February
- Bird watching extraordinaire! White tailed tropic birds my favorite
- Bird watching, whale watching, views, friendly staff.
- Bird watching; whirling dolphins; other wildlife watching.
- Bird/whale watching
- Birds & view
- Birds, whales.
- Birdwatching
- Birdwatching
- Birdwatching
- Birdwatching
- Birdwatching
- Birdwatching
- Birdwatching & photo
- Birdwatching very exciting
- Birdwatching, seals & dolphins, beautiful scenery, lighthouse
- Birdwatching, whale watching
- Birdwatching--whales, dolphins; nature walk, hike
- Bring back tours to crater hill; smaller groups.
- Chance to view whales
- Coastal views, animal sightings
- Coastal views, bird watching, historical information
- Coming in jan & seeing the whales--I'm hooked!
- Could see dolphins to the west; binoculars to borrow with sign-out list (terrific!!)
- Courteousness of staff, available binoculars for free to borrow
- Crater hill hikes--i will always come back anyway but miss the hike.
- Didn't know what to expect. Great surprise to see birds especially albatross.
- Dolphin & bird watching. Nice environment.
- Dolphin & whale viewing
- Dolphin viewing
- Dolphin watching
- Dolphin watching and serene atmosphere
- Dolphin watching. I had no idea that we would be able to see them. One of the rangers pointed them out. It was very exciting & to get the use of the binoculars was even more of a treat; we left ours at hotel.
- Dolphins
- Dolphins! Cute lighthouse beautiful coast
- Don't know that i would come back
- Educational information
- Educational information on whale activity
- Educational kiosk, whales, birds, lighthousewe'd bring our kids

- Educational opportunities--always learn or see something new. We always bring our guests there.
- Enjoy the birds, whales & dolphins
- Enjoyable atmosphere with stunning views; history on the lighthouse
- Enjoyed all of it
- Enjoyed birds & views--super!
- Enjoyed everything.
- Enjoyment enough
- Everyone there was very knowledgeable & friendly -- views/birds were great!
- Everything
- Everything about seeing nature at it's best. It was such a calm and relaxing trip. (thank you.)
- Everything!
- Everything, it was a wonderful place to see
- Everything--i love it there
- Everything--viewing birds & sea mammals
- Excellent assistance from the volunteers. Visitor center staff let us recharge our digital camera battery & suggested hikes on the island! Saw whales spout too.
- Excellent bird watching
- Excellent condition of refuge; outstanding picture opportunities
- Excellent info from volunteer guides
- Excellent photo opportunities
- Excellent refuge staff help!
- Excellent views of coastline & birds; fun to see nesting birds; enjoyed learning history of lighthouse
- Excellent whale watching
- Experience of birding/wildlife/sealife; guide's knowledge.
- Experiencing mother nature and her beauty would bring us to the lighthouse again but only if we came to visit our friends again one day.
- Fabulous ocean view; viewing the birds; observing dolphins and whales
- Family sharing--we like lighthouses
- Finally seeing nene!
- First visit had very few people. Just luck that day.
- First visit was too short--should have prepared better for more time
- Free binoculars was cool! No rental fee! Don't start restricting access to save things--let more folks enjoy things--open lighthouse tours.
- Friendliness of staff & volunteers

- Friendly place, beautiful coast
- Friendly staff; reasonable fees; wildlife viewing.
- Friendly staff; whales; birds; binoculars.
- Fun watching the birds, whales, surf. Great place to take pictures.
- Generally very good time
- Generally, everything is great
- Gift shop blended very nicely with the surrounding environment; everything, it will always be a stop on my visits to Kauai (unless the fee goes to \$90.00)
- Going inside the lighthouse. Peaceful, undeveloped area to sit, watch the coast, etc.
- Good opportunity to photograph wildlife.
- Good view of red-footed boobies
- Good viewing of birds & wildlife. I was unaware there were so many different kinds there. I originally went just to see the lighthouse.
- Good views
- Good whale watching.
- Gorgeous views
- Gorgeous views, wildlife
- Great beauty, history, wildlife, photo opts
- Great bird watching
- Great environment; helpful staff
- Great opportunities to view wildlife
- Great place to come to--i always come at least twice each trip to Kauai (10 trips in 15 yrs)
- Great scenery & wildlife
- Great scenery, fascinating bird watching
- Great scenery.
- Great scenic overlook!
- Great view
- Great view--beautiful scenery
- Great viewing
- Great views of the ocean & birds & dolphins.
 Please don't overdevelop. Keeping things simple works for us
- Great views!
- Greatest scenic view on island beside helicopter tour
- Hatching shearwaters, beautiful view
- Having binoculars available for free was great!
- Helpfulness of staff; the dolphins & birds
- Historical
- Historical value--easy viewing--binoculars for use--birds and natural habitat preservation efforts & educational experiences
- History of the site and of the lighthouse.
- I can't wait to come back to Kauai--it is paradise.
- I do come back--every time i visit Kauai
- I don't know that i will ever be able to get back to the islands at all, but if i do, the refuge would be a significant priority

- I don't know that i'd go back--there really wasn't that much to it and so i've pretty much seen what there is to be seen
- I enjoy identifying the birds and their nesting habits. Especially interesting were the protected areas where birds had made nests near the fence and it was possible to view the new hatchlings in their nests
- I enjoyed seeing the nene & other birds. The scenery was beautiful.
- I enjoyed the beautiful view and would like to have went [sic] into the lighthouse
- I enjoyed watching the birds on nearby cliffs.
- I have the picture we took of an outcropping, with little white dots for birds, as the wallpaper on my computer. It is serene & a beautiful reminder of a great trip.
- I just enjoyed seeing the wildlife, especially the baby birds.
- I like lighthouses. I would love to come back & see it & the refuge again.
- I liked the lighthouse
- I love watching the birds, we once (not this last trip) watched an albatross trying to land on the east side hills of the lighthouse, it was so fun to watch. A group of about 15 tourists must have stood there 20 minutes or so enjoying.
- I loved seeing the different wildlife & plants. The scenery was beautiful & calming. I was expecting just a lighthouse, but everything else was a pleasant surprise.
- I loved the film & all the information contained in it--it was very comprehensive
- I loved the lighthouse & view
- I loved the wildlife & serenity
- I never get tired of seeing nature close up, so i would visit the refuge if & when i return to Kauai
- I really appreciated the free use of binoculars
- I was not anticipating the wildlife viewing at the refuge & was impressed with this.
- I was particularly pleased with the availability of binoculars and the pleasant, friendly and knowledgeable staff/volunteers.
- I would come back to see the scenery, the birds and the whales.
- I would like to come back in the winter/spring to see the whales. We didn't see any dolphins either but it was beautiful.
- I would only go back if we were with someone who has never been there
- I'd come back to enjoy the quiet peaceful atmosphere
- I'd love to see the laysan albatrosses--we missed them by two weeks
- If get a chance, would always visit

- If i return to Kauai for vacation purposes, i will go back
- If lighthouse is restored & environment
- If we are lucky enough to come back, the refuge would be on our list to see again.
- In 2000, we filmed a cow and calf in the bay.
 Spy hopping & pec-slaps. We will never forget.
 Could be that the lighthouse is a must see, just in case....
- Incredible space
- Informal interactions w/staff, interpretive materials
- Interesting place
- Introducing new family member traveling w/us on future trips. This is a must-see place.
- It is a beautiful place. I just enjoy being there and doing nothing [double-underlined].
- It is a beautiful, mostly unspoiled piece of the planet. Can we keep it that way? I would come back for the view, the birds & animals.
- It is a unique site--birds--vantage point--history
- It is a wonderful place to bring guests.
- It is an enjoyable place, well kept with very pleasant people. It makes for a wonderful visit each time i am on Kauai.
- It is in a wonderful location. It is peaceful, well maintained, and interesting.
- It was a pleasant way to spend an hour. I wish it would have opened earlier in the morning (9am)
- It was a wonderful place to visit, as was Kauai
- It was all good.
- It was beautiful & its part of history
- It was beautiful & very well maintained--worth the visit
- It was enjoyable. Enjoyed the wildlife. Would like to learn more about the island birds.
- It was great & exciting to see the baby chicks in their nests
- It was great to see the tropic birds
- It was peaceful--beautiful vistas, nice people
- It was really great that you had binoculars available for checkout. With them, we were able to see dolphins & seals! Pretty exciting coming from colorado
- It was so beautiful & serene
- It was very calm, relaxing journey!!
- It was very enjoyable to just watch the huge waves as they rolled in & splashed high onto the cliffs, watch for whales & other animals/birds, & just enjoy the beautiful nature surrounding me.
- It was very relaxing
- Its [sic] just a nice place to visit.
- It's a beautiful area--we liked everything about it--views of the coastline are wonderful!
- It's a great scenic place that i would try to visit on each future visit to Kauai

- It's an outstanding place away form the touristy areas (of course we haven't been when a large tour group was there).
- It's beautiful! The staff was very friendly.
- Its beauty
- Its beauty.
- Its beauty; seeing the birds; & dolphins on previous visit
- It's environment [sic] & setting
- It's just a cool place
- It's so serene & the view is breathtaking. The birds are wonderful!
- Just a beautiful serene place. I would like to be there for the whale migration at your point. Maybe next year.
- Just a nice place to visit
- Just being in Hawaii
- Just being in Hawaii
- Just being there
- Just being there once is enough to make me want to return time & time again
- Just being there!
- Just that we enjoyed seeing it
- Just the beauty of the whole area
- Just the general beauty of it all [doubleunderlined].
- Just the great ___ [illegible] and the wildlife
- Just the view
- Just wonderful wildlife
- Lassan albatross & humpback whale
- Learning about the wildlife & nesting habit
- Lighthouse
- Lighthouse maintained, wildlife, view
- Lighthouse of course; scenic views; more historic & other info about the site
- Lighthouse: whale/dolphin watching
- Like to see the boobys fly backwards. Friendly
- Location, informative staff, condition of area
- Location, weather, scenery
- Look section 4 no. 6
- Looking at the dolphins & birds & the spectacular view of the ocean & coastline!
- Looking for turtles below
- Lots of whales & birds to watch.
- Love the scenery
- Loved the historical pictures & beautiful views.
 Interesting plants & birds. Informative
- May not return
- Mentioned above. We also observed the monk seals and new baby birds!
- More advertisement. Let people know about its location & activities.
- More binoculars
- Most. We take friends--ie, newcomers, there.

- My photos of the area--the wildlife and the ocean waves slapping against the coastline w/the lighthouse in the background
- Natural beauty
- Natural beauty
- Natural beauty and exposure to wildlife.
- Natural beauty of environment and spectacular views
- Natural beauty of the lighthouse and land on which it is situated. Great views!
- Natural beauty.
- Natural beauty. A very refreshing experience.
- Natural environment, lighthouse
- Natural history
- Natural ocean view
- Nesting birds; whale watching; history of the lighthouse & its evolution
- Nesting chicks, views, info on birds
- Nice atmosphere; low entrance fee
- Nice gentleman requesting that we sign up for this
- Nice place
- Nice scenery, lighthouse, bookstore, photo opportunities
- Nice view
- Nice view, good place to stretch your legs and walk around
- Nice views
- Nice, relaxing atmosphere. Beautiful location and wonderful animals.
- No comment
- No trip to Kauai would be complete without a trip to the refuge. The scenary [sic] is heartstopping & the whales are a joyful bonus.
- None
- None
- None
- None, i believe it was a one time experience
- Not having to fill out another survey. This is too long.
- Not really anything the way it currently is
- Observation of wildlife
- Observing very young (newborn) birds
- Observing wildlife
- Ocean & bird viewing
- Ocean view.
- Ocean view; birds.
- Ocean views
- One of the few parts of the coastline not ruined by homes, resorts, golf courses & malls.
- One of the most beautiful places i've ever seen (and i've seen a few). Watching the birds soar up the updrafts.
- Opportunities to view whales.
- Opportunity to view natural wildlife

- Opportunity to watch seabirds at various stages of courting, nesting, raising young, leaving young, young starting to fly
- Outstanding experience; especially whale & senic [sic] viewing; volunteers helpful; loved the nenes.
- Outstanding views, wildlife & educational opportunities
- Outstanding views/scenery; natural habitat; birds; whales and dolphins (although i didn't see any during my visit)
- Overall attention to preservation and education of the wildlife/birdlife and the island history and culture
- Overall beauty & wildlife
- Overall beauty; educational experiences; wildlife.
- Overall experience was very good in limited time. Would like to return and allocate enough time to see facilities more thoroughly.
- Park rangers' knowledge
- Peaceful
- Peaceful & beautiful
- Peaceful feelings, beautiful setting
- Peaceful setting, great views, nice people
- Peaceful, serene atmosphere
- Peacefulness & quiet beauty
- PhotOshoot of dolphins & whales. Photoshoot of lighthouse in early morning & late eve.
- Photo opportunities
- Photographic opportunities
- Photos
- Photos & clean fresh air & views
- Physical problems now cured--will return.
- Pictures
- Pleasant, peaceful view. Whales in the distance.
- Pleasant, serene place
- Pretty location; waves splashing on rocks.
- Probably will not visit Hawaii again for quite awhile even though we loved it.
- Probably won't come back to Kauai until i've visited all the other islands! First trip to Hawaii
- Quiet atmosphere & beauty of the area
- Quiet, great nature, whale watching
- Rainstorm with lightening [sic]. Beautiful to watch
- Refuge staff member speaking & pointing out birds/type. Binoculars to see dolphins, birds. Lighthouse history.
- Refuge was so very appealing especially the lighthouse lawns and seeing birds and dolphins made it excellent!!
- Relaxing place to watch dolphins and wild birds.
 One of the staff had a telescope aimed at a monk seal sunning on the rocks
- Resident of australia unlikely to return

- Same reason great employees--very knowledgeable & helpful. Also, the beautiful views & serene feeling one gets up there!
- Saw a baby bird close to walkway in bush
- Saw dolphins and seal
- Saw dolphins--really liked lighthouse
- Saw lots of whales & dolphins as well as the birds. The view was beautiful.
- Saw sea turtles; coastline views were beautiful
- Scenery
- Scenery
- Scenery
- Scenery & chance to see other wildlife (like whales)
- Scenery & friendly staff
- Scenery and birds
- Scenery and quiet
- Scenery, spinner dolphins
- Scenery, views
- Scenery, wildlife, staff.
- Scenic beauty
- Scenic beauty
- Scenic beauty
- Scenic beauty & wildlife
- Scenic beauty, wildlife viewing
- Scenic overlook
- Scenic overlook
- Scenic overlook
- Scenic overlook; wildlife viewing; whale watching
- Scenic photos, views
- Scenic shoreline
- Scenic view.
- Scenic views
- Scenic viewsScenic views
- Sea turtle--binoculars available
- Sea wildlife was much more than expected; advance marketing could be better
- Seabirds
- See #6.
- See above answer also peacefulness of shoreline; bird watching; historic lighthouse
- See attached page
- Seeing a frigate bird and the albatross.
- Seeing a sea lion sunning self on beach rock
- Seeing albatross and other birds
- Seeing albatross take off and fly; also dancing
- Seeing all the birds, whales & sea turtles & dolphins
- Seeing all the variety of wildlife in such a small area, including all of the various seabirds, whales, monk seals, and indigenous geese that were present the day we visited.
- Seeing baby albatross

- Seeing baby birds close up. View was spectacular. Would like to be able to go up in lighthouse
- Seeing baby shearwater chicks, nenes, tropicbirds; learning about construction of lighthouse; beautiful views
- Seeing beautiful coastline, friendly staff, dolphins & seabirds
- Seeing birds
- Seeing birds & knowing next time others will be there (seasonal)
- Seeing birds and wildlife mostly unknown in california
- Seeing birds in their nests
- Seeing birds, monk seal.
- Seeing dolphins/whales, beautiful ocean view
- Seeing how beautiful & clean the refuge is
- Seeing nenes! And tropic birds...
- Seeing sea turtles, monk seals, dolphins, gorgeous scenery!
- Seeing the albatross would bring us back.
- Seeing the albatross. It is such a perfectly wonderful place. Everything would bring me back. I tell all friends who are planning trips to Kauai to go to the lighthouse.
- Seeing the baby birds
- Seeing the birds
- Seeing the birds
- Seeing the birds & coastline
- Seeing the birds & whales
- Seeing the birds & whales & huge waves
- Seeing the birds and the baby birds
- Seeing the birds soar & land on cliff nests; watching whales & dolphins swim.
- Seeing the coastline, dolphins, birds
- Seeing the different wildlife
- Seeing the dolphins and the baby bird helped me realize there was more to see than on previous visits, one just must look more closely and know what to look for
- Seeing the dolphins & the birds; taking photos
- Seeing the dolphins and the lighthouse; the availability of binoculars for guests to use made all the difference in seeing the dolphins. Also the volunteers were very friendly & helpful
- Seeing the dolphins play
- Seeing the dolphins; the view
- Seeing the frigate birds, albatross, views--it was wonderful
- Seeing the Hawaiian geese flying wild. I am a member & supporter of the British wildfowl & wetland trust (headquarters in slimbridge, gloucester, england) & it was a chance of a lifetime for me to see these endangered birds getting back to natural habitat
- Seeing the monk seal below

- Seeing the nene up close--well, seeing it from any distance would be a thrill, but it was about 10 feet away!
- Seeing the whales
- Seeing the whales & birds
- Seeing the whales and all the other wildlife
- Seeing the wildlife
- Seeing the wildlife and whales; beautiful view; beautiful setting.
- Seeing turtles in water, lots of birds, nests
- Seeing whales & dolphins
- Seeing whales and dolphins
- Seeing whales from the cliffs.
- Seeing whales from the point. The guides were very helpful & friendly. They suggested where to look to see the whales.
- Seeing whales, frigate birds
- Seeing whales.
- Seeing wildlife
- Seeing wildlife (whales, turtles, seals, birds)-especially seeing mating ritual of albatross & whales
- Seeing wildlife, beautiful view, knowing history of place
- Seeing wildlife, the peacefulness
- Seeing wildlife.
- Seeng spinner dolphins!
- Serene
- Serene & beautiful views with the natural activities of the local birds.
- Serene, breathtaking beauty & great location to view wildlife
- Serenity
- Serenity, view, gentle breezes.
- Serenity; wildlife viewing
- Sharing with 1st time visits by grandchildren & friends!
- Showing others
- Sighting a monk seal on the beach below; whales surfacing in the waters as they pass the lighthouse; seeing a baby bird in it's nest, as pointed out by a refuge staff member
- Sighting whales; availability of binoculars; signage telling of natural shore, birds, whales & other wildlife.
- Sightings of whales, seals, turtles & albatross. We have amazing photos!
- Sights of coastline
- Sight-seeing
- Spectacular views, bird watching
- Spectacular views. History. Wildlife.
- Spinner dolphins, nesting birds, beautiful view
- Spotted whales off the point
- Staff loaning out binocs was super cool--thanks!
- Staff seemed very knowledgeable and glad to be of help

- Staff was available to answer questions
- Staff, view, wildlife
- Staff, wildlife & scenery were significant factors in the positive experience at the refuge
- Suits my hobby: wildlife photography
- Taking photos
- Talked with employee--good info got post card from her
- Talking with the local volunteers
- Talking with young woman staff person from dakota
- Talks with tour guides. Watching birds.
- Technical difficulties with my camera
- The absolute pristine views of the rugged coastline & the wildlife. I also enjoy the peace of just sitting & enjoying the environment.
- The beautiful locale.
- The beautiful lookout & the wildlife
- The beautiful scenery & seeing the nene (state bird of Hawaii)
- The beautiful scenery and the hope of seeing whales and/or dolphins
- The beautiful scenery, the monk seals, birds
- The beautiful sight of the ocean waves crashing and the natural life view was awesome!
- The beautiful view
- The beautiful view
- The beautiful view of the wildlife.
- The beautiful view.
- The beautiful views of the coastline
- The beauty
- The beauty
- The beauty and cleanliness.
- The beauty and we missed the whales due to time of year
- The beauty of all at that place
- The beauty of it.
- The beauty of nature
- The beauty of nature & lighthouse
- The beauty of nature.
- The beauty of the area!! Seeing an albatrose [sic] fly low over me--wings (underside--whow! [sic]) the whale watching.
- The beauty of the area.
- The beauty of the area--sighting of dolphins
- The beauty of the landscape.
- The beauty of the sea & the birds
- The beauty of the sight [sic] & natural habitates [sic] & wildlife.
- The beauty of the site & opportunity to see whales & seabirds as well as seeing the lighthouse up close.
- The beauty of the spot--magnificent
- The beauty!
- The beauty, the wildlife & i'd love to return to see the whales & dolphins

- The beauty, view & wildlife
- The beauty.
- The binoculars were a delightful tool to use in our visit. I wouldn't have thought to bring any, but they enhanced the educational experience.
 Someone was thinking
- The bird & wildlife viewing plus the area in general.
- The birds
- The birds
- The birds & to show others.
- The birds and learning about them=to watch the birds fly & soar=beautiful
- The birds and the views
- The bird's nest-view
- The birds were outstanding.
- The birds, the beauty of the location, the peacefulness
- The birds; whales; the view.
- The birds--variety & closeness
- The breathtaking view & your beautiful island [smile face]
- The cleanliness of it all
- The difference 10 years . . . 1984 vs 2003.
 Missed seeing the turtles...not as close to edge or the shrub was too high to see over edge
- The dolphins
- The easy access to wildlife viewing
- The enjoyment of nature
- The exceptional view of coastline & the very friendly staff.
- The existing wildlife & view
- The experience
- The fabulous view
- The fabulous views & the curtious staff
- The fact that the refuge is one of the most unspoiled, beautiful spots on earth.
- The friendliness & professionalism of the volunteers--they were terrific!
- The great beauty & majesty of the scenic views.
- The great photo opportunities.
- The great view!
- The guides were excellent. Thank you! Pointed out things we may have missed.
- The Hawaiian ducks close up & ref-footed boo [sic]
- The helpful staff
- The helpfulness of the staff & volunteers was excellent--everyone from the cleaning (bathroom) crew to the "tour guides" who explained about the birds & gift shop staff were helpful w/island destination points. Really none of these were asked for--they j
- The incredible scenery & wildlife & great volunteers.
- The info, the views, the education & the wildlife

- The island with migratory birds
- The lighthouse & scenery
- The lighthouse & serenity are more than enough
- The lighthouse and the view of the coastline.
- The loaner binoculars for dolphin sighting. Ne ne and other native birds. The scenery. Overall, a very pleasant experience
- The marvelous flights of seabirds all around &, on some days, all the whale activity.
- The natural beauty
- The natural beauty of the area and all of the wildlife
- The natural beauty of the site. Dolphin watching
- The natural environment
- The natural environment and beauty of the area. We plan to return in February.
- The naturalists were good at pointing out the seal(s) below & the nene geese, whales, etc.
- The nene geese; a chance to climb inside the lighthouse; great whale watching; the talk with a volunteer guide/ranger who showed us lots of birds, etc. & was a great source of information.
- The only place i saw nene out of 3 islands
- The opportunity to see the wildlife & the friendliness of the staff
- The outstanding beauty
- The outstanding views of the birds; the great interpreter signs; the way we were left alone (i.e., not bothered by staff)--we enjoy selfguided destinations
- The overall beauty, serenity and non-commercial aspect
- The overall serenity of the area
- The overlook
- The peaceful, beautiful view. The friendly people/staff.
- The people [sic] running the kiosk was very informative & friendly. I enjoyed talking to him.
- The pretty view, peaceful, friendly staff
- The proximity to the birds. Chance to see particular species in flight/nesting, etc.
- THE PYSICAL [sic] beauty is breathtaking
- The refuge was one of top experiences in Kauai.
 I don't think changes are necessary.
- The scenery
- The scenery & the bird watching. I told my children (adults) they should go for this reason alone.
- The scenery . The good vantage point for viewing whales. Nearness to parking lot.
- The scenery was gorgeous
- The scenery, the birds, the whales.
- The scenery, the peaceful beautiful setting; opportunity to view & photograph wildlife (east to find-good location)

- The scenery, viewing the dolphins, the serene environment
- The scenic beauty along with the whale and bird watching--we really enjoy everything there.
- The scenic beauty.
- The scenic ocean vistas were nice. The yard landscaping was appealing.
- The scenic overlooks & wildlife
- The scenic view
- The scenic view
- The scenic views/wildlife
- The sea birds are wonderful to watch
- The seabirds
- The serenity & whale watching
- The serenity, wildlife (particularly the birds) and getting away from it all.
- The sheer beauty!
- The sheer joy of watching the birds, sighting the whales, & the peace of the surroundings. This made us come back this February to see the whales & the frigate birds which we did not see on our first trip. It needs nothing added to it, its beauty & the w
- The sight itself is beautiful. It's worth it for the view alone, the wildlife is an outstanding experience. I think having the binoculars available was wonderful. My children also enjoyed the movie.
- The sight of coastline, wildlife
- The sight of the lighthouse & the possibility of seeing sea turtles, dolphins & whales
- The sights, the dolphins, it was beautiful
- The sites were awesome
- The sitings of wildlife/the lighthouse
- The spectacular scenic overlook of the coastline at the historic lighthouse. The ability to view whales, dolphins & the native seabirds.
- The staff have always been very helpful & in the spring when i visited took time to show me a baby albatross being fed by parents
- The staff was extremely friendly. The beauty and serenity of the refuge was fantastic. We probably would have stayed longer had more snacks and refreshments been available.
- The staff was very helpful and informative, especially bob (retired lawyer/surfer-volunteer)
- The staff were all helpful lending myself & our children binoculars & pointing out whales & a sea turtle! Showing us books for info.
- The staff were excellent w/our 2 boys (5 & 9) pointing out spinner dolphins, seals, birds. Very enthusiastic & knowledgeable. The binoculars is a nice added touch!
- The uniqueness of the refuge--having binoculars there to use (free)

- The vast natural environment/landscape, friendly knowledgeable staff
- The very helpful staff.
- The view
- The view
- The view
- The view
- The view & staff
- The view & the birds
- The view & the birds
- The view & whales & birds
- The view and friendly staff
- The view and wildlife
- The view from theere [sic]
- The view is awesome & your staff were so helpful with information & friendly
- The view over the cliff
- The view was beautiful.
- The view was incredible!
- The view was spectacular--great pictures
- The view!
- The view, been before & want to return to same place
- The view, seeing the birds, the video was excellent--but this trip to Kauai might just be a once in a lifetime
- The view, the cliffs, the birds in their natural nests & the lighthouse
- The view, watching dolphins/whales.
- The view, wildlife, lighthouse
- The view.
- The view/wildlife
- The view; whale watching
- The viewing opportunities, good variety & quality of gift shop.
- The views & seeing birds/wildlife
- The views and the opportunity for wildlife viewing were very important. These are what would bring me back.
- The views of the coastline and being able to look at flora and fauna would bring me back.
- The views, the knowledge of the staff
- The views.
- The views; the albatross; the history
- The volunteers were fantastic & extremely knowledgeable about everything we asked about (whales, wildlife, surrounding areas)
- The volunters [sic] were very helpful and pleasant to all of the visitors.
- The way you have kept the island well maintained & natural--to me it was like stepping back into the 1960's. Such a sweet island.
- The whale watching was particularly good on the day we were there.
- The whale watching, coast line, birds, wall area, history of the site

- The whales
- The whales
- The whales and views
- The whole overall experience. Well worth a repeat visit.
- The wildlife
- The wildlife
- The wildlife & the natural undeveloped area.
- The wildlife and scenic views
- The wildlife viewing and the amazing views of the coast
- The wildlife viewing and the amazing views of the coast.
- The wildlife, serenity.
- The wildlife, the lighthouse & the view
- The wind, the waves, the big nature
- The wonderful view, whales and birds--it is fantastic!
- There was a wedding!
- They were all wonderful.
- This was my 3rd trip to Hawaii & my 3rd to the refuge. Anytime i am in Kauai i will return to this beautiful area.
- To go back inside of lighthouse
- To see more types of birds, close enough for telephoto lens photography
- To see more wildlife; a different facility to watch the videos with more seating
- To see the outstanding beauty! (and i would love to see the whales)
- To see the wildlife specific to the area/region again
- Top 3 most scenic site on the island
- Total experience
- Truly beautiful--would go back to see more wildlife
- Two volunteers especially cordial & helpfultook time & made our handicapped son feel welcome & important. One was named alan hill
- Unexpected exotic bird viewing at close proximity, wonderful views of coastline (loaner binoculars are a nice touch)
- Unusual--easy to access
- Very good memories--would definitely return and recommend it as a place for others to visit!
- Very interesting
- Very lovely.
- Very scenic, will return when we return to Kauai
- Very well maintained & great photo opportunities
- View
- View
- View
- View
- View
- View

- View
- View
- View see newborn
- View & birds
- View & personnel
- View & the wildlife
- View and condition of historic lighthouse
- View and wildlife
- View is superb.
- View of shoreline
- View of the area
- View seabirds
- View, albatrosses
- View, birds & dolphins
- View, birds, smells
- View, birds, whales, great environment
- View, wildlife, availability of binoculars to borrow
- View.
- View; whales; birds; wildlife; volunteers
- Viewing a 4-day-old shearwater chick. Other excellent birding. The staff was excellent and informative as well. Pleasant interactions with other visitors.
- Viewing albatross
- Viewing all kinds of wildlife. Helpful & friendly volunteers
- Viewing dolphins and avian life
- Viewing dolphins, tropic birds, boobies, and albatross.
- Viewing lighthouse; helpfulness of staff/volunteer; wildlife viewing
- Viewing of whales, dolphins, and the lighthouse (didn't get opportunity to see whales & dolphins)
- Viewing of wildlife
- Viewing of wildlife was really great. The staff was friendly and very knowledgeable.
- Viewing of wildlife; helpfulness of staff.
- Viewing scenery, lighthouse. Learning of history, wildlife.
- Viewing scenery, whales, birds
- Viewing seabirds
- Viewing sea-birds and rookery; visiting lighthouse; opportunity to look for whales offshore.
- Viewing seabirds--would like to be there to coincide with laysan albatross
- Viewing seals, birds & dolphins
- Viewing the birds
- Viewing the birds
- Viewing the birds and coastal landscape
- Viewing the birds, help from the naturalist & the volunteers in identification--seeing the whales, dolphins, sea turtles--the views of the coast
- Viewing the birds, seeing the baby birds in the tunnels, beautiful location.

- Viewing the dolphins and seeing whales
- Viewing the native seabirds!
- Viewing the natural habitants--whales, sea lions, dolphins & birds
- Viewing the wildlife
- Viewing the wildlife & learning about them from staff & signs
- Viewing the wildlife & learning new facts about the animals
- Viewing the wildlife, the lighthouse, the setting and the docent at the entrance was very friendly and use to live in our area. But, we did not know her.
- Viewing unusual birds.
- Viewing whales & sea turtles! Very exciting experience! Very beautiful!
- Viewing whales and dolphins
- Viewing whales, birds, etc. Conversing with well informed staff, especially one retired couple at the entrance
- Viewing whales, dolphins & birds.
- Viewing whales; picture taking; fresh air--ocean breezes
- Viewing wildlife
- Viewing wildlife & scenery.
- Viewing wildlife such as whales, dolphins, & monk seal. Not disturbing wildlife but being able to view the animals in their natural habitat.
- Viewing wildlife; interest, knowledge, & enthusiasm of guides; so much wildlife in one area! Don't change it at all, please.
- Viewing, environment very positive.
- Viewing/photographing birds, enjoying the view of the ocean, visiting the lighthouse.
- Viewing/photography of spinner dolphins & sea turtle
- Views
- Views
- Views & serenity
- Views & wildlife viewing
- Views & wildlife.
- Views of coastline & dolphin watching
- Views of coastlines, birds, learning about natural history
- Views of ocean, birds
- Views, birds close up
- Views, seeing birds/wildlife
- Views, signs, well-maintained site
- Views, whales, birds
- Views, wildlife
- Views. Friendly staff. Wildlife
- Views; guided tour
- Visiting Kauai when whales are offshore
- Volunteer talking about wildlife
- Volunteers were well-informed and helpful
- Want to see more whales--saw just one.

- Was very nice. It's been kept up very well
- Watching dolphin & whales
- Watching dolphins and the pregnant monk seal
- Watching nesting birds (sea)
- Watching sea birds and whales.
- Watching seabird with staff information
- Watching the birds & beautiful scenery
- Watching the birds & sea life and the lighthouse is beautiful.
- Watching the dolphins & birds
- Watching the ocean & sea creatures & land birds
- Watching the sea turtles
- Watching the whales
- Watching the whales jump was great
- Watching whales
- Watching whales & birds
- Watching whales & wildlife.
- We always stop here--it is a wonderful experience
- We bring different friends every year so they can enjoy the refuge as much as we do
- We come primarily to photograph birds & scenery to use in paintings--will come back for that.
- We do return year after year--esp. Checking on the change in the local indigenous plant exhibit
- We enjoy visiting historical structures.
- We enjoyed all aspects of the visit
- We had a wonderful experience! Just the natural beauty of area would bring us back.
- We had visited 2 years ago & noticed a much needed improvement of the grounds this year.
 What a difference--simply beautiful.
- We have been to the refuge dozens of times and this year was one of the best. The staff was very helpful pointing out birds, monk seals and whales. They were doing a good job with the visitors. It was a wonderful experience. Keep up the good work!
- We have visited twice and enjoy the serene environment beautiful views & wildlife. As long as fee does not increase we would probably visit again on our next trip to Kauai.
- We heard it's a cool place to be in the winter to watch the giant waves.
- We just enjoy the beauty looking at the birds & i love lighthouses
- We liked that things are kept as natural as possible. Do not add parking! This will only destroy more land.
- We love the bird walk on the bluff
- We love the view but most of all seeing the birds, whales, dolphins & last time seals.

- We love the views & the birds but especially whale watching. We'll be back no matter what you do.
- We once took the guided hike to the top of the crater. It was truly outstanding and would surely bring us back. This was closed on our last visit due to nesting birds.
- We saw turtle, seals, wildlife...
- We saw whales & enjoyed that. Learned about your 'birds' -- very interesting. Probably won't visit Hawaii again--regretfully.
- We seen dolphins
- We took some beautiful pictures and it was quiet
- We were able to see a few dolphins in the water.
 That was a different/unique experience for us.
 The dolphins & scenery made the visit.
- We were just visiting this one time
- We've been to Kauai 5 or 6 times. We are not planning to return.
- We've been twice and each visit was very different. So we'll probably visit again on another trip.
- We've enjoyed it both times we've visited. We will return & hope to get some items from the bookstore.
- Whale season
- Whale season
- Whale sightings, beauty from coastline (scenery), seal sightings, refuge info was interesting.
- Whale viewing
- Whale watching
- Whale watching
- Whale watchingWhale watching
- Whale watching
- Whale watchingWhale watching & bird viewing
- Whale watching was great on all of my 3 visits.
 The birds, the scenery, helpful staff but not in your face
- Whale watching was great.
- Whale watching, bird watching, picture taking
- Whale watching, birds, view
- Whale watching, nene goose, ocean, view & sky
- Whale watching, seals, birds
- Whale watching, the sea views.
- Whale watching.
- Whale watching.
- Whale watching.
- Whale watching/birdwatching
- Whale watching; birds nesting close along the walks; fabulous scenery; history & information about the lighthouse
- Whale watching; scenic overlook
- Whale watching; turtle & seal viewing; albatross nesting viewing thru telescope

- Whale watching--bird watching
- Whale/dolphin watching, bird-chicks
- Whales
- Whales
- Whales
- Whales
- Whales & children loved it
- Whales in February 05
- Whales whales
- Whales, batch of Hawaiian geese
- Whales, birds
- Whales, birds, being in Kauai
- Whales, birds, volunteers, great help
- Whales, dolphins, birds, ben stiller, great and friendly staff
- Whales; albatross
- Whales--great view
- Whalewatching
- What a lovely, serene place to visit. The wildlife beautiful and staff very helpful
- When on Kauai the refuge is a must for usalways see wildlife one kind or another.
- Wildlife
- Wildlife & scenery
- Wildlife & view
- Wildlife (whales)
- Wildlife and scenic views
- Wildlife observation
- Wildlife observation
- Wildlife observation
- Wildlife varieties
- Wildlife view
- Wildlife viewing
- Wildlife viewing & information.

- Wildlife viewing & scenery
- Wildlife viewing opportunities
- Wildlife viewing, environmental educ opportunities for myself & children
- Wildlife viewing, scenery & nene.
- Wildlife viewing, serene environment, overlook viewing.
- Wildlife viewing; natural beauty; lighthouse itself; friendly & knowledgeable volunteers!
 They were great!
- Wildlife viewing; volunteers were very informative.
- Wildlife viewing--i'd come back to see the whales
- Wildlife/birds; lighthouse, view
- Wildlife/natural setting
- Wonderful bird-watching; seeing the nesting albatross & jumping whales; breath-taking views; just to enjoy the general atmosphere; a nature hike with a naturalist.
- Wonderful site, protected, wildlife, informative staff
- Wonderful view
- Wonderful view for all aspects
- Wonderful views, staff & info
- Would always bring any grandchildren to see it when they come with us to Kauai. It is important for their learning of nature and history in the island of Kauai
- Would come back on every visit for birds (w/or without tour) and views
- Would like to see the albatross flying away for their land home
- Would like to see whales but we always come to Hawaii in summer months
- Would return if we were there again

Appendix B Kilauea Preliminary Community Report Statistics

The following appendix contains the information obtained from frequency counts of the raw data from the Kilauea Point National Wildlife Refuge community survey. The order of the tables follows that of the questions in the survey section by section. Summaries and verbatim comments of the open-ended questions contained in the survey can be found at the end of the frequency report.

Section 1

Question 1

Table 1. Number of visits to Kilauea Point NWR in the past 5 years.

Times visited	% respondents
0	12%
1	10
2	11
3	13
4	4
5	13
6	4
7	2
8	2
9	1
10	8
11-25	12
26-50	5
51-100	1
> 100	1

n = 398

Table 2. Things listed that would encourage Kilauea residents who have not visited Kilauea Point NWR in the last 5 years to do so.

Item	n
Free admission	12
Less work/finding time	11
Visit when family/guests visit	9
Natural beauty	8
More activities and functions	5
Access to Crater Hill	5
Educational opportunities	4
Later hours	4
Never go in/view from overlook	4
Walking path to Refuge	3
Large community event	3
Need reminders for it	3
Easier access	2
Able to bring a dog	2
Away at school	2
More hiking trails	2
Younger/too old for it	2
Biking	1
More native plants	1
Couldn't go regardless	1
A café with decent food	1
Too many visitors already	1
Event to get involved with and volunteer opportunities	1
Fishing access	1
Grazing livestock on Refuge pasture	1
If more like a park	1
Open Lighthouse 4 times/year for viewing	1
More shopping opportunities	
Transportation	1
An invitation	1
Informational brochure	1

Table 3. Special events at Kilauea Point NWR attended by community members in the past year.

Event	Percent attended
Ocean Fair	30%
Lighthouse Day	27
National Wildlife Refuge Week activities	14
Holiday Craft Fair	27
ě	

n = 358

Table 4. Importance of activities in community members' decision to visit Kilauea Point NWR.

Activities			Importar	nce		
	Very important	Important	Somewhat important	Not important	No opinion	n
Viewing native seabirds	73%	19%	6%	1%	1%	353
Being in natural, undeveloped lands	72	17	8	2	2	350
Viewing scenic overlooks of the coastline	67	25	7	1	1	347
Viewing whales and/or dolphins	64	23	10	1	1	349
Experiencing a serene environment	63	25	9	1	1	348
Visiting a historic landmark/lighthouse	47	32	17	4	1	339
Taking self-guides walks with interpreted signs	46	34	15	3	1	348
Photographing wildlife	31	26	24	16	3	346
Learning about the Refuge from staff/volunteers	27	36	25	11	2	343
Participating in environmental education programs	26	30	27	13	4	345
Purchasing books about the natural history of the area	12	27	34	24	3	344
Purchasing mementos at the gift shop	9	14	31	43	4	346
Other activities	89	9		2		53

Table 5. Activities important to respondents' decision to visit; collapsed.

Activities]	Importance	
	Very important/ Important	Somewhat important/ Not important	n
Viewing native seabirds	92%	7%	353
Viewing scenic overlooks of the coastline	91	8	347
Experiencing a serene environment	89	10	348
Being in natural, undeveloped lands	88	9	350
Viewing whales and/or dolphins	87	12	349
Taking self-guides walks with interpreted signs	80	18	348
Visiting a historic landmark/lighthouse	79	21	339
Learning about the Refuge from staff/volunteers	63	35	343
Photographing wildlife	57	40	346
Participating in environmental education programs	56	40	345
Purchasing books about the natural history of the area	39	58	344
Purchasing mementos at the gift shop	23	74	346
Other activities	98	2	53

Table 6. Other activities important to residents' visit.

Activity	n
Crater Hill guided hike	10
Place to take friends/family visiting	7
Education/programs for children	6
Enjoying nature	4
Hiking/walking	4
Native plants	4
Birding	4
Climbing up Lighthouse for view	3
Fishing	3
Ocean Fair	3
Place to take kids	3
Picnicking	2
Leading hikes	2
Checking ocean conditions for boating, surfing, diving	2
Community craft Fairs	2
Volunteer work	2
Lighthouse Day	2
Just having access	1
Kayaking/boating along shoreline	1
Biking to park entrance	1
Movies and guest speakers	1
National Wildlife Refuge Week	1
Painting	1
Dance hula for special events with halau	1
Watching daughters dance hula	1
View disrespectful tourists	1
Food and beverage would be great	1
We miss watching sunset from Crater Hill	1
More access for local public	1

Table 7. Most important activity to visitors of Kilauea Point NWR

Activity	Percentage
Viewing native seabirds	40
Viewing whales and/or dolphins	26
Learning about the Refuge from staff/volunteers	22
Other activities	12
Visiting a historic landmark/lighthouse	12
Experiencing a serene environment	11
Being in natural, undeveloped lands	8
Viewing scenic overlooks of the coastline	4
Photographing wildlife	2
Taking self-guided walks with interpreted signs	2
Participating in environmental education programs	1
Purchasing mementos at the gift shop	1
Purchasing books about the natural history of the area	< 1

n = 314

Table 8. Importance of services or features to respondents' satisfaction with their visit to Kilauea Point NWR.

Service/feature			Import	ance		
	Very important	Important	Somewhat important	Not important	Does not apply	n
Condition of the natural environment	82%	17%	1%		< 1%	349
Wildlife viewing opportunities	79	18	3	< 1%	1	349
Refuge grounds well-maintained	75	23	1		1	345
Lighthouse well-preserved and maintained	63	33	3	1	< 1	348
Natural history information about the site	52	35	9	3	1	348
Access for people with physical disabilities or walking difficulties	50	27	11	5	8	341
Educational kiosks or signs about the Refuge and its wildlife	47	40	9	2	1	350
Reasonable entrance fees	46	36	12	4	1	349
Helpfulness of Refuge staff	41	41	10	1	2	346
Information provided on bird watching, whale watching, and/or wildlife photography	40	41	15	3	1	346
Lighthouse and Refuge easy to find	38	32	13	10	7	347
Adequate number of parking spaces	34	41	18	6	1	346
Refuge special events	24	37	22	11	6	344
Appealing gift shop or bookstore items	14	28	33	22	2	348

Table 9. Importance of services or features to respondents' satisfaction with their visit to Kilauea Point NWR, collapsed.

Service/feature		Importance	
	Very important/ Important	Somewhat important/ Not important	n
Condition of the natural environment	99%	1%	349
Refuge grounds well-maintained	98	1	345
Wildlife viewing opportunities	97	3	349
Lighthouse well-preserved and maintained	96	4	348
Educational kiosks or signs about the Refuge and its wildlife	88	12	350
Natural history information about the site	87	12	348
Helpfulness of Refuge staff	87	11	346
Reasonable entrance fees	82	16	349
Information provided on bird watching, whale watching, and/or wildlife photography	81	18	346
Access for people with physical disabilities or walking difficulties	77	15	341
Adequate number of parking spaces	75	25	346
Lighthouse and Refuge easy to find	70	23	347
Refuge special events	61	32	344
Appealing gift shop or bookstore items	42	56	348

Table 10. Community member satisfaction with services or features at Kilauea Point.

Service/feature			Sat	isfaction			
	Outstanding	Good	Average	Adequate	Poor	Does not Apply	n
Wildlife viewing opportunities	52%	37%	7%	3%		1%	335
Refuge grounds well-maintained	51	40	7	2		1	336
Condition of the natural environment	44	43	10	3		< 1	334
Helpfulness of Refuge staff	39	41	13	3	1	3	333
Lighthouse well-preserved and maintained	38	49	8	3	2	< 1	333
Lighthouse and Refuge easy to find	31	47	9	4	2	7	329
Reasonable entrance fees	29	43	16	8	2	3	330
Information provided on bird watching, whale watching, and/or wildlife photography	26	51	14	5	1	3	326
Natural history information about the site	23	55	15	4	1	2	332
Educational kiosks or signs about the Refuge and its wildlife	22	55	18	4		2	332
Access for people with physical disabilities or walking difficulties	21	48	14	4	1	12	316
Refuge special events	21	47	13	4	< 1	15	316
Appealing gift shop or bookstore items	15	48	18	9	2	9	330
Adequate number of parking spaces	10	50	21	14	4	2	333

Table 11. Management of features at Kilauea Point NWR.

Feature		More features (%)	Leave as is (%)	Less features (%)	n
Access to					345
Lighthouse	Provide more access to the inside of the Lighthouse Leave as is Provide limited access to the inside of the Lighthouse	46	47	7	
Visitor impacts	Increase efforts to restrict visitor behavior that is harmful to wildlife Leave as is	53	43		339
	Decrease efforts to restrict visitor behavior that is harmful to wildlife		73	4	
Environmental education					343
	More programs & interpretation Leave as is Reduce programs & interpretation	41	59	1	
Information signs		•			345
	Provide more signs Leave as is Limit the number of signs	21	67	11	
Services	Provide more visitor info & staff Leave as is	27	72		344
Visitor numbers	Provide less visitor info & staff			2	342
Visitor numbers	Encourage more visitation Leave as is	25	69	7	342
Facilities	Restrict visitation to the Refuge			/	344
	Develop additional facilities Leave as is Remove some facilities	14	84	2	
Naturalness	Allow more landscape alterations	6			347
	Leave as is Restore more natural conditions		54	39	

Questions 8 & 9

A summary of the responses to these open-ended questions can be found on page B-35 of this appendix.

Table 12. Responses to whether visitors to Kilauea Point NWR paid the Refuge entrance fee.

Paid fee	%
Yes	66%
No	34
n = 336	

Table 13. Reasons for not paying the Kilauea Point NWR entrance fee.

Reason	Percentage
Other	41%
No correct change	30
Too expensive	15
Not aware of fee	10
Thought fee was voluntary	6
Did not want to pay	5
Used pass	1

 $\overline{n=111}$

Table 14. Other reasons listed for not paying fee.

Reason	n
Free day	9
Special event	4
Resident of Kilauea	4
Didn't go in	3
Volunteer	3
Admission was free in past	2
Personal tour	2
Rest of family paid	2
Didn't see it	2
School field trip	2
Not there long	2
Boyfriend on staff	1
Visited bookstore	1
Short information session	1
On bike—no wallet	1
Went with senior citizen	1
Boycotting because of fencing on Crater Hill	1
Local residents should be offered a pass	1
Paid \$2 because we went every Sunday	1
Paid on other visits	1

For a discussion of these questions, please refer to the main report, Section 4, "Net Economic Benefits of Visiting Kauai and the Refuge Visitor Trip Spending."

Section 2

Questions 1 & 2

A summary of the responses to these open-ended questions can be found on page B-35 of this appendix.

Question 3

Table 15. Kilauea residents' perception of visitor impacts to certain community features.

Feature	No problem	Small problem	Moderate problem	Big problem	Does not apply	n
Disruption of daily activities	56%	23%	11%	4%	6%	393
Personal privacy	53	20	14	6	7	393
Traffic noise	40	26	19	10	5	400
Traffic congestion in town	30	25	22	21	3	395
Traffic safety	25	26	26	19	4	396
Other		8	33	54	4	24

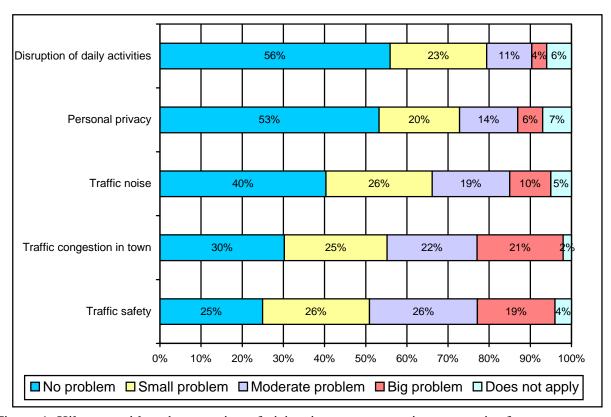


Figure 1. Kilauea residents' perception of visitor impacts to certain community features. *Remaining percentages not shown represent "Does not apply" responses.

Table 16. Other community features impacted by visitors.

Other feature listed	n
Speeding on Kilauea Lighthouse Rd.	6
Need better signage/directions to Lighthouse	5
Road wear	3
Turning around in residents' driveways	2
Animals on roadway	2
Auto exhaust	1
Big busses/bad for runners	1
Respect for 'aina	1
Slow driving	1

Table 17. Mean scores of residents' feelings toward Kilauea Point NWR.

Table 17. Mean scores of residents' feelings toward K Statement	Strongly/ Mildly agree	Strongly/ Mildly	Unsure (%)	n
	(%)	disagree (%)	. ,	
Place heritage				
It is important to me that my children and my grandchildren will be able to visit the Refuge.	91	1	8	407
Coming to places like this Refuge is an important part of my family tradition.	60	10	31	398
The Refuge provides me a sense of connection to past and future generations.	62	7	31	402
This place is special because it is where my family and I spend time.	38	16	46	396
This place is special because it is where my friends and I spend time.	31	23	46	389
Coming to places like this Refuge was an important part of my childhood.	41	21	38	384
Place identity				
I am very attached to the Refuge.	66	6	28	403
This Refuge means a lot to me.	68	5	27	402
I feel this Refuge is a part of me.	50	12	38	399
I identify strongly with the Refuge.	48	11	41	393
Place dependence				
This are is the best place for what I like to do.	57	14	29	393
Doing what I do at this Refuge is more important to me than doing it in any other place.	26	25	50	396
I get more satisfaction out of visiting this place than visiting any other.	26	23	51	398
I wouldn't substitute any other place for doing what I do here.	34	20	46	393
No other place can compare to this area.	57	14	29	397
Trust				
Everything considered, I trust the Refuge staff will do what is right for the Refuge.	68	10	22	402
In general, I have confidence in the decisions that the U.S. Fish and Wildlife Service makes about managing this Refuge.	56	15	29	402
I have confidence in decisions made by the local staff at the Refuge.	64	8	28	402
Because of my experiences at the Refuge I will definitely come back.	78	4	18	401
I should <i>not</i> have to pay a fee to visit this or any National Wildlife Refuge	31	43	27	406

Section 3

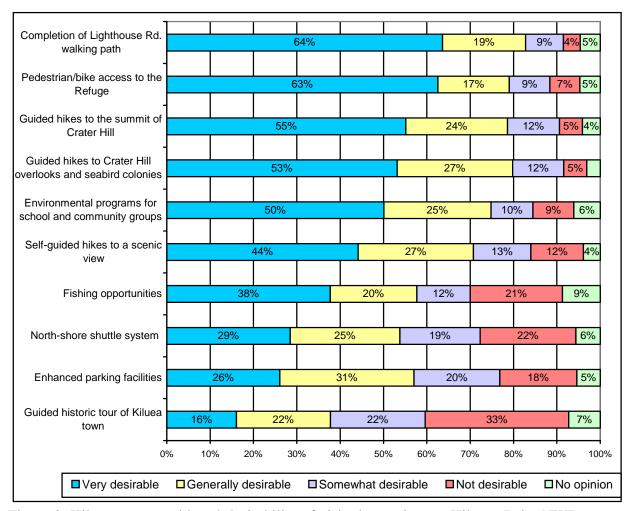


Figure 2. Kilauea town residents' desirability of visitation options to Kilauea Point NWR. *Numbers for percentages less than 4% are not shown.

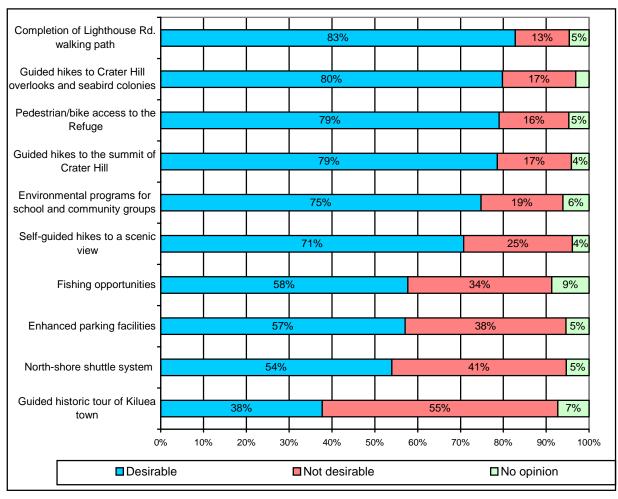


Figure 3. Kilauea town residents' desirability of visitation options to Kilauea Point NWR, collapsed.

^{*}Numbers for percentages less than 4% are not shown.

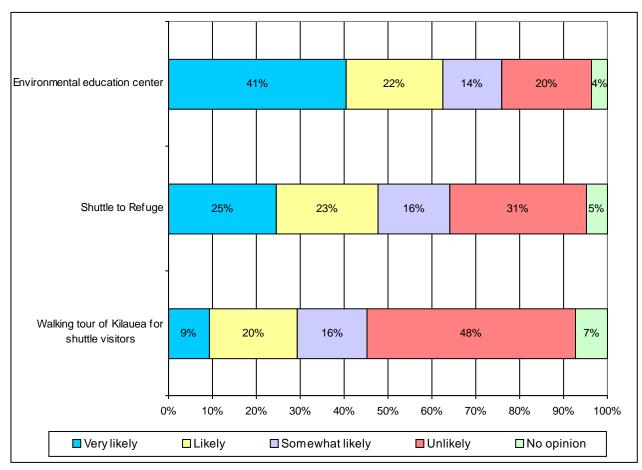


Figure 4. Likelihood of community support for options at Kilauea Point NWR.

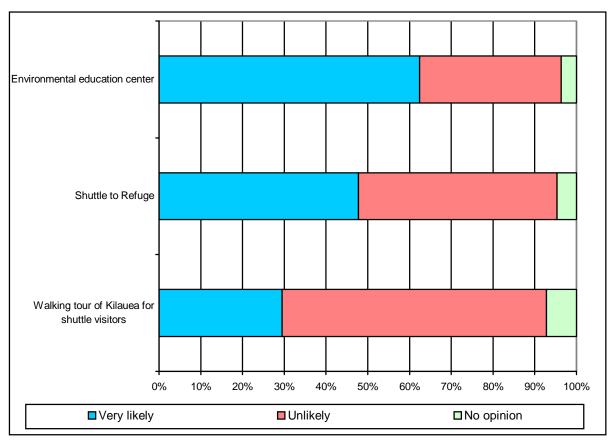


Figure 5. Likelihood of community support for options at Kilauea Point NWR, collapsed.

Table 18. Factors that would encourage community members to support a shuttle system.

Factor	n
Traffic congestion on Lighthouse Rd. is reduced	266
Homeowner privacy is preserved	247
Shuttle system is self-supported through fees	225
Shuttle system benefits local economy	226
Off-site parking for shuttle is near the highway	209
Shuttle system is linked to other public transportation	173
Off-site parking for shuttle is near the Refuge	120
Other	26

Table 19. Ranks 1, 2, & 3.

Factor	Rank (n)		
	1 st	2 nd	3 rd
Homeowner privacy is preserved ^a	96	39	28
Traffic congestion on Lighthouse Rd. is reduced ^a	77	70	45
Shuttle system is self-supported through fees	33	46	44
Off-site parking for shuttle is near the highway ^a	29	53	57
Shuttle system benefits local economy ^a	26	31	54
Shuttle system is linked to other public transportation	21	35	33
Off-site parking for shuttle is near the Refuge	18	19	13

^a·Order in table changed from number of people who ranked the factor.

Table 20. Other factors listed that would encourage Kilauea community member support of a shuttle system.

shattle system.	
Factor	n
Don't want more parking lots/eyesores	3
Bike racks on shuttle/bike access to Refuge	3
Access to the Lighthouse for residents	2
Off-site parking in commercial district	2
Residents should not have to use shuttle	2
Community use of shuttle	1
Improve Kuhio/Lighthouse Rd. Block	1
Free shuttle for tour	1
Cultural exhibits showcased	1
Frequent enough to avoid long waits	1
No carving up Crater Hill for shuttle riders	1
New parking lot between Kong Lung and Lighthouse	1
Need larger parking lot	1
Restrict number of visitors	1
Shuttle not needed	1
Separate new road bypassing town	1
Shuttle must be non-polluting	1
Speed reduced on road	1
Traffic congestion at Kolo Road and Highway	1
Walkers/bikers taken into consideration due to traffic	1

For a discussion of these questions, please refer to the main report, Section 4, "Net Economic Benefits of Visiting Kauai and the Refuge Visitor Trip Spending."

Section 4

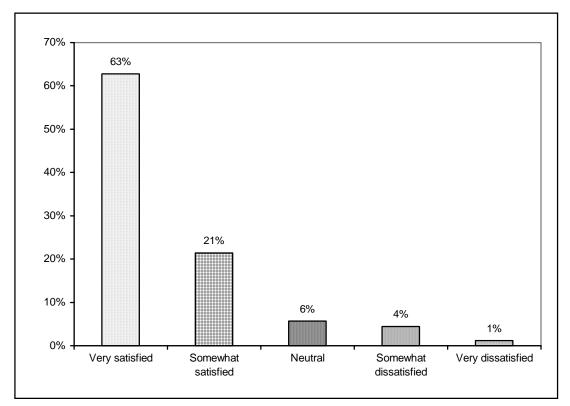


Figure 6. Satisfaction with living in Kilauea town. n = 406

^{*}Remaining 5% indicated no opinion.

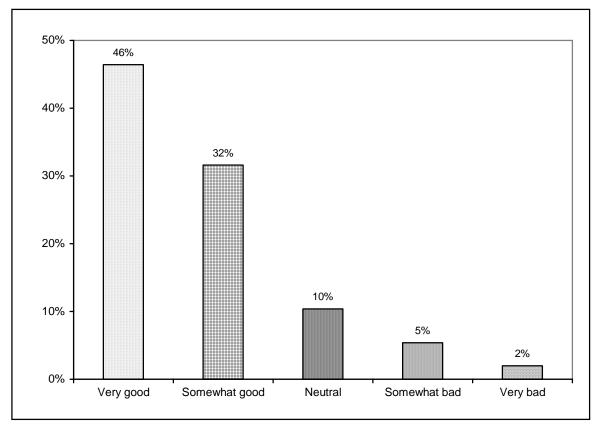


Figure 7. How things are going for the residents of Kilauea town. n = 405

^{*}The remaining 5% indicated no opinion.

Table 21. Importance of features to Kilauea residents when selecting a town in which to live.

Service/feature	Importance					
	Very important	Important	Somewhat important	Not important	Does not apply	n
Safety, low crime rate	89	10	1	< 1	< 1	400
Absence of air/noise/light pollution	80	17	3		< 1	400
Parks and open space	75	21	3	< 1	1	396
Scenic beauty	77	20	3	< 1	< 1	400
Quality of schools	69	16	3	3	11	401
Affordable housing	61	23	8	6	4	399
Walkways/bike paths	56	27	11	3	1	398
Opportunities for well-paying jobs	39	27	15	11	8	394
Length of commute	39	27	16	7	12	393
Historic character	41	33	18	7	< 1	396
Low risk of natural catastrophes	35	30	18	12	6	393
Number of stores and shops	18	26	38	17	2	402
Public transit that is reliable and convenient	39	26	20	11	5	392

Table 22. Importance of features to Kilauea residents when selecting a town in which to live; collapsed.

Service/feature	Importance			
	Very important/ Important (%)	Somewhat important/ Not important (%)	n	
Safety, low crime rate	99%	1%	400	
Scenic beauty	97	3	400	
Absence of air/noise/light pollution	97	3	400	
Parks and open space	96	3	396	
Walkways/bike paths	85	14	398	
Quality of schools	85	5	401	
Affordable housing	83	13	399	
Historic character	75	25	396	
Opportunities for well-paying jobs	66	26	394	
Length of commute	66	22	393	
Low risk of natural catastrophes	66	30	393	
Public transit that is reliable and convenient	65	30	392	
Number of stores and shops	44	55	402	

Table 23. Kilauea resident satisfaction with conditions of community features.

Service/feature	Satisfaction						
	Outstanding	Good	Average	Adequate	Poor	Does not Apply	n
Scenic beauty	44%	37%	10%	6%	2%	1%	361
Absence of air/noise/light pollution	12	38	24	15	10	1	361
Historic character	12	40	32	12	3	2	358
Quality of schools	11	33	22	13	9	12	362
Length of commute	10	32	26	11	5	16	352
Safety, low crime rate	7	44	24	12	12	1	367
Parks and open space	8	29	31	14	18	1	363
Low risk of natural catastrophes	5	24	36	18	8	9	347
Number of stores and shops	3	33	24	26	11	3	360
Affordable housing	2	6	12	13	62	6	363
Opportunities for well-paying jobs	2	9	23	18	37	12	355
Public transit that is reliable and convenient	1	10	16	27	37	9	357
Walkways/bike paths	1	13	22	23	39	3	358

Table 24. Aspects that negatively affect quality of life in Kilauea.

Aspect/problem	Percentage	n
Growth and development	47%	187
Poor local land use planning	31	122
Other problems	17	69
Current economic conditions	12	46
Conflict between community groups	11	42
Lack of public funds	8	33

^{*}Percentages do not add up to 100%. Some respondents chose more than one option.

Table 25. Other aspects that negatively affect quality of life in Kilauea.

Aspect	Number of people listing
Drugs	17
Affordable housing	9
Chickens	5
Crime	4
Barking dogs	3
Traffic/traffic noise	5
Kilauea Neighborhood Association	3
Development	2
Jobs for youth	2
Litter	2
Housing density	2
Public access to mountains or beach	2
Housing turnover	2
Parks and facilities a mess	1
Homeless/hippies on beach	1
Civil liberty decay	1
Lack of ohano influence on agency decisions	1
Mainland mentality	1
No adequate hurricane shelter	1
No fire station	1
No sewer or drainage system	1
Growth without growth in park and open land	1
Racism	1
Access roads besides Lighthouse Rd	1
Poor schools	1
Increased property taxes	1
Activities for youth	1
Have swimming pool	1

Table 26. Kilauea residents' preferences for transportation projects that should have priority.

Transportation project	Percentage
Walkways and bicycle paths	34%
Highways	30
Public transit systems	24
Local streets and roads	21

n = 406

Question 6

Table 27. Residents' preferences for addressing traffic, development, air pollution, and open space issues.

Issue	Percentage
Slowing down growth and development	41%
Improving local land use planning	38
More coordination between local community groups	10
Other needs	8
More public funds	8
A change in economic conditions	5

n = 405

Question 7

Table 28. Response to whether community residents had heard about land use or development conflicts.

Heard of conflict	Percentage
Yes	82%
No	18

n = 402

^{*}Percentages do not add up to 100%. Some respondents chose more than one option.

^{*}Percentages do not add up to 100%. Some respondents chose more than one option.

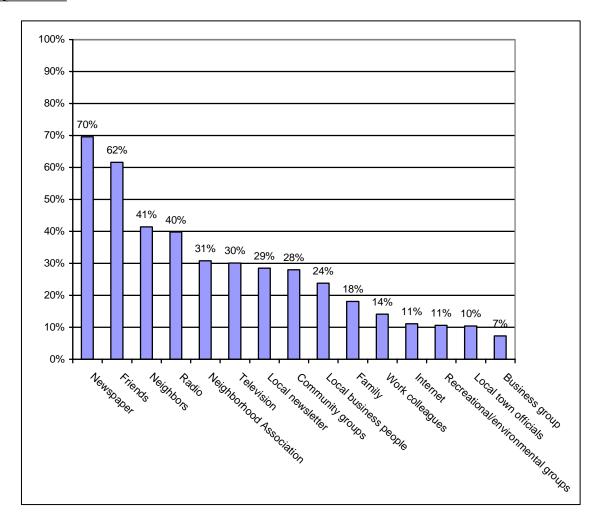


Figure 8. Sources of information on land use and development issues.

Table 29. Other sources of information listed by respondents.

,	J F
Other source categories	n
Coconut Wireless	2
Church of the Pacific	1
Real estate people	1
Senior Center meetings	1
Talking to elders	1

Section 5

Question 1

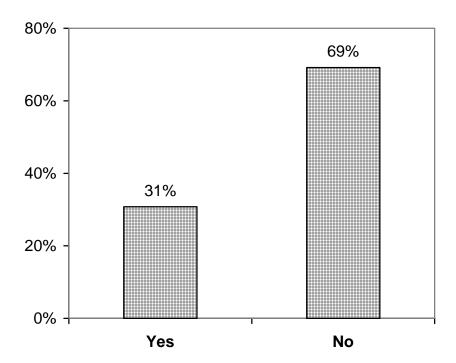


Figure 9. Have you ever used a transit shuttle or bus at a national park, national forest, or at another public facility?

Question 2

Table 30. Kilauea residents' means of commuting.

Transportation	Percentage
Drive alone	70%
Other	20
Walking or bicycle	8
Carpool	5
Public transit	1

n = 405

Table 31. Categories of other means of transportation or responses.

Category/response	n
Don't work/retired	13
Work from home	15
Does not apply	3
Don't work here	2
Motorbike/moped	2
Hitchhike	1
Work in town	1
Disabled/don't commute	1
Drive for a living	1
Ride a horse to the ranch	1
Airplane (Oahu)	1
Don't commute	1

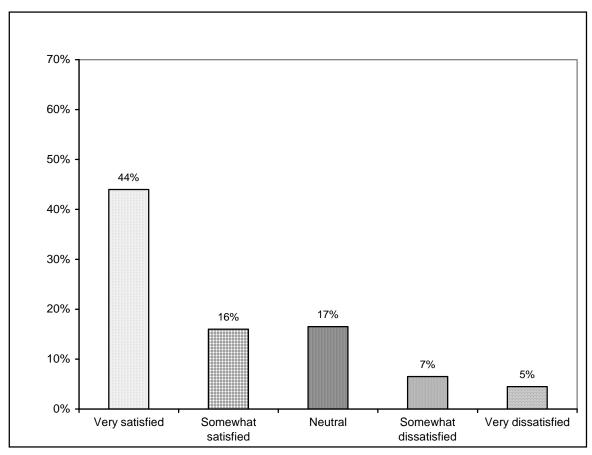


Figure 10. Kilauea residents' satisfaction with their commute to work *The remaining 11% stated that they had no opinion.

Table 32. Satisfaction by commute type.

	Very satisfied	Somewhat satisfied	Neutral	Somewhat dissatisfied	Very dissatisfied
Drive alone	129	51	51	24	11
Walk/bicycle	22	5	2		3
Carpool	7	4	6	1	2
Public transit		1	1		

Table 33. Participation in natural resource decision making.

Activity	Participation
Attended a public hearing or meeting	67%
Contacted or wrote a state or federal agency	37
Contacted or wrote a U.S. Senator or State Legislator	43
Wrote a letter to the editor of a newspaper	17
Signed a petition	79
Joined a special interest group	35

n = 380

Question 5

Table 34. Number of years lived on Kauai.

Years on Kauai	Percentage
1-5	15%
6-10	15
11-15	13
16-20	17
21-30	16
31-40	9
41-50	5
> 50	39

n = 410

Table 35. Number of generations on Kauai.

Generations on Kauai	Percentage
0	8%
1	30
2	28
3	20
4	11
5	1
> 5	4

n = 161

Table 36. Number of years lived in Kilauea.

Years in Kilauea	Percentage
0-5	24%
6-10	21
11-15	14
16-20	13
21-30	14
31-40	5
41-50	4
> 50	5

n = 407

Question 7 & 8

For a discussion of these questions, please refer to the main report, Section2, "Visitor and Community Resident Experience."

Question 9

Table 37. Sex of respondents

Sex	Percentage
Female	61%
Male	39
410	

n = 410

Question 10

Table 38. Age of respondents as categorized by the U.S. Census Bureau.

Age category	Percentage
19-24	2%
25-34	11
35-44	20
45-54	33
55-64	20
65-74	8
75-84	4
85 and above	1

n = 392

Table 39. Community resident employment.

Employment status	Percentage
Work (full- or part-time)	81%
Retired	16
n = 431	

Question 12

Table 40. Ethnicity of residents.

Ethnicity	Percentage
Not Hispanic or Latino	95%
Hispanic or Latino	5
n = 307	·

Question 13

Table 41. Racial origin of residents.

Racial Origin	n
White	294
American Indian	9
Black or African American	3
Native Hawaiian or other Pacific Islander	35
Samoan	1
Hawaiian-Chinese	1
Asian	3
Filipino	34
Japanese	34
Chinese	15
Indonesian	1
Tai	1

Question 14

Table 42. Education among Kilauea NWR visitors.

Education	Percentage
Less than high school	3%
High school	16
Some college	34
College degree	23
Advanced degree	24

n = 402

Question 16

Table 43. Income of Kilauea Point NWR visitors.

Income	Percentage
Less than \$10,000	2%
\$10,000 to \$14,999	4
\$15,000 to \$24,999	9
\$25,000 to \$34,999	10
\$35,000 to \$49,999	17
\$50,000 to \$74,999	26
\$75,000 to \$99,999	14
\$100,000 to \$149,999	13
Over \$150,000	5

n = 361

Kilauea Point National Wildlife Refuge & Lighthouse Community Survey: Summary and Comments from Open-Ended Questions

Participants of the community who responded to the Kilauea Point National Wildlife Refuge & Lighthouse Survey were asked a number of open-ended questions in order to invite self expression and detailed information of their experience. The information received varied from person to person but answers were recurring, illustrating a general theme. These answers were used as building blocks to assess the communities concerns and experiences. Four questions were asked throughout the survey to uncover what would bring them back, what would enhance their experience, and lastly, what is the biggest benefit or concern of being a neighbor of the Kilauea Point National Wildlife Refuge & Lighthouse? Their responses are formulated into general topics and are illustrated below.

Section 1, Question 8: What would enhance your experience at the Refuge?

The first open-ended question directed toward community respondents asked, "What would enhance your experience?" This type of question can be used as an opportunity to link their experience at the Refuge with management practices to determine if their needs and objectives are satisfied. Are they receiving a first-rate opportunity for a wildlife-oriented recreational and educational experience? Are programs and facilities for the visitor's enjoyment fulfilled and meet their expectations? Many respondents opt to not change a thing: "Great balance as a tourist attraction and Refuge;" yet others offer suggestions for change and improvement. The most common suggestion is for residents and visitors to regain access to Crater Hill and other hiking trails, perhaps even down to the ocean, and secondly; to reinstitute access to the inside of the lighthouse. Members of the community would like to see the lighthouse in working order more often and suggest letting the light shine. Others would be interested in having night visits available providing the opportunity to watch the sunset and/or stargazing, still others hope that the Refuge will simply be open longer hours. Some individuals wish that residents and Kilauea community members would not have to pay full admission to enter the Refuge and have commented that they would like to be able to walk into the Refuge on foot rather than have to drive. To improve the facilities, respondents suggest adding shaded areas, seating, and picnic areas. Respondents also indicated they would like to see more native fauna. "It is a beautiful spot unlike any others in the world; the uniqueness of it is enough," expressed one individual. As indicated by many community members, they would enjoy more access to educational material, such as: mailings, newsletters, brochures, special interest programs and activities. In other words, they are interested in having more information on the history of the lighthouse and Refuge, native plants, the environment and wildlife in the region. Suggestions included providing this information through audio tours, workshops, seminars, signage, and allowing both guided and self-guided tours. One individual would like to have a person welcoming the visitors at the entrance. Though many shared ideas for Refuge modifications, others commend the existence of the Refuge without changes being made, "Enjoy it as is - I think the lighthouse is lovely, the Refuge is beautiful. I think things are good."

Section 1, Question 9: What experience have you had at the Refuge that will bring you back?

Secondly, the community was asked, "What would bring you back?" A wide range of responses were offered and included both the social and natural environment. For example, some individuals cherished the view of the coastlines, cliffs, surf, flowers and wildlife; while others value the presence of informative guides, volunteers, a friendly staff, and the company of visitors. Others say that it is simply the "Aloha Spirit" that would bring them back. Members of the community have been going there since they were young and now the Refuge serves as a place that they can bring their children, ultimately reliving their childhood memories and sharing the historic value of the lighthouse with others. Special events and informative affairs also prove to be an element that will bring the community back. Respondents encouraged the existence of educational programs and tours, class trips, and community based events. Lastly, Crater Hill hikes, exploration of the Lighthouse, and the pure enjoyment of "just being there" to view wildlife, such as: the albatross, whales, seals, seabirds, turtles, and dolphins were among the most common responses to why the members of the community would come back to enjoy the Refuge.

Section 2, Question 1: What is the biggest benefit to being a neighbor of the Kilauea Point National Wildlife Refuge/Lighthouse?

The next set of open-ended questions asked residents of the community to express their thoughts of Kilauea Point National Wildlife Refuge in terms of its meaning to them and to their community. First, they were asked what the biggest benefit is to being a neighbor of the Refuge. The key words reiterated in the responses from the community are *preservation* and *access*. Respondents specifically enjoy the convenience of having a protected, undeveloped preserve for flora and fauna close by and in some cases just minutes away. "Knowing that there is a safe place nearly that protects and nurtures the natural world and her inhabitants is the biggest benefit to being a neighbor to the Refuge," expressed one member of the community. Without having to travel long distances, they can experience a beautiful piece of history and natural education. It is a point of interest and a place of recreation and leisure to take visitors and family. Lastly, the respondents benefit from having the Refuge in their neighborhood because they say it enhances the value of the community and small town economy. "Part of our island is being preserved and shared back with the community," articulated a community respondent.

Section 2, Question 2: What is the biggest concern of being a neighbor of the Kilauea Point National Wildlife Refuge/Lighthouse?

The Kilauea community was then asked: What is the biggest concern being a neighbor to the Refuge? As the Refuge grows the residents first concern is traffic. If the numbers of tourists increase, they fear that traffic, noise, and speeding will also increase. "The newly paved road has resulted in more speeding cars, posing a danger to those of us who walk to the lookout," commented one resident. Also, many people are concerned that the Refuge will become too crowded and congested and/or too expensive. If visitation patterns increase, some individuals

express concerns for pollution, urban development, and environmental impact. It is evident that the community is adamant about keeping the Refuge simple, natural and protected. In other words, as one resident stated: they do not want the Lighthouse to become another "all-American amusement park." Many of their responses surround the general theme that if visitors increase then they are compromising the exploitation of natural beauty, the loss of wildlife habitat and public access to the Refuge and its surrounding public lands. Various people were uneasy about tourist disrespect and insensitivity for the natural environment, suggesting that dogs and cats could perhaps invade the refuge, injuring the nesting birds and/or the visitors could trash the Refuge as a result of overdevelopment increasing visitation. The respondents show a concern for conservation, additional respondents promote visitation, but it is evident that the community is not willing to increase public access if in effect they themselves will lose access to public lands and experience and increase in restricted areas.

Verbatim Responses

Section 1, Question 8: What would enhance your experience at the Refuge?

- 1.Take down fences at Crater Hill. 2. Stop charging. 3. Let pedestrians enter.
- 19th century "period costumes" (for staff); Less "Federalism"; more so the maritime motif
- a better craft fair w/music & food area
- A few more shaded areas to get out of the sun
- a mailing 2x year w/program for next 6 monthstalks by environmentalists
- A newsletter stating hours, activities, special interest items.
- A night time visit.
- A shady place to sit. More access to Crater Hill area. Later hours.
- A single piece comprehensive brochure at a reasonable price
- a trail to the bay (HA!)
- a zoo
- Access to Crater Hill for walking or bike w/access thru to Rock Quarry
- access to Crater Hill without a guide or tour group
- access to hiking trails (limit #s going in a time)
- access to lighthouse
- Access to more areas of the refuge without causing damage to plants & animal wildlife
- access to ocean
- access to old lighthouse
- always enjoy it
- As a resident of area, I would like to be able to WALK into refuge, not HAVE to drive.
- At this time no comment, but there's always room for some changes.
- audio tour with increased info
- be able to go in the lighthouse
- Being abel [sic] to use Crater Hill (to drive there, that is a public area).
- being able to go everywhere on the site...ie, Crater Hill
- Being able to go to the top of Crater Hill
- Being able to go up Crater Hill. Walking along the cliffside.
- being able to hike to the top of crater
- being able to hike up Crater Hill & to the point
- being able to hike up to the lookout during business hours (at our leisure)
- Being able to sit on the grass area fronting the lighthouse & have lunch with my children (brown bag)

- Being able to take myself & my children up into the lighthouse.
- Being able to walk in without a car and/or ride a bicycle in
- being inside lighthouse
- Being open on weekends per visitors [sic] request
- better hours, open earlier, longer hours
- binocular availability & telescopes set up on wildlife
- binoculars
- Calm seas & being the first opihi picker of the season!!
- can't think of a thing
- can't think of anything
- can't think of anything
- Careful expansion to respect the larger numbers of people the visitor industry constantly invite [sic] to the island--visitor friendly. Redo intersection of Kuhio Hwy.
- Crater Hill hike
- Crater Hill hike; tours of the site with a GOOD interpote [sic]
- Crater Hill hike reinstituted
- Discount on entrance fee for riding bicycle into refuge [smile face]
- don't care
- educational; protecting the environment
- Encourage people to visit
- fewer people
- fewer people
- Fewer people there but that cannot be helped
- fewer visitors allowed; more environmental education; a Kama'aina rate for locals
- fishing
- For the community--I think it's nice to have sunset opportunities--where people from Kauai can feel they are treated special...Leisure pace, less people, quiet environment
- Free
- Free admission for local residents
- free entrance to Kilauea community members (or discounted) so we could use it more
- Free entrancy on foot/charge if driving & parking. Rest area/refreshments.
- Get to do activities below more often!
- Going inside lighthouse, guided tour? Bino's [sic] available at gift shop
- going into the old lighthouse

- going on the hikes
- going to top of lighthouse
- Gosh--more personal information--I guess I felt it was "interesting" but need to know more-always felt a bit flat after leaving--how you do that I do not know
- guarentee [sic] to see more wildlife
- guided Crater Hill hikes
- Guided hikes, guided tours, more marine information
- guided tours
- guides
- Have geological info on islands; provide shaded area w/sitting on point; allow people be introduced [sic] to native plant nursury [sic]
- Having more access by foot like we did years ago
- Having more free time (Refuge is great)
- higher frequency of nature walks
- hiking access to Crater Hill/the wooden perch/the Point where old dumping (I was told by old timers) area overlooking Rock Quarry
- I don't know
- I don't know
- I enjoy it as is
- I enjoy it as it is & recommend it to all of my visiting guests.
- I have enjoyed each experience--it would be nice to go up to the lighthouse
- I just love going there--& seeing the beauty!
- I like it as it is
- I like it the way it is.
- I like the Refuge just the way that it is.
- I love the lighthouse just the way it is
- I love the way it is
- I should take the time to visit more
- I think it's perfect the way it is.
- I think the lighthouse is lovely, the refuge is beautiful. I think things are good.
- I think we should have a daily shuttle to & from
- I wish I could bike there. Then I would visit more frequently & perhaps check out the gift shop for family gifts.
- I would like to be able to go up in the tower & see the clamshell lens.
- I would like to see the lighthouse lit up at dusk
- If the entrance fee would be lowered for people who have been raised & are raising their children here in Kilauea.
- Improved access: (1) bicycle & pedestrian access
 (2) access to Crater Hill lookout & hiking (3) shuttle vans from highway site (4) increased hours.

- improved information--history, environment, birds, mammals, etc..
- increased native plant & ecosystem area
- Informational brochures, more info tours
- interesting speakers
- It is a beautiful spot unlike any others in the world; the uniqueness of it is enough.
- it is fine as is
- It was always wonderful & very friendly knowledgeable staff
- It would be nice if there were walking trails
- It's just fine as is.
- Keep facility open until sunset (later in Summer).
- Keep the natural scenic beauty
- Keiki Day where children could receive something memorable (experience also)
- Knowing that people aren't unwittingly being exposed to mercury vapors when they ascend the lighthouse stairs.
- landscaping--all native
- leave as is
- less charge
- less crowds
- Less odor from the birds [sic] droppings
- less people
- less people
- lighthouse access
- lighthouse access (interior of lighthouse)
- Locals rarely visit the lighthouse. Most of the donation revenue comes from tourists. It should be free or discounted to the few residents who actually come.
- longer hours
- Lower enterance [sic] fees.
- Maybe a film on different types of wildlife on the island
- more access
- More access to Crater Hill area
- More access to lighthouse
- more access to lighthouse
- More access to other refuge lands such as Crater Hill, Hanalei Valley & this refuge on the south side.
- more activities for kids
- more binoculars
- more birds & animals to watch
- more digital information, slides, movies, etc. for kids; need a snack shop, water, sodas, hot dogs, etc.; need special "camara" [sic] to see areas of the ocean dolphins & bird watching
- More educational opportunities in the evenings!
- More explanation on background
- more fairs example ocean during whale season

- more formally presented info--short tours/talks (10 mins)
- more free to self guide (wider time during day)
- more guided tours
- More guided tours of cliff area
- More hiking access
- More history about the 'point' & island
- more info from guided tours
- More info on native plants & their uses. More info on Hawaiian culture.
- More info on wildlife & environment
- More interaction with wildlife
- More interactive educational exhibits. Bigger bookstore.
- more lighthouse access
- more marine mammals
- more native fauna
- more native plants, less visitors from outside, more community
- More nature hikes
- More of a community feel; to [sic] restrictive
- more parking
- more plants & wildlife
- More seating to enjoy the view.
- More self-guided info; more places to sit.
- More small educational signs
- More uniformed staff to interact with visitors in formal interpretive programs.
- more viewing scopes or binoculars
- more workshops & seminars to educate publicincluding adults
- more written info for public
- Mostly I visit the Refuge & Lighthouse with visitors from United Sates, etc.
- My experiences have been outstanding--I can't think of anything to improve it.
- My personal experiences there have been positive & fulfilling
- native plants, where are they, etc.
- nice as is
- Night & evening special event tours; star gaze with informed guide speaking of Hawaiian cosmology & watch evening nite [sic] habits of wildlife (esp. on full moon)
- Night time events--star gazing, fund raising, etc., walking trails
- no comment at this time
- No idea on that
- no screaming children, UNATTENDED!
- none
- not sure
- Nothing! It's beautiful! Maybe a walkway/bike path [smile face].
- Nothing, it's all good.

- nothing, we enjoy it the way it is
- Nothing. I enjoy it for what it is.
- Nothing. I like the refuge as is. I would visit more often if free.
- nothing--great as a refuge & tourist attraction (& that balance is probably HARD to create!)
- OK-now
- One evening per week where site open later & stays open in evening as birds come to land.
- one free day a month preferably on a weekend
- open all the time
- Open gate at Crater Hill to allow access
- Perhaps offering hikes? Community access beyond what the regular visitors do. "Help the Lighthouse" days or some cleanup days posted.
- Permit more access to other part of the Refuge
- picnic areas; less tourists
- picnicking [sic]
- Places to sit & watch whales & birds
- Re-establishment of walk [sic] tours to the top of Crate [sic] Hill. Public access to Bali Hai view at end of Seaclifff cul-de-sac.
- Re-open Crater Hill guided hike
- restaurant
- restoring the lead hike up Crater Hill
- Satisfied, but maybe some native plants or an area with rare native plants
- season pass
- See more wildlife & the natural habitats they live in.
- seeing beautiful birds & variety of them
- seeing orchids & plants
- Seeing the light lit more often
- self-guided trails with more overlook (ocean scenic views)
- skeet shooting:^) [smile face] kidding...
- slide shows on the hour
- Some type of night experience under a full moon.
- Someone welcoming you to the preserve
- the ability to walk Crater Hill at will
- the beauty of nature
- The guided walks to see the birds in natural habitat & Crater Hill is a very important aspect of the experience & should be reinstated.
- There should be a break for local residents of Kilauea for the admission fee
- to be able to walk up to the crater easily when I want to
- To remember the Hawaiian names of the birds/aquatice [sic] mammals.
- To watch the lighthouse really work
- Trails & other walking opportunities

- Walking path into facility along road--not all of us locals drive in--we walk in from town.
- walkway continued from Kilauea town to Lighthouse
- Water available at contact station. Water fountain has poor flow quantity
- We are adequately pleased with each visit.
- wildlife observations
- Would like to be able to walk down instead of having to drive

Section 1, Question 9: What experience have you had at the Refuge that will bring you back?

- Crater Hill hikes (2) educational programs (3) informative guides-volunteers
- a beautiful spot to view God's creation
- a beautiful wedding
- albatross, view of whales when they are here
- All
- all an outstanding experience
- All were excellent. I will always return, especially with guests.
- always coming back
- amazing bird viewing & sightseeing
- art activities--kids
- As above, & always for the birds
- Awesome nature, engaging guides, good bookshop
- Beautiful coastline, views & seabird viewing
- Beautiful experience, just being there. I've been going there since I was a young child when the Moriarty Family was there. I will take my child.
- Beautiful surroundings/manne & birdlife
- beautiful view
- Beautiful views. Quiet.
- Beauty & one opihi! Good fishing/diving.
- Beauty of water & cliff views
- being able to go everywhere on the site...ie, Crater Hill
- being able to watch the native birds in the Refuge/Lighthouse.
- Bird life & surf
- bird watching
- bird watching, watching the surf
- birds
- birds & sea life
- birds up close, flowers
- birds, birds, birds
- birds, whales, beauty
- birds, whales, turtles
- Birds, whales--just a great spot
- Birds--Whales
- birdwatching--the scenic coastline
- bring back my neighbor & family
- childhood memories

- Class trips
- close encounters
- Close observation of birds
- Coast sightseeing
- Community-based events. Connecting with other folks who love the lighthouse; enjoying the babies; whales; dolphins; cruising with the Moriarty's [sic] in the old days...
- conservational activities
- Cousteau speaking
- Crater Hill
- Crater Hill hike
- Crater Hill hike
- Crater Hill hike, contact w/helpful volunteers
- education
- educational tours
- Engaging volunteers who taught about the computer access for students & albatross etc.--I almost volunteered for whale counting but my work was in the way--next year!
- Enjoyed the historic value of the lighthouse.
- Enjoying the natural area
- environment
- excellent viewing of whale, birds, etc.
- Excitement on the faces of visiting family members
- experiencing a serene environment
- Extraordinary visuals!
- Fabulous views & weather. Great history & wildlife information
- family history
- fledgings [sic], spectacular views
- Friendly & informative volunteers & staff.
- Friendly workers
- friendly, knowledgable staff; handicapped services excellent
- Generally, all good--volunteer work the best; always bring visitors & recommend to guests.
- Get to go to the top of the Lighthouse! Being there at night--the full moon!
- going into the Lighthouse
- going upstairs to see house light

- good photographs, Charlie Martin
- good views of wildlife & landscape
- Great staff interaction & of course the natural beauty & wildlife.
- Great staff, great views, birds!
- Great staff; great views; cleanliness
- great views of marine life
- Great whale & dolphin spotting! Love to see the birds.
- guided hike
- guided walks
- guides
- having close contact with the nene & other wildlife/seeing baby birds; using the facility as an educational experience for my child
- Having the Refuge open on Saturdays is a major plus. I am able to plan activities with friends & share the Refuge with youth who otherwise would not visit.
- high concetration [sic] of sea birds, native plants
- Hike into bird santuary [sic]
- hike into refuge
- Hiked to cliffs w/friends
- hikes
- Hiking the Crater Hill
- historical events
- I drive a school bus so I enjoy the field trips to Refuge
- I go every day off to take in the beauty but I do not walk down to center.
- I go there when I want to see birds, look down the coast--it would be nice to be able to watch sunset from there.
- I just love taking a walk & viewing what it has to offer. The money is well spent knowing it helps to keep the park alive.
- I like the atmosphere/location
- I like the history provided in the center.
- I live in Kilauea but the Refuge & Lighthouse is special so it is great to visit & observe the birds, ocean, & visitors.
- I lived here since before it was a refuge & the shear [sic] experience of standing out on the point is enough for me.
- I love hearing all the noise the birds make as the sun begins to set. I love the view.
- I love the air, the winds, the viewing of the birds, the coastline
- I loved the ocean fair, but I suggest have it at a different time of year (rain!!)
- I will always come back.
- Information, spectacular views, native vegetation
- Informational tour of lighthouse, wildlife viewing, friendly & knowledgeable staff

- It is just a really beautiful place to take in the coastline.
- It is very important to preserve the wildlife specially [sic] the one [sic] who are in danger of extintion [sic].
- It is very pretty overlook. It is a really nice place to just look at & watch wildlife & nature.
- It's a great place. The use of binoculars is a wonderful idea. Liked the video, too.
- It's natural beauty & serenity.
- It's sheer beauty & magnificence
- It's the people that excite me--meaning the staff, Cathy, David & Judith. Their enthusiasm & dedication inspire me & touch the lives of countless others.
- its uniqueness & serenity
- just a great visit very peaceful
- Just being able to walk around & view the wildlife.
- just relaxing, enjoy scenery, etc.
- just the natural beauty the way it is
- just watching & listening to the birds; whale watching
- Last year our school (2003/2004) Kula El. had an excursion there that was outstanding. It was very informative, educational, & age appropriate.
- Local fauna & flora, ocean-watching, craft fair, art lessons
- Low entrance makes frequent visits possible. It is a special & beautiful place--nothing else like it. Staff is wonderful. It is always exhilarating to be there.
- magic
- many
- Monk seals on the beach below; hearing good & awesome things about your field trips for children
- more access to shore-line fishing
- more hula
- More information about how to help the lighthouse.
- mother nature's show!
- My childhood days growing up in Kilauea, memories that will never be forgotten
- natural beauty
- natural beauty
- natural beauty, birds
- Natural beauty--hikes & information
- natural environment--coastline--birds
- Naturalness & beauty of the area
- Nature hike up Crater Hill
- nature, quiet, peace
- Nesting seabirds, big surf

- Nice place to visit when I have company/visitors
- Nice staff--beautiful scenery--great guided tour.
- nice views
- no comment at this time
- none
- observing friends [sic] 1st visit reaction
- Observing wildlife & the natural surrounding environment
- Ocean Day & Lighthouse Day are GREAT! I have not been able to attend the other 2 days because of work schedule.
- Ocean Fair & whale season
- ocean fair; whale viewing; seabird viewing
- Ocean Fairs
- OK-now
- Overlook at sunrise--hiking to top of Crater Hill
 -- watching ocean from lighthouse
- permits to go fishing or being able to go fishing
- photos of the birds & coastline, seeing so many birds up close
- pristine nature views
- Saw whales & dolfins [sic], love lighthouse penninsula [sic] & Crater Hill hike.
- seabird viewing
- seabirds, nenes -- viewing
- sealife, friendly staff eager to answer questions
- seeing baby birds
- seeing natural wildlife
- seeing seal; nice staff
- seeing so many birds
- seeing so many birds, beautiful veiws [sic]
- seeing the birds, Albatross & whales
- seeing the favorable reaction of guests
- Seeing the various wildlife & plants such as naupaka.
- seeing the whales & porpoises
- Seeing the whales with my kids
- seeing the wildlife
- Seeing wildlife & going in the lighthouse.
- Seeing wildlife in its own natural environment
- seen enough
- So many--Frigate birds soaring--mostly my place to "commune with nature"
- some history of "Industrial Revolution"-spawned sugar production "human resources" ABUSE is aired.
- special days
- special events
- special events
- special events
- special events bringing tourists
- spectacular location, well-maintained
- Staff

- sunset bird watch & night walk when shearwater is nesting
- Sunsets on the hill!!
- terrific view of coast line!
- The air, view, bird [sic], location, Mokuaeae, dolphins off Kaupea.
- the Aloha Spirit
- The Aloha Spirit.
- The ALOHA with lots of information.
- The amazing scenery
- the awe of whales & albatross
- The beautiful scenery
- The beautiful scenery & history is worthwhile visiting.
- the beauty it beholds
- The beauty of the area & the wildlife.
- The beauty of the place
- the beauty--whales
- The binoculars to view wildlife, cabbage on a stick [sic], whales, birdwatching.
- the birds
- The Crater Hill walk offers an educational experience unlike the others offered.
- The crystal lense [sic]; whale & bird watching.
- the fun expearinces [sic]
- the hike
- The marine & bird life & natural beauty is always rewarding.
- The natural beauty & abundance of wildlife & sea life
- The natural beauty & environmental control of such a pristine area!
- The natural environment, protection of species.
- the ocean view, wahels [sic] & dol.
- The overall experience of the wildlife & the beautiful serene surroundings
- The overall visit & info
- the power/beauty of the place
- The refuge open late for special occasions so people can experience the end of the day there.
- the road--enjoy all my visits
- the scenery, the wildlife, the view
- The special events, to share with child.
- The view
- the view
- The view, the helpfulness of the staff & the nature walk to view the nesting birds on the hillside.
- the view, the wildlife, the courteous refuge employees
- The view.
- The views & wildlife.
- the wildlife
- the wildlife

- The wildlife viewing opportunities are excellent & for the most part, the volunteer docents are knowledgeable & friendly.
- The wonderful view!
- They were all good!
- to see high surf & paint paintings
- too many
- Touring the lighthouse, hikes to Crater Hill
- Tours-seabirds-whales-everything. It's a special place.
- Traditional Hawaiian events, I.e., dancing, storytelling--volunteer services to help injured birds--or bird care
- view
- view & birds
- viewing albatross & other birds & high surf; lighthouse is beautiful; spectacular views
- viewing lens
- viewing the birds & whales
- Viewing the interior of the lighthouse & of course, the serene environment & wildlife.
- viewing the natural beauty, wildlife & ocean/large surf conditions.
- Viewing the wildlife
- viewing wildlife, seeing lighthouse, learning opportunities
- viewing wonderful natural beauty with my family & friends (& viewing the birds)
- views
- views & wildlife; environmental education & care
- Views of the area, gift shop, seeing whales
- views, watching the birds

- views, waterfowl, loved tracking the migration of the albatross
- Visiting the sight [sic] & talking with staff.
- Volunteering
- walking up lighthouse steps; viewing nesting birds in habitats
- Walks on cliff
- Watching the native birds
- watching the whales/dolphins
- Watching whales, & environment
- whale & bird & dolphin-watching
- whale & dolphin & bird sitings [sic]
- Whale Watching
- Whale watching & albatross chick fledging
- whale watching, birds in action, visiting inside the lighthouse
- Whale watching. Bird hikes.
- whale/dolphin sighting/seabird viewing
- whales & seabird viewing
- whales & wildlife
- Whales!
- whalewatching
- wild birds, beautiful view, educational signs
- wildlife & plants
- wildlife sightings & scenery; sunset viewings
- wildlife viewing
- wildlife viewing
- wildlife, whales, beauty
- wildlife/views/serenity always bring me back
- worked as volunteer
- zazen

Section 2, Question 1: What is the biggest benefit to being a neighbor of the Kilauea Point National Wildlife Refuge/Lighthouse?

- It is a beautiful place.
- A beautiful place to take visitors
- A beautiful quiet place to commune with the ocean, sky & the birds.
- a piece of important history of our island & to save wildlife nesting grounds
- A place for visitors/locals to enjoy/preserve natural beauty, yet presented in such a way that safety, viewability & nondestruction of habitat occurs
- a place of history & natural education
- a place to see wildlife up close
- a place to take visitors
- a place to take visitors

- a protected area of Kauai not to be developed
- A safe haven for the birds, the environment & visitors. It is always a pleasure to take family & visitors & to enjoy the continuous upgrades.
- a sancuary [sic] for wildlife
- A scenic & calm, beautiful spot nearby. Place to take visitors.
- A well run wildlife sanctuary is an asset to our community & visitors
- a world-class refuge in our back yard
- Abbundance [sic] of native birds & absence of helicopter over
- Ability to take my son there frequently for educational opportunities
- able to drop in at a moment's notice

- Abundant sea birds in neighboring areas like Kaupea & Kahili beaches (Secrets & Rock Ouarries)
- access easily
- access to Crater Hill like it used to be for residents only, tours for visitors
- access to environmental beauty & education
- access to location
- access to natural lands, bird sanc [sic].
- access to ocean viewing & wildlife protection
- Access to protected natural beauty & ecosystem
- access to Refuge
- an area that wasn't developed--protected bird & sea animals
- an educational, gorgeous place to send our guests!
- An open area is preserved--visually & for wildlife
- appearance & educational
- area remains natural--development is limited
- availability of the wonderful area to share with mainland family & friends
- be able to go there anytime
- beautiful area
- Beautiful location to view whales, dolphins & birds
- beautiful scenic views
- Beautiful untouched hillsides, visitors along Lighthouse Road where our new church & farm are being built
- beauty
- Beauty & history of site
- Being [sic] to care about the Refuge/Lighthouse
- Being a part of its history.
- being able to bike there
- Being able to bring visitors & family members to such a beautiful spot is special.
- Being able to enjoy seeing & interacting with the wildlife that the refuge supports.
- being able to ride my bike to the lookout & view it
- Being able to talk to tourist about Gods [sic] creation!
- Being able to view nature in an uncrowded, serene locale--it's like falling into a different world. I rarely attend your events--usually visit on "off times"--less crowded.
- Being able to visit & enjoy the surroundings
- Being able to visit the lighthouse any day.
- Being able to visit the point & its incredible beauty.
- Being close to this point of interest & observing the birds in this vicinity
- Being in an environment supportive of nature

- being minutes away from such a spectacular refuge
- Being so near to a protected wildlife refuge, &, having visiting nenes, knowing they are safe
- birds
- BIRDS! Place to bring my kid on Sunday to see ocean from above
- breath taken! [sic]
- bringing students
- Brings in the tourist \$ to Kilauea
- Brings visitors into Town
- business traffic
- close access
- close by
- close proximity & more birds near & through the neighborhood
- Close to all that beauty & info
- close to facility
- Close to unbuildable natural spot
- close to where we live
- Distant view
- don't know
- don't know
- ease of access
- easy access to the beautiful landscapes
- Easy access to wildlife & scenery
- Easy to get to the lighthouse
- education in backyard
- enhances value of the community
- enjoy looking at the birds & whales & dolphins
- Enjoying the lighthouse (quaint!) & the nene flying in formation
- fed reg
- frequent visits
- Get a chance to view wildlife
- Gives character & renown to area--keeps us linked (aware) to area's natural resources; staff very community minded.
- Going to a beautiful natural place. People w/money can't buy it!
- good for business
- Good place to take visitors--good for local schools
- great place to go & take visitors
- Great place to take friends to see wildlife
- Grew up in area, 1 grandmother worked for plantation. Went up to lighthouse to play with friends. Old playground.
- Guarantee the Point will stay natural & wonderful

- guides
- have a special interest in lighthouses
- Have not spent much time @ the Refuge, but love having the nene population here.
- having a beautiful nature park in "backyard"
- Having a beautiful area for sea birds & nene nesting area.
- Having a historic & a beautiful spot to view nature & history for our community.
- Having a historic landmark. Having a place for wildlife. Having it undeveloped so people can experience the beauty of nature.
- having a natural area preserved forever
- Having a pristine place to bring guests to visit.
- Having a protected area that won't get buit [sic] on or developed.
- having a protected place for the wildlife
- Having availability to a federal protected area.
- having close access to Refuge
- Having close, easy access to one of the most beautiful spots in the world.
- having easy access
- Having it nearby
- having it preserved
- having less development
- having save [sic] the open space
- having such a wonderful place so close by
- Having the natural environment preserved.
- having the opportunity to see the amazing wildlife
- having the protected area
- having to share it with my kids
- help one another
- historic
- Historic area--no shopping malls
- historic site
- historic value
- historical value & interest
- history
- I am glad the birds & wildlife have a home.
- I believe in preserving wildlife & having refuges for it. It's a good thing. I'm not sure it directly impacts my being a neighbor.
- I can drive/walk/or bike down whenever
- I can go there any time I want to for a reasonable fee
- I can see native birds in a naturel [sic] setting.
- I can visit often.
- I can walk there even though I don't go inside I still can enjoy the area & view
- I enjoy the natural open space.
- I feel having a place where one knows they can go, it's taken care of, we are greeted as

- individuals & the birds have a refuge--these things create a really good feeling.
- I have a pass & can go anytime
- I have pastures all along Kaupea Rd & enjoy the nesting birds--whales & dolphins
- I like living near such a beautiful place
- I like the fact that there is a wildlife refuge nearby.
- I like to ride my bike down to the gates, but I rarely go in b/c of the fee & the crowds.
- I love living near a refuge, it feels healthy.
- I love the place and am proud to take friends & family there
- I walk to get excercise [sic] because I live nearby--I really enjoy walking to the lighthouse!
- I write lots of letters (pen pals) all over the world I send them lots of snapshots of Kilauea lighthouse
- It brings customers to our small neighbor [sic] for our small businesses.
- It gives me a great place to jog to & stay in shape
- It has history [sic] significance & sharing it with visitors is of importance.
- It helps the various businesses in Kilauea.
- It is a beautiful place
- It is a spectacular place/site to have in one's neighborhood.
- it is a tourist spot
- It is a wonderful place that is accessible to all people. It allows us humans to interface with the beauty & dynamism of the natural world & reminds us of who we are & the vastness & beauty of the world we live in.
- It is beautiful
- It is nature, appealing to everyone. Biggest benefit marking most northern point in state.
- It is nice to bring family & friends to view the ocean.
- It is part of Kilauea
- It is so beatiful [sic] & I am proud how it is kept for the wildlife.
- It's a nature preserve: wildlife haven among an area with development; peace; conservation; history
- its [sic] a beautiful & historic place--important to the birds that nest there
- It's a beautiful landmark for the North Shore, Kauai.
- It's a historic site. It provides jobs for local residents.
- It's a landmark
- It's an area that is preserved & not developed.
- Its beauty-preserved-unchanging
- It's close to home if visitors are visiting.

- Its easy & welcome acess [sic] to our guests
- Its location
- It's part of the island's history & the most northern Hawaiian vantage point
- Just a great scenic view & place to visit for our visitors & a great refuge site for our wildlife.
- Keeping that area open space--void of any development
- kids & adults are more aware of nature
- Knowing I live close to a beautiful area
- Knowing it is there & taking friends & family to visit
- Knowing it won't be developed & educational activities for kids.
- Knowing my neighborhood cares about wildlife & having it close by.
- Knowing that area will always remain the way it is & not be developed
- Knowing that it will stay open space for wildlife
- Knowing that the land is being preserved for future generations & that the birds have a safe haven.
- Knowing that there is a safe place nearby that protects & nurtures the natural world & her inhabitants.
- Knowing that there is an activity so close by.
- Knowing the land is protected for the wildlife.
 The peace & quiet.
- Knowing the Refuge exists
- Knowing there is a safe, natural environment for seabirds.
- Knowledge that maritime navigation & safety is enhanced (should their GPS systems fail & sextant get rusty & miscallibrated [sic]).
- Land is not developed--a natural landscape
- Living close to one of the most beautiful places on Kauai
- Living next to a Bird & Marine Sanctuary is a dream come true-RARE & SPECIAL. I have lots of winged visitors to my garden.
- long family history
- more bird wildlife around my home
- more people
- Most beautiful spot in the world!
- National Educational Facility in near proximity
- native habitats undisturbed no lights on Crater Hill at night
- natural beauty & wildlife!!
- Natural beauty that is being preserved, & the access that schools have to the refuge.
- natural environment, wildlife
- natural preserve
- Natural protection of animals
- natural, uncluttered environment

- NC
- Nenes--they visit us daily. We have counted over 200 on our lawn.
- nesting seabirds/historic lighthouse
- Next to natural beauty & environment that is managed & maintained. Preservation of historic lighthouse.
- nice bike ride
- Nice green area, no homes, lots of birds! Very nice!
- nice scenic point
- Nice views scenery
- no benefit
- no benefit to [sic] restrictive
- No benefit to me.
- No benefit. Good for the birds.
- none
- none
- none
- none personally, tho [sic] I'm sure some businesses are helped
- None.
- None--traffic is bad!
- one of the most important refuges for birds on Kauai
- open land & wildlife
- open land & wildlife
- open space, wildlife conservation & abundance
- open spaces being preserved
- open spaces--not developed
- Opportunities for the children (& all of us) to view & be educated about wildlife & history @ Kilauea Point
- Our daily a.m. walk to the lighthouse is breathtaking & beneficial to our well being with our exercise.
- Part of our island is being preserved & shared back with the community.
- People can't build around that area.
- People know I live near a scenic area of Kauai.
- People know where Kilauea is located.
- personal privacy & minimal entrance/other charge
- physical proximity to other tourist destinations
- Place to take visiting family
- Point saved from further commercial development (ie, condos, gated communities, etc.)
- preservation
- preservation & access
- preservation of area
- Preservation of native flora & fauna
- Preservation of natural landscape inc. flora & fauna

- preservation of open space
- Preservation of open space & wildlife habitat
- preserve nature & wildlife
- Preserved land--no development, conscious community, pride
- preserved open space
- preserving native birds like nene geese & the views
- Preserving natural habitat for bird wildlife
- pride
- PRIDE in a beautiful, national refuge that brings people together.
- pristine area of refuge
- pristine area preserved--no lights on Crater hill during nitetime [sic]
- Private property owners restrict so much access to coastal viewpoints it is nice just to be able to see the view. I was VERY disappointed at how the end of the road was fenced off at the top of Crater Hill.
- Promotion of Refuge and Lighthouse
- protecting beautiful bird species
- protection
- Provides location to care for & learn about species
- Provides undeveloped natural land for wildlife to proliferate which enriches living in the area
- proximity to the exceptional view
- puts Kilauea on the map so to speak nice to be near to this resource
- saving birds
- school projects & beauty
- sea access
- Securing the point from developers. The wildlife needs a home too.
- Seeing amazing birds flying overhead
- seeing sea birds in a natural environment
- seeing the historic landmark
- Send visitor [sic] there. It preserves important habitat & protects our fragile environment.
- Some place educational to take your children to.
- Support of the environment & wildlife
- That at least some small section of Kilauea is preserved.
- That it's right down the street
- That something--some place this special is so accessible & I can share it with children, friends & family to easily to [sic] help educate them.
- the ability to visit easily with friends & family
- The area is to remain free from development
- the beauty & wildlife refuge
- The beauty of the area.

- The biggest benefit is being able to enjoy a large undeveloped area that is devoted to the native wildlife of the island.
- The donation is good. Because it's helps [sic] for funds etc.
- The fact that we have a Lighthouse & National Wildlife Refuge within walking distance to anyone in Kilauea.
- The lighthouse, birds & staff
- the maintenance of our natural environment
- The natural beauty & preservation
- The natural beauty & the wildlife
- the natural environment (wish it was accessible)
- The natural reserve protects area from development.
- The natural unspoiled beauty
- The nene that fly by my house almost daily
- The number of visitors who then can stop & spent money in businesses in town.
- The point & Crater Hill is still like it was when I first moved here 20 yrs ago. It is too beautiful to see go for 1 persons' personal gain & mansion approach to living.
- The preserve for wildlife
- The protection of the wildlife. Teaching the children about wildlife.
- The reasonable price, natural maintained habitat for birds.
- The scenic view is awsome [sic].
- the shearwaters & booby birds
- the view, only place left
- The view. I visit the lookout frequently. Watching the birds is absolutely amazing!
- The visits of the nene & seeing nene & seabirds in flight.
- the wildlife
- The wildlife populations are enhanced because of it.
- to be able to go there
- To be living near a beautiful protected environment.
- To encourage more visitors to visit wildlife refuge/ligthouse [sic].
- To have a beautiful & serene place to share with family & friends--safe place for nene
- to watch the nene fly over
- tourist [sic]; more revenue
- tourist attraction
- Tourists to Kilauea
- tourists to Kilauea
- traffic
- undevelopt [sic] land
- very beautiful
- view

- view--improvement on entrance safer
- Viewing the sunsets from nearby--the peacefulness
- viewing wildlife
- Visitors can enjoy who support our economy
- visitors can go there
- Visitors definitely enhance our small town economy.
- visitors to Kilauea businesses
- walking my dogs to the lookout
- Watching the various birds
- We are able to visit at least once a year & attend special events.

- We do not have to drive long distance to enjoy this beautiful & natural place.
- We have something of value to see
- Well known landmark
- Whale watching access
- wildlife
- wildlife preservation & education
- wildlife watching
- wonderful educational opportunities
- Wonderful natural resource for wildlife, history, natural history & scenic beauty
- wonderful sightseeing, views
- Wonderful view, great staff.

Section 2, Question 2: What is the biggest concern of being a neighbor of the Kilauea Point National Wildlife Refuge/Lighthouse?

- # of tourists driving through Kilauea
- (locals) & tourists sometimes disrespectful
- ?? Increased traffic?
- 1. I noticed ocean debris on my last visit.
 Concern for pollution of water ways & rivers going into area. 2. Really disrespectful tourists.
- A lot of traffic in town
- access to backside Rock Quarries
- Access to pohaku pili.
- All of the features in Section 2 #3.
- all the traffic & people
- becoming more than it is
- Being closed out. Not having access to the beach below & to Crater Hill.
- being kept out of Crater Hill!
- Being locked out of one of the most senic [sic] areas of Kauai
- being overrun by tourists
- Being pressured by urban development
- Biggest concern is conservation.
- birds
- Cars going up with speed. Dangerous around the curve.
- Cars speeding along Lighthouse Road.
- closed access to Crater Hill
- closing off other land (Crater, Rock Quarries etc.)
- convenience
- Corner of Kuhio Hwy [arrow facing right]
 Kilauea Rd.
- Crater Hill access hikes being terminated due to Crater Hill Residential Association
- destruction of beauty & environment
- development & loss of wildlife habitat
- development around [2 symbols] birds return

- Development impact on wildlife
- Do not exploit the natural beauty!
- Dogs & cats hurting the nesting birds
- dogs & cats invading refuge
- Dogs running into refuge
- Dogs will eat birds
- dogs, cats, rats, etc. causing damage
- don't have nay--hours open re very reasonable
- easy accses [sic] to bring friends & family to know this beautiful place.
- environmental impact
- excess speed on Kilauea Lighthouse Road!
- fast cars, I have kids
- Fear of feral dogs & cats harming wildlife.
- Federal penchant to "show-off", add/increase visitors, put structures on open space, think facilities not experiences.
- Growing numbers impacting infrastructure
- Having the USFWS cut off more access
- Having to pay to go there.
- help one another
- Higher entrance fees
- hurting the natural environment
- I am concerned about the increase in traffic to some extent.
- I am proud of your compli__ & beautiful place!!
- I have no concern
- I have no problem with the tourist traffic to the lighthouse because most of them will come Kilauea anyway.
- I think if there was pedestrian & bicycle access to the Point & a very nominal fee, like 50 cents or \$1.00/person you would actually get more \$ from residents visiting the point.

- I use [sic] to go up to the Crater every morning now it's fenced.
- I wish there was a walk-in access because when I ride my bike there I can't enter the Refuge.
- IF Refuge outlaws fishing in area--spear fishing, pole & net fishing
- Impact on Kilauea traffic
- Increased traffic & noise on Kilauea Rd.
- Increased traffic on Lighthouse Road
- increased traffic on road
- increased traffic through middle of town
- Increased traffic to the Refuge as population increases.
- increased visitors
- Ingress into certain areas are prohibited
- insufficient staff for anticipated additions
- invading animals habitat
- It's all good!
- Its desire to becoming more of a tourist trap then [sic] Refuge
- just speeding tourist [sic] to & from there
- Keep it safe & clean.
- Keep tax dollars coming in to maintain pristine environment
- keeping it natural
- Keeping it open.
- Keeping it special.
- Kilauea Rd traffic & wear & tear on the road
- Knowing that it's still open
- Lack of access to Crater Hill
- less heavy traffic
- less public access to area surrounding refuge
- Like to see it kept in good hands. Take care of history landmark.
- limitations to access views & recreational areas
- Locals trashing area before gate at bluff lookout
- Loosing it
- losing access like the gated thing on Lighthouse Rd.
- losing the wildlife preservation
- Loss of access to Crater Hill Lookout
- loss of public access to bluffs
- make sure it is there
- many cars driving fast
- miss the fact we can't go to the top of the Crater anymore
- more cars & buses
- More traffic & dogs that kill birds (Not ALL dogs do.).
- MUCH traffic
- My biggest concern is people not caring about the Refuge/Lighthouse.
- My children can't experience what I did or go places I did as a child especially Crater Hill.

- My concern is the speeding of trucks & automobiles going to the Lighthouse.
- New Rd open to public--Old Rock Q Rd?
 Maintance [sic] of Rd, noise, traffic
- no access at Seacliff (car)
- No concerns--well maybe the speed of the tourist [sic] while driving to the point
- no major growth
- No problem being a neighbor of the Kilauea Point
- None now--if the lighthouse/refuge grows, main concern would be increased traffic.
- None, except that it might increase the visiter [sic] fee. Also there should be a family rate so it doesn't get too pricey for large families.
- None, I personally do not mind the tourism (as long as they respect the environment).
- Not being able to drive to Crater Hill & walk my dog.
- Not being able to go there whenever
- not enough access to Crater Hill
- Open access
- Other neighbors who let their dogs run loose & end up killing refuge wildlife.
- overdevelopment
- overrun by tourists
- Overtaken by rich developers
- overuse of the area
- Please-we do not want the lighthouse to become another all American amusement park--Please keep it simple & natural
- population growth
- possiable [sic] closure of public lands
- preservation of areas from development
- preservation of the wildlife
- PRESERVATION of these great wild spaces.
- preserve the area & maintain
- preserving the wildlife
- Pressure from individuals to limit access to walks & from gov't funding to keep entrance fee low.
- Protect birds; wish we were more informed. Go on KKCR!
- protection of nesting seabirds, native plants & sea life.
- protection wildlife
- refuge will sell land to developers
- Remain as is.
- Restricted access to coastal resources
- restricted access to Crater Hill
- restrictions
- Same as no. 1.
- Somehow it's important cause [sic] we have lots of visitors & we can take people there

- Sometimes too much traffic
- speeding tourists
- stray animals
- That development will adversely affect the site.
 Concerns with the marine life & pollutants, runoff--Fluger-like.
- that even MORE restrictions will be put in place
- that everyone has to drive in
- That halogen gas incandescents [sic] may send the solid glass Fresnel lens the way of the Vacuum Tub (usurped by "newfangled" semiconductor-based transistor components)
- THAT housing dev. on private land will drive birds away.
- that insensitive locals will trash a good thing in the name of amusement
- that it always remains a haven to wildlife & yet still be acessable [sic] if possible.
- That it could be shut down or made inaccessable [sic].
- That it is run correctly & not turned into Disneyland.
- That it may be ignored
- That it may someday become a tourist trap that ruins the quality of life for homeowners of Kilauea
- That it might cost more & not enough road signs to get there.
- That it remain open.
- That it remains natural & protected.
- That it will be overdeveloped or priced out of range of locals.
- That it will not be preserved in the future.
- That it will not be preserved-I hope it's always there.
- That more areas will be fenced. The birds don't care!
- That Rock Quarry Beach & Kilauea Stream might become part of refuge & closed to access. Leave vehicular & boat access as is.
- That the area around the refuge will get too built up; Kilauea Pt NWR is in a position to help us prevent this by acquiring adjacent wildlife habitat & natural ecological systems.
- that the birds are not overly disturbed
- That the birds stay protected.
- That the facility not be funded adequately like our state parks & many national parks
- That the surrounding area will be taken over by over developed money hungry people!
- That to [sic] many tourists will disrespect it with trash, cigaretts [sic], & distrupt [sic] the animals & plants.
- that too many people will spoil it

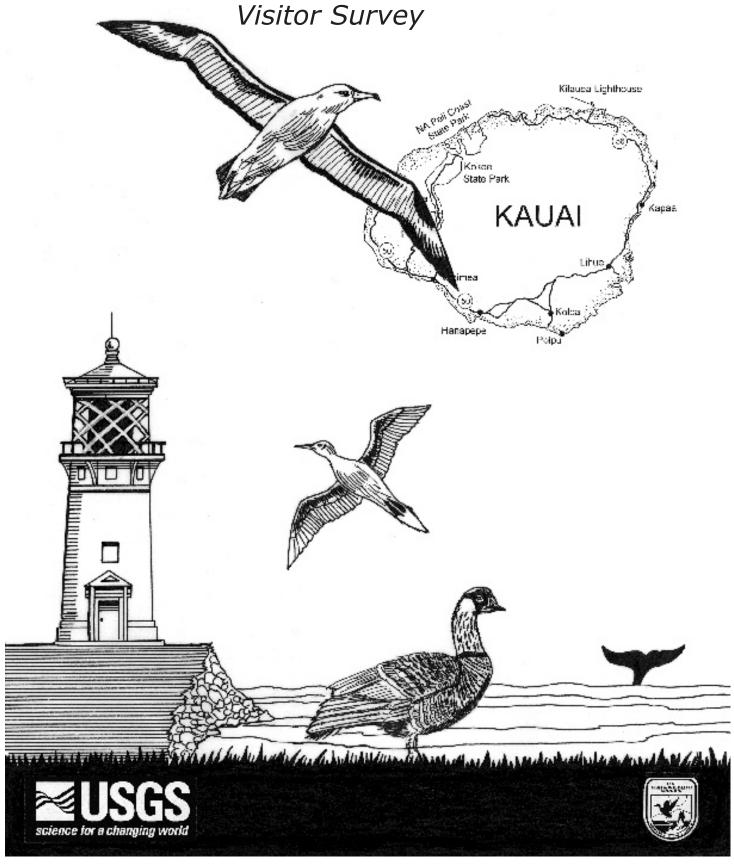
- That you are charging entrance fees to Hawaiians on land that really isn't yours to begin with!!
- The land being bought & built on.
- the mon [sic]
- The newly paved road has resulted in more speeding cars, posing a danger to those of us who walk to the lookout.
- The people or organization responsible for this place preserve it & its inhabitants in the best way that they are allowed.
- The possible expansion of the Refuge that would include the "Rock Quarry" Beach area. I do not want the beach access from Wailapo Rd restricted!
- The Refuge is bringing in way to [sic] many tourist [sic].
- the road into Kilauea is over used
- The tourist traffic it brings through town.
- The traffic changing the Refuge so that we can't visit spots (I.e., Crater Hill).
- The traffic going up the road to the lighthouse & being able to cross the street to go to the post office.
- The traffic problems caused by so many vehicles on Kilauea's main street.
- The traffic sometimes on Lighthouse Rd.
- The traffic to & from lighthouse.
- There needs to be more signage at entrance to Kilauea & Kilauea Rd.
- They'll try to shut down access to the beach sites like they did on the overlook from Seacliffs [sic].
- to [sic] many turest [sic] coming in to Kilauea
- to [sic] much traffic
- To keep our wildlife refuge safe & clean environment [sic]
- To keep the birds protected
- To many restricted areas
- to not overwhelm the site with people impact
- Tom, the previous mgr. of refuge, once proposed a trail/road to top of Crater Hill. Not good--Senator Inouye in dedication speech said, "this place should remain wild." So it should be.
- Too crowded.
- Too expensive
- Too many people!
- too many tourists that would interrupt w/the wildlife
- too many visitors
- too much sea access...more people like me
- too much traffic
- too much traffic
- Too much traffic & limited access to crater.

- Too much traffic!
- Too much traffic!
- Tourist impact on wildlife & breeding habits for the Nene, Boobie [sic], & Albatross to flourish & live in their natural habitat.
- Tourist traffic (auto/etc.)
- Tourists driving WAY too fast through Kilauea, lots of traffic going to refuge.
- Tourists frequently lose their way & drive down Keneke Street by mistake, & then try to turn around in our driveway. You need better signage. Perhaps another directional sign near Kong Lung/Keneke Street area.
- Traffic
- trurric
- traffic
- Traffic & motorist [sic] using it as a race track.
- Traffic & speeding are major concerns.
- traffic congestion
- traffic congestion at Menehune & along Lighthouse Road
- traffic down Kilauea Road
- traffic during summer months
- traffic flies by Kauai Christian Academy
- traffic flow
- Traffic from highway esp. congestion by Shell station & Kilauea Lighthouse Rd.
- traffic from tourists

- traffic if efforts to increase visitors
- traffic impact, buses
- Traffic on Kilauea Rd--especially at the entrance to town.
- Traffic on Kolo Road
- traffic on Lighthouse Rd
- traffic on Lighthouse Road
- traffic speed
- Traffic speed (we bike & jog a lot). Usually the visitors aren't speeding on that road...its [sic] the locals.
- traffic through Kilauea
- Traffic through Kilauea town on a residential st.
- traffic through town & children
- Traffic trespass, noise from tourists, dangerous driveways, illegal parking on Coonoy Rafa [sic].
- Traffic, but it's not such a problem presently where I live on Kauapu Rd.
- traffic, influx of tourists, etc.
- traffic, probably
- traffic--during the events held there
- Traffic--the entry to Kilauea is already a bottleneck. The neighborhood board needs to stop stalling Kilauea development.
- Traffic--the shuttles from the Rock Buildings is the best
- trafic [sic] along the road to the refuge
- Trying to keep dogs & cats away from the nests of birds & not letting development take over.
- Unable to go fishing but it could be of benefit being area can't be over fished.
- urban encroachment
- visitor traffic
- We're too far outside of town for bother from traffic, etc.
- What! You folks already blocked of [sic] Crater Hill. Go ahead & close the whole thing, see if I care.
- Will limit our access to other areas such as the NW end of Rock Quarry beach.
- With to [sic] much traffic the birds may go somewhere else
- would restrict surfing at Rock Quarry's [sic]

Appendix C Kilauea Point National Wildlife Refuge Visitor Survey

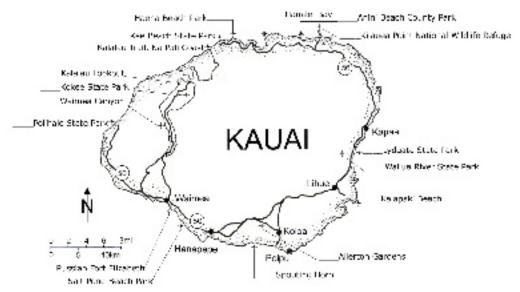
Kilauea Point National Wildlife Refuge & Lighthouse



SECTION 1

Please tell us about your trip to Kilauea Point National Wildlife Refuge and Lighthouse.

	Which best describes the way in	which you arrived on Kau	ai? Please Check Only One	
	☐ Cruise Ship	☐ Private Plan		
	☐ Air Charter	☐ Boat Charte		Commercial Plane
	(as part of tour group)	(as part of tour	group) (as	s an independent traveler)
3. V	Which of the following best sur	mmarizes the type of trip ye	ou are taking? Please Che	ck Only One
	☐ Vacation with Kauai as	s the sole destination \Box	An outing from another	r Hawaiian island
	Primarily business trav	rel 🔲	Part of a larger travel p	lan to visit U.S. or other countries
4. V	What modes of travel did you u	ise during your visit to Kau	ai? Please Check All that 2	A <i>pply</i>
	☐ Bicycle	☐ Boat	☐ Helicopter	☐ Private Vehicle
	☐ Public transit	☐ Rental Vehicle	☐ Taxi	☐ Tour van/bus
	☐ Walking	□Other_		
	 □ Snorkeling □ Photography □ Beach activities (sunbathing, swimming, etc.) □ Other (please specify) 	☐ Golfing ☐ Wildlife/Plant Viewir ☐ Touring Kauai in a tour van or tour boat		☐ Fishing sing ☐ Tennis Kauai's culture/history
	How much time did you spend	•	±	
5. F	# of hours OR	_# of nights AND	_# of days	
5. F				
5. F	6 a. How much of this tim# of minutes OR	1		
	6 a. How much of this tim	# of hours	stay overnight? <i>Please Cl</i>	beck Only One
	6 a. How much of this tim# of minutes OR	# of hours	stay overnight? <i>Please Cl</i> Lihue On a cruise ship	☐ Poipu



8. The main visitor attractions of Kauai are shown on the map above.

Please number the attractions in the order that you visited them on the day you visited the Refuge. For example, if the first place you visited was Spouting Horn, you would write a #1 on the blank line that is next to the words "Spouting Horn" on the map. If you find that a major attraction you visited that day is not listed, write it in on the map and indicate the order that you visited it in relation to the other attractions.

9. Which of the above	visitor attractions was your fav	vorite? Please Write Below	
10. What was your main	n mode of transportation to the	nese visitor attractions? <i>Please</i>	e Check Only One
☐ Bicycle	☐ Boat	☐ Helicopter	☐ Private Vehicle
☐ Public Tran	sit	e 🗖 Taxi	☐ Tour Van/Bus
☐ Walking			
	tion were available to these vi Please Check the Reason Below:	sitor attractions and the Refu	ge, would you use it?
☐ Too	much time	ble	Too expensive
☐ I pre	efer a guided tour 🚨 I prefe		1
-	er	•	
	nt visit to the Refuge was it: Pa		
	purpose of your visit to Kaua y equally important reasons or		. Kanai
·	1 1 1	2	purposes or to other destinations
13. Including yourself, Refuge?# of _	± ±	le in your group that traveled	d on your most recent trip to the
13 a. If you were	part of a group, which of the fo	ollowing best describes that g	group? Please Check One
☐ Family	☐ Frie	nds	☐ Friends and Family
☐ Commercia	Tour Group	anized Club or Group	☐ School Group
☐ Other			

SECTION 2

Please tell us about your trip expenditures.

1. If yo	u made local purchases as pa	rt of your visit to the	Refuge, were these pu	archases primarily made in:
	☐ Kilauea	☐ Kapa'a	☐ Hanalei	☐ Princeville
	☐ Lihue	☐ Poipu	☐ Koloa	
	,	, .		shared expenses (e.g., other family
membe	rs, traveling companions) spe	nt on your most rec	ent visit to Kauai. <i>Ple</i>	ase Enter the Amount for each Category
	Category		Amount Spent or	n Kauai
	Rental car/motorcycle/scoo	oter	\$	
	Gasoline		\$	
	Hotels/motels		\$	
	Food/drink: restaurants		\$	
	Food/drink: groceries		\$	
	Refuge bookstore		\$	
	Refuge entrance fee		\$	
	Supplies/souvenirs/other re	etail	\$	
	Guided day tour of Kauai		\$	
	Boat or helicopter tours		\$	
	Equipment rental		\$	
	Golf or tennis fees		\$	
	Massage/yoga/spa		\$	
	Excursion fee		\$	
3. Inclu	ding yourself, how many peo	ple in your group sha	ared these expenses or	n this most recent trip?
	# of persons in y	our group sharing th	ese expenses	
			-	
-		<u> </u>	e e e e e e e e e e e e e e e e e e e	ne total cost of this most recent trip
to Kaua	ii had been \$ high	er, would you have m	ade this trip? Please Ch	heck One
		_		nere visitors can pay the \$3 Refuge
	e fee. Did you pay the fee on	your most recent visi	it to the Refuge?	
	☐ Yes			
	□ No I f No, Please Check t			_
	☐ Too expensive	☐ Not aware	of fee	☐ Thought the fee was voluntary
	☐ Did not want to	1 /	ass (Golden Eagle, Federal Duck Stamp)	☐ Did not have correct change or did not want to over-pay
	Other			
	current Refuge entrance fee i		ne Refuge fee were to	increase to \$ would you have
	de this most recent visit to th	e Ketuge?		
	☐ Yes ☐ No			

SECTION 3

Please tell us about your experience at Kilauea Point National Wildlife Refuge and Lighthouse.

1. How did you learn	about Kilauea Point Li	ghthouse/Natio	nal Wildlife	Refuge? Plea	se Check all i	that Apply		
☐ Friends		☐ Fam:	ily		□ н	ighway Sigr	ns	
☐ Business	Associate	☐ Loca	l Resident o	f Kauai	□ M	☐ Magazine		
☐ Travel A	gent	☐ Visit	or Brochure		☐ Radio			
☐ Hotel St	aff or Concierge	☐ Trav	el Guideboo	k	☐ Television			
U.S. Fish	and Wildlife Service W	ebsite 🗖 In-fl	ight or On-s	hip Informa	tion 🗖 R	efuge Staff		
	onal/Environmental Gr			tivity Desk/				
☐ Other_								
2. Was your main m	ode of transport to othe			-	·			
	If No, indicate below	* *			_			
	☐ Bicycle	☐ Tour Van		☐ Taxi		Private Vel	nicle	
	Public Transit	☐ Rental Ve	hicle	■ Walking		Other		
For each activity, plea	understand how importa use circle the number that bes		ctivity's import	ance in your de	ecision to visit	the Refuge.		
Activity			_	e for your I	Experience		_	
			Not Important	Somewhat Important	Important	Very Important	No Opinion	
1. Viewing native s	eabirds (i.e., Albatross,	Tropicbirds)	1	2	3	4		
2. Viewing whales	and/or dolphins		1	2	3	4		
3. Visiting a historic	c landmark/lighthouse		1	2	3	4		
4. Viewing scenic o	verlooks of the coastline	9	1	2	3	4		
5. Learning about the	ne Refuge from staff/vo	lunteers	1	2	3	4		
6. Experiencing a se	erene environment		1	2	3	4		
7. Purchasing book	s about the natural histo	ory of the area	1	2	3	4		
8. Purchasing memo	entos at the gift shop		1	2	3	4		
9. Being in natural,	undeveloped lands		1	2	3	4		
10. Taking self-guid	led walks with interpret	ed signs	1	2	3	4		
11. Participating in	environmental education	n programs	1	2	3	4		
12. Photographing v	wildlife		1	2	3	4		
13. Other activities-	—Please list		1	2	3	4		
4. Which of the activ	vities listed above was th	e most importa	nt reason for	your most	recent visit	to the Ref	uge?	

Please write the number of the activity in the blank below

Most Important Activity___

5. This question has two parts. First, rate **how important** the item is to satisfaction during your last visit to the Refuge. Then, rate **how satisfied** you are with the way the Refuge is managing each item.

Please complete both sections (Importance and Satisfaction) for each item

Importance to your experience at the Refug	e					Sati	sfacti	on w	ith C	ondi	tions
	Not Important	Somewhat Important	Important	Very Important	Does not Apply	Poor	Adequate	Average	Good	Outstanding	Does not Apply
Adequate number of parking spaces	1	2	3	4	DA	1	2	3	4	5	DA
Lighthouse well-preserved and maintained	1	2	3	4	DA	1	2	3	4	5	DA
Lighthouse and Refuge easy to find	1	2	3	4	DA	1	2	3	4	5	DA
Wildlife viewing opportunities	1	2	3	4	DA	1	2	3	4	5	DA
Condition of the natural environment	1	2	3	4	DA	1	2	3	4	5	DA
Helpfulness of Refuge staff	1	2	3	4	DA	1	2	3	4	5	DA
Appealing gift shop or bookstore items	1	2	3	4	DA	1	2	3	4	5	DA
Natural history information about the site	1	2	3	4	DA	1	2	3	4	5	DA
Reasonable entrance frees	1	2	3	4	DA	1	2	3	4	5	DA
Refuge grounds well-maintained	1	2	3	4	DA	1	2	3	4	5	DA
Access for people with physical disabilities or walking difficulties	1	2	3	4	DA	1	2	3	4	5	DA
Information provided on birdwatching, whale watching, and/or wildlife photography	1	2	3	4	DA	1	2	3	4	5	DA
Educational kiosks or signs about the Refuge and its wildlife	1	2	3	4	DA	1	2	3	4	5	DA
Other activities—Please list	1	2	3	4	DA	1	2	3	4	5	DA

6. What would enhance your experience at the Refuge?

7. What experiences have you had at the Refuge that would bring you back?



8. Please indicate how you feel the features listed below should be managed to maximize your experience at the Refuge. Please Check One Answer for Each Feature

Features	Preferred Management Action					
Naturalness	☐ restore more natural conditions	☐ leave as is	☐ allow more landscape alterations			
Facilities	☐ remove some facilities	☐ leave as is	☐ develop additional facilities			
Visitor numbers	☐ restrict visitation to the Refuge	☐ leave as is	☐ encourage more visitation			
Information signs	☐ limit the number of signs	☐ leave as is	☐ provide more signs			
Services	☐ provide less visitor info & staff	☐ leave as is	☐ provide more visitor info & staff			
Access to Lighthouse	provide limited access to the inside of the Lighthouse	leave as is	☐ provide more access to the inside of the Lighthouse			
Environmental education activities	reduce the number educational programs and activities	☐ leave as is	☐ increase the number of educational programs and activities			
Visitor impacts on wildlife	decrease efforts to restrict visitor behavior that is harmful to wildlife	☐ leave as is	☐ increase efforts to restrict visitor behavior that is harmful to wildlife			

9. On the day that you visited the Refuge, how much did the number of visitors contribute to the following?

	Not at All	Somewhat	A Fair Amount	A Lot	Does Not Apply
Noise levels	1	2	3	4	DA
Litter	1	2	3	4	DA
Difficulty parking	1	2	3	4	DA
Visitor conflicts due to crowding	1	2	3	4	DA
Difficulty viewing wildlife up close	1	2	3	4	DA
Changes in wildlife behavior	1	2	3	4	DA
Staff/volunteers availability	1	2	3	4	DA

10. How crowded were different areas on your visit to the Refuge?

	Not at all	Somewhat		Very	Does Not
	Crowded	Crowded	Crowded	Crowded	Apply
In the Refuge bookstore/giftshop	1	2	3	4	DA
At the overlook above the Refuge entrance	1	2	3	4	DA
At the Refuge's onsite parking lot	1	2	3	4	DA
On the Refuge grounds (walkways, Lighthouse area)	1	2	3	4	DA
On the road from the highway to the Refuge	1	2	3	4	DA
entrance					

11. Overall, now crowded did y	ou feel at the Refuge? Please Check Of	ne	
☐ Not crowded	☐ Somewhat crowded	☐ Crowded	☐ Very crowded

SECTION 4

Please tell us about your future preferences for transportation and access to the Refuge.

The U.S. Fish and Wildlife Service and the Federal Highway Administration are exploring methods for improving visitor access and transportation needs at the Refuge because of traffic congestion and parking problems caused by too many vehicles during peak visitation periods. This next series of questions asks your opinion about possible options.

1. How likely would you visit the Refuge if the following options were implemented?

Refuge Transportation and Access Options	Unlikely	Somewhat Likely	Likely	Very Likely
Reservations by phone or email are required to visit the Refuge.	1	2	3	4
In addition to the entrance fee, visitors pay a fee to park in the Refuge.	1	2	3	4
The Refuge is only accessible by public transportation.	1	2	3	4
The Refuge is only accessible by a shuttle that has a public transit link to other visitor attractions on Kauai.	1	2	3	4
The Refuge is only accessible by shuttle. Visitors use off-site parking and take a shuttle into the Refuge.	1	2	3	4
Visitation is limited to a certain number of people every hour, allowing more visitors to enter as other visitors leave.	1	2	3	4
Educational programs and guided tours are offered at off-peak visitation times to encourage people to visit when the Refuge is less crowded.	1	2	3	4
Both on-site and off-site Refuge parking is available. Refuge visitors pay more to park in the Refuge; the off-site parking and shuttle to the Refuge would cost less.	1	2	3	4

to encourage people to visit when the Refuge is less	crowded.				
Both on-site and off-site Refuge parking is available.	Refuge visitors pay more to	1	2	3	4
park in the Refuge; the off-site parking and shuttle to	o the Refuge would cost less.				
2. What is the maximum amount of time you would be willing	ng to wait to enter the Refuge	by shu	ttle?		
# minutes for a shuttle OR# ho	urs				
3. What is the maximum amount of time you would be willing a certain number of people/hour? # minutes OR# hours	ng to wait to enter the Refuge	if visit	ation i	s restric	eted to
4. To improve visitor access and transportation, a shuttle coursefuge. RANK in order of importance , the FIVE main fair it were only accessible by shuttle. For example, you would most likely affect your decision to visit the Refuge by shuttle.	ctors that would affect your dowrite a #1 in the blank next to	ecision	to visi	it the R	efuge
Off-site parking area is near the highway	Onboard shuttle stora	ge for	strolle	rs, bike	s, etc.
Off-site parking area is near the Refuge	Reliable and on-time s	service			
Cost of shuttle fare	Link to other public to	ranspo	rtation	L	
Off-site parking is easy to find	Opportunity to bike/v	walk in	to the	Refuge	
Quality of tour-guide comments on-board	Off-site parking is clo	se to v	isitor s	services	such
the shuttle	as shopping, restaurants, a	ınd res	troom	S	
Other					

	the Refuge were to charge a fee of \$ per person that included parking at an off-site efuge with on-board tour-guide commentary, and the Refuge entrance fee, would you have no ge?		
	☐ Yes ☐ No		
6. Wo	ould you spend more time at the Refuge and the surrounding area if the following were availa	ıble?	
	Options	Yes	No
	A guided history tour of nearby Kilauea, a former plantation town for a fee of \$	1	2
	An introduction to the Refuge by a Refuge staff person or volunteer (free)	1	2
	A guided, 10-minute, easy-moderate hike from the overlook for an up-close view of a nesting seabird colony (of Red-footed booby birds) for a fee of \$	1	2
	A self-guided, 30-minute, moderate-difficult hike through restored native forest for a scenic view of the lighthouse, Kilauea town, ocean, and surrounding mountains (free)	1	2
	A guided, 2-hour hike to the summit of an extinct volcanic crater to view native seabirds, marine wildlife, plants, historic WWII bunkers, and north-shore ocean and mountain scenery for a fee of \$	1	2
	TION 5 se tell us about yourself.		
Pleas	e indicate how often you use public transit. Please Check Only One □ Almost every day □ At least once per week □ At least once per month □ A few times per year □ Never □ If Never or only a few times per year, Please Check the Reason: □ Too expensive □ Takes too much time □ Doesn't go wh □ Not easy to get to □ Service not available □ Inconvenient □ Other	s or large	O
	ve you ever used a transit shuttle or bus at a national park, national forest, or at another publor fairgrounds? Yes No	ic facility	such as a
resou	e would like to understand how Refuge visitors participate in local or regional decisionmaking arce and/or environmental issues. Please indicate which of the activities you have participated years. Please Check All that Apply	*	
	Attending a public hearing or meeting		
	Contacting or writing a state/federal agency		
	Contacting or writing a U.S. Senator or state legislator		
	Writing a letter to the editor of a newspaper		
	Signing a petition		
	Joining a special interest group (such as an environmental, sportsman's, animal rights, agricu or resource use organization)	ılture,	

Your answers will be kept strictly confidential and will not be passed on to anyone. You will not be identified in any way. 4. What is the zip code of your permanent residence?_____ 5. If you don't live in the United States, what country are you from?_____ 6. Are you? ☐ Male ☐ Female 7. In what year were you born?_____(yyyy) 8. Are you employed? ☐ Part-time ☐ Yes ☐ If yes, Please Check One ☐ Full-time □ No⊃ If no, are you retired? Please Check One □ No ☐ Yes 9. What ethnicity do you consider yourself? *Please Check One* \square Hispanic or Latino \square Not Hispanic or Latino 10. What racial origin do you consider yourself? Please Select All that Apply ☐ American Indian or ☐ Asian (please specify below) ☐ Native Hawaiian or Alaska Native ☐ Asian Indian other Pacific Islander ☐ Japanese (please specify below) ☐ White ☐ Korean ☐ Guamanian or Chamorro ☐ Black or African American ☐ Vietnamese ■ Samoan ☐ Chinese ☐ Other Pacific Islander_ ☐ Filipino ☐ Other Asian 11. What is your highest year of formal schooling? Please Circle Only One 17 1 2 5 10 11 12 13 14 15 16 18 19 +20(elementary) (junior high or (high school) (college or technical (graduate or professional school) school) middle school) 12. How many members are in your household? _____person(s) 13. Including these people, what was your approximate household income from all sources (before taxes) last year? Please Check Only One ☐ less than \$10,000 \$25,000-\$34,999 \$75,000-\$99,000 \$10,000-\$14,999 \$35,000-\$49,999 **\$100,000-\$149,999** \$50,000-\$74,999 **\$15,000-\$24,000** • over \$150,000

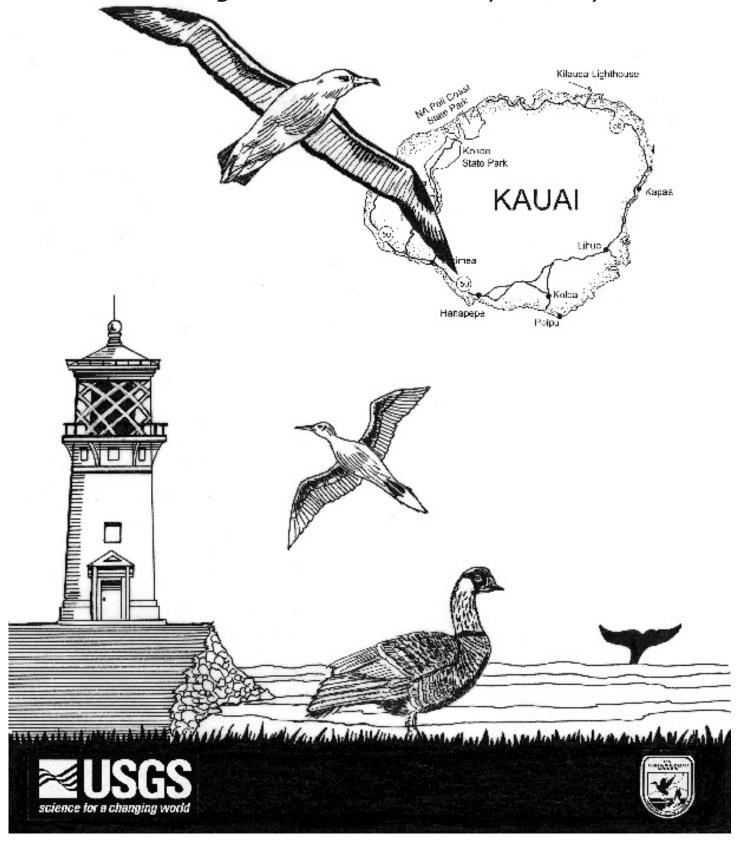
These last few questions will help us in evaluating how well our sample represents visitors to the Refuge.



Appendix D

Kilauea Point National Wildlife Refuge Community Survey

Kilauea Point National Wildlife Refuge and Lighthouse Community Survey



SECTION 1

Please tell us about your	experience as	a visitor to	Kilauea	Point National	Wildlife Refug
and Lighthouse.	•				5

1.	How many times have you visited Kilauea Point National VI have visited the Refuge time(s) in the past five year	
2.	If you haven't visited the Refuge in the past five years, wha	at would encourage you to visit the Refuge?
,	If you haven't visited the Refuge in the past to	
3.	Did you attend any of the following special events at Kilau Please check all that apply for the past year.	iea Point National Wildlife Refuge/Lighthouse?
	☐ Ocean Fair (March)	☐ Lighthouse Day (May)
	☐ National Wildlife Refuge Week Activities (October)	☐ Holiday Craft Fair (November)
1.	Please tell us how important the following activities are in Wildlife Refuge and Lighthouse. For each activity, please circle your decision to visit the Refuge.	•

Activity	Importance for your Experience at Kilauea Point NWR					
	Not Important	Somewhat Important	Important	Very Important	No Opinion	
1. Viewing native seabirds (i.e., Albatross, Tropicbirds)	1	2	3	4		
2. Viewing whales and dolphins	1	2	3	4		
3. Visiting a historic landmark/lighthouse	1	2	3	4		
4. Learning about the site from a staff person	1	2	3	4		
5. Viewing scenic overlooks of coastline	1	2	3	4		
6. Experiencing a serene environment	1	2	3	4		
7. Purchasing books about the natural history of the area	1	2	3	4		
8. Purchasing mementos at the gift shop	1	2	3	4		
9. Being in natural, undeveloped lands	1	2	3	4		
10. Taking self-guided walks with interpreted signs	1	2	3	4		
11. Participating in environmental education programs	1	2	3	4		
12. Photographing wildlife on the Refuge	1	2	3	4		
13. Other activities—Please list	1	2	3	4		

5.	Which of the activities listed above was the most important reason for your most recent visit to the Refuger
	Please write the number of the activity in the blank below.
	Most Important Activity

6. This question has two parts. **First,** rate **how important** the item is to satisfaction during your last visit to the Refuge. **Then,** rate **how satisfied** you are with the way the Refuge is managing for each item. *Please complete both sections (Importance and Satisfaction) for each item.*

		Imp	orta	nce		Satisfaction with Conditions				h	
	Not Important	Somewhat Important	Important	Very Important	$\begin{array}{c} \text{Does Not} \\ \text{Apply} \end{array}$	Poor	Adequate	Average	Good	Outstanding	Does Not Apply
Adequate number of parking spaces	1	2	3	4	DA	1	2	3	4	5	DA
Lighthouse well-preserved and maintained	1	2	3	4	DA	1	2	3	4	5	DA
Refuge grounds maintained (such as litter pick-up)	1	2	3	4	DA	1	2	3	4	5	DA
Wildlife viewing opportunities	1	2	3	4	DA	1	2	3	4	5	DA
Condition of the natural environment	1	2	3	4	DA	1	2	3	4	5	DA
Helpfulness of Refuge staff	1	2	3	4	DA	1	2	3	4	5	DA
Appealing giftshop or bookstore items	1	2	3	4	DA	1	2	3	4	5	DA
Information provided on birdwatching, whale watching and/or wildlife photography	1	2	3	4	DA	1	2	3	4	5	DA
Refuge special events	1	2	3	4	DA	1	2	3	4	5	DA
Educational kiosks or signs about the Refuge and its wildlife	1	2	3	4	DA	1	2	3	4	5	DA
Reasonable entrance fees	1	2	3	4	DA	1	2	3	4	5	DA
Access for people with physical disabilities or difficulties walking	1	2	3	4	DA	1	2	3	4	5	DA
Lighthouse and Refuge easy to find	1	2	3	4	DA	1	2	3	4	5	DA
Natural history information about the site	1	2	3	4	DA	1	2	3	4	5	DA

7. Please indicate how you feel the features listed below should be managed to maximize your experience at Kilauea Point National Wildlife Refuge/Lighthouse. *Please check one answer for each feature*.

Naturalness	restore more natural conditions	leave as is	allow more landscape alterations
Facilities	remove some facilities	leave as is	develop additional facilities
Services	provide less visitor info & staff	leave as is	provide more visitor info & staff
Information signs	limit the number of signs	leave as is	provide more signs
Access to lighthouse	limit access to the inside of the lighthouse	leave as is	provide more access to the inside of the lighthouse
Environmental education opportunities	reduce education programs & activities	leave as is	increase education programs & activities
Visitor numbers	restrict visitation to the refuge	leave as is	encourage more visitation
Visitor impacts	decrease efforts to restrict visitor behavior that is harmful to wildlife	leave as is	increase efforts to restrict visitor behavior that is harmful to wildlife

9.	What	t experienc	ces have yo	u had at th	ne Refu	ige that wil	l bring you	back?			
10.		nce fee. D	_	-		_	se, there is a		ere visitors ca	nn pay the \$3	Refuge
		No \rightarrow If I	No, Please C	heck the Re	eason:						
			☐ Not av	vare of fee	e	☐ Though	t it was volu	ıntary	☐ Did no	t want to pay	
			☐ Too ex	pensive		☐ Did not	have correct	ct change/did	l not want to	over-pay	
			☐ Used r	ny pass (C	Golden	Eagle, Gol	den Age, Fe	ederal Duck S	stamp, Kama	ina Pass, etc.)	
			☐ Other								
SE Ple to	Refug ECTIC ease you	ge? ON 2 tell us a and to y	Yes about Kila your com	auea Poi nmunity.	□ No int Na	ational W	/ildlife Re	increase to \$ fuge in tentional	rms of its	_	
2.	What	t is the big	gest conce	rn of bein	ıg a nei	ghbor of tl	ne Kilauea I	Point Nationa	l Wildlife Re	fuge/Lightho	ouse?
3.	ed be	,	o visitors			,		1		munity featur le the number th	
		Feature				No problem	Small problem	Moderate Problem	Big Problem	Does Not Apply	

8. What would enhance your experience at the Refuge?

Feature	No problem	Small problem	Moderate Problem	Big Problem	Does Not Apply
Traffic noise	1	2	3	4	DA
Personal privacy	1	2	3	4	DA
Traffic safety	1	2	3	4	DA
Traffic congestion in town	1	2	3	4	DA
Disruption of daily activities	1	2	3	4	DA
Other (Please specify)	1	2	3	4	DA

4. Please indicate the extent to which each statement below describes your general feelings about Kilauea Point National Wildlife Refuge/Lighthouse. *Please circle the number that best describes how you feel about each statement.*

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
It is important to me that my children and my children's children will be able to visit the Refuge.	1	2	3	4	5
I am very attached to the Refuge.	1	2	3	4	5
Coming to places like this Refuge is an important part of my family tradition.	1	2	3	4	5
This area is the best place for what I like to do.	1	2	3	4	5
Because of my experiences at this Refuge I will definitely come back.	1	2	3	4	5
I feel this Refuge is a part of me.	1	2	3	4	5
This place is special because it is where my family and I spend time.	1	2	3	4	5
Everything considered, I trust the Refuge staff will do what is right for the Refuge.	1	2	3	4	5
I get more satisfaction out of visiting this place than visiting any other.	1	2	3	4	5
This Refuge means a lot to me.	1	2	3	4	5
Doing what I do at this Refuge is more important to me than doing it in any other place.	1	2	3	4	5
I have confidence in decisions made by the local staff at the Refuge.	1	2	3	4	5
The Refuge provides me a sense of connection to past and future generations.	1	2	3	4	5
No other place can compare to this area.	1	2	3	4	5
I identify strongly with the Refuge.	1	2	3	4	5
Coming to places like this Refuge was an important part of my childhood.	1	2	3	4	5
I wouldn't substitute any other place for doing what I do here.	1	2	3	4	5
This place is special because it is where my friends and I spend time.	1	2	3	4	5
In general, I have confidence in the decisions that the U.S. Fish and Wildlife Service makes about managing this Refuge.	1	2	3	4	5
I should not have to pay a fee to visit this or any National Wildlife Refuge.	1	2	3	4	5



SECTION 3

Please tell us about your future preferences for management of the Refuge, including transportation and access.

The Refuge is exploring methods for improving visitor access and transportation needs because of traffic congestion and parking problems caused by too many vehicles during peak visitation periods. There are many options for doing this and some may affect you and your community more than others. This next set of questions asks about impacts to you as a resident of Kilauea and neighbor of the Kilauea Point National Wildlife Refuge/Lighthouse.

1. As a resident of Kilauea town, how desirable are the following hypothetical options related to visitation to the Refuge? *Please circle the number that best represents your opinion*.

Options	Not Desirable	Somewhat Desirable	Generally Desirable	Very Desirable	No Opinion
A guided tour of Kilauea town, focusing on the historical buildings and accounts of Kilauea as a former plantation town.	1	2	3	4	5
Guided hikes by Refuge staff to Crater Hill overlooks and sea bird colonies.	1	2	3	4	5
Self-guided hikes from the end of Lighthouse Road for a scenic view of the lighthouse, Kilauea town, ocean, and surrounding mountains.	1	2	3	4	5
Guided hikes by Refuge staff to the summit of Crater Hill to view native seabirds, marine wildlife, plants, historic WWII bunkers, and north-shore ocean and mountain scenery.	1	2	3	4	5
Enhanced parking facilities at overlook/Refuge entrance to include such features as viewing areas and designated parking.	1	2	3	4	5
Environmental programs for school and community groups at an education shelter located on Crater Hill.	1	2	3	4	5
A north-shore shuttle system that has stops at Kilauea town and the Kilauea Point National Wildlife Refuge/Lighthouse and other Kauai towns and visitor attractions.	1	2	3	4	5
Pedestrian/bike access to the Refuge.	1	2	3	4	5
Completion of the Lighthouse Road walking path to the Refuge entrance gate.	1	2	3	4	5
Fishing opportunities where compatible with the protection of wildlife and wildlife habitat.	1	2	3	4	5



	that best represents your opinion.					
	Options	Not Likely	Somewhat Likely	Likely	Very Likely	No
b	A shuttle to the Refuge that left from a parking lot in town if it meant more business for local shops and stores, less traffic congestion on the road to the Refuge, but larger numbers of visitors and visitor vehicles in town.	1	2	3	4	5
h	a guided, walking tour of Kilauea for shuttle visitors if it meant less privacy for omeowners along the walking tour route but more business for local shops and tores.	1	2	3	4	5
f	an environmental education center on the top of Crater Hill if it meant less privacy or adjacent homeowners but more environmental education opportunities for the ocal youth and Kilauea residents.	1	2	3	4	5
S	Refuge. RANK in order of importance, the FIVE main factors that would enco for a shuttle system. For example, you would write #1 in the blank next to the factor that wo support such a plan. Shuttle system is self-supported through fees Shuttle system benefits local economy Off-site parking for shuttle is near the highway Off-site parking for shuttle is near the Refuge Homeowner privacy is preserved Traffic congestion on Lighthouse Road is reduced Shuttle system is linked to other public transportation Other (Please specify) If the Refuge were to charge one fee of \$ per person that included parking at a the Refuge with on-board tour-guide commentary, and the Refuge entrance fee, wo Yes No	urage uld mo	you to ost encoun	suppo rage yo	ort pl u to huttle	ans e to
	Overall, how satisfied are you with living in Kilauea town? <i>Please circle only one</i> .					
1.	Very satisfied Somewhat satisfied Neutral Somewhat dissatisfied Very		isfied	No	opini	on
2.		one. bad		No	opini	on

2. How likely would you to be to support the following options with the following tradeoffs? Please circle the number

3. This question has two parts. **First** rate **how important** each item is when you select a town to live in. **Then** rate how satisfied you are with these items in Kilauea. *Please complete both sections (Importance and Satisfaction) for each item*.

	Importance			Satisfaction with Conditions							
	Not Important	Somewhat Important	Important	Very Important	Does Not Apply	Poor	Adequate	Average	Good	Outstanding	Does Not Apply
Safety, low crime-rate	1	2	3	4	DA	1	2	3	4	5	DA
Quality of schools	1	2	3	4	DA	1	2	3	4	5	DA
Parks and open space	1	2	3	4	DA	1	2	3	4	5	DA
Length of commute	1	2	3	4	DA	1	2	3	4	5	DA
Number of stores and shops	1	2	3	4	DA	1	2	3	4	5	DA
Opportunities for well-paying jobs	1	2	3	4	DA	1	2	3	4	5	DA
Affordable housing	1	2	3	4	DA	1	2	3	4	5	DA
Public transit that is reliable and convenient	1	2	3	4	DA	1	2	3	4	5	DA
Walkways / bike paths	1	2	3	4	DA	1	2	3	4	5	DA
Absence of air/noise/light pollution	1	2	3	4	DA	1	2	3	4	5	DA
Historic character	1	2	3	4	DA	1	2	3	4	5	DA
Scenic beauty	1	2	3	4	DA	1	2	3	4	5	DA
Low-risk of natural catastrophes (i.e., hurricanes)	1	2	3	4	DA	1	2	3	4	5	DA

4.	Which of the following do you think most negatively affects your quality of life in Kilauea? Please check only one.
	☐ Growth and development
	☐ Current economic conditions
	☐ Lack of public funds
	☐ Poor local land use planning
	☐ Conflict between community groups
	☐ Other (Please specify)

5.	Which of the following transportation projects do you think should have top priority for public funding? <i>Please check only one</i> .
	☐ Highways
	☐ Public transit systems

☐ Walkways and bicycle paths

lacksquare Local streets and roads

6.	6. What do you think is most needed when addressing such is space? <i>Please check only one</i> .	ssues as traffic, development, air pollution, and open
	☐ Slowing down growth and development	☐ A change in economic conditions
	☐ More coordination between local community group	s
	☐ Improving local land use planning	☐ Other (Please specify)
7.	7. Do you recall seeing, reading, or hearing about any recent opment issues in your city or community?	controversies or conflicts over local land use or devel
	☐ Yes ☐ No	
8.	8. Where do you get most of your news and information about all that apply.	out land use and development issues? Please check
	☐ Radio ☐ Television	☐ Newspaper
	☐ Friends ☐ Family	☐ Work colleagues
	☐ Neighbors ☐ Local town officials	☐ Neighborhood Association
	☐ Community groups ☐ Recreational/environr	mental group
	☐ Local business people ☐ Business group or org	anization
	☐ Other (please specify)	
	SECTION 5 Please tell us something about yourself.	
1.	 Have you ever used public transit shuttles or buses in a Na Forest? 	tional Wildlife Refuge, National Park, or National
	☐ Yes ☐ No	
2.	2. How do you usually commute to work? Please check only one.	
	☐ Drive alone ☐ Walking or bicyc	le
	☐ Carpool ☐ Other (please spec	
	☐ Public bus or transit	
3.	3. Overall, how satisfied are you with your commute to work	Please circle one.
	Very satisfied Somewhat satisfied Neutral Somew	hat dissatisfied Very dissatisfied No opinion
4.	4. We would like to understand how community members par environmental issues. Please indicate which of the activities <i>Please check all that apply</i> .	
	☐ Attending a public hearing or meeting	
	☐ Contacting or writing a state/federal agency	
	☐ Contacting or writing a U.S. Senator, member of Co	ongress, or State Legislator
	☐ Writing a letter to the editor of a newspaper	
	☐ Signing a petition	
	U U 1	

of your community. Your answers will be kept strictly confidential and will not be passed onto anyone. You will not be identified in any way. 5. How long have you lived on the island of Kauai? _____ # years # generations on Kauai How long have you lived in Kilauea? years ☐ Year-round resident ☐ Part-time resident 7a. If you are a part-time resident, what time of the year do you live in Kilauea? ☐ Spring ☐ Summer ☐ Fall ☐ Winter 8. What is the zip code of your permanent residence? 9. Are you? ☐ Male ☐ Female 10. In what year were you born? _____ (yyyy) 11. Are you employed? ☐ Yes ☐ If yes, Please check one. ☐ Full-time ☐ Part-time □ No⊃ If no, are you retired? Please check one. ☐ Yes □ No 12. What ethnicity do you consider yourself? Please select only one. ☐ Hispanic or Latino ☐ Not Hispanic or Latino 13. What racial origin do you consider yourself? Please select all that apply. ☐ American Indian or ☐ Asian (please specify below) ☐ Native Hawaiian or ☐ Asian Indian Alaska Native Other Pacific Islander ☐ Japanese (please specify below) ☐ White ☐ Korean ☐ Guamanian or Chamorro ☐ Vietnamese ☐ Black or African American ☐ Samoan ☐ Chinese ☐ Other Pacific Islander_ ☐ Filipino ☐ Other Asian_ 14. What is your highest year of formal schooling? Please circle only one. 10 11 12 14 15 16 $17 \quad 18 \quad 19 \quad +20$ (elementary) (junior high or (high school) (college or technical (graduate or professchool) sional school) middle school) 15. How many members are in your household? _____ person(s) 16. Including these people, what was your approximate household income from all sources (before taxes) last year? ☐ less than \$10,000 **\$25,000-\$34,999 \$75,000-\$99,999 \$10,000-\$14,999 35,**000-\$49,999 **\$100,000-\$149,999 \$15,000-\$24,999 \$50,000-\$74,999** □ over \$150,000

These last few questions will help us in evaluating how well our sample represents members



Appendix E

Contingent Valuation Bid Response Distributions

Table 1. Kauai visit contingent valuation bid response distribution for winter and summer Refuge visitors.

Kilauea Point NW	R winter visitors	Kilauea Point NWR summer visitors				
Bid amount (\$)	Percent yes (%)	Bid amount (\$)	Percent yes (%)			
10	100	10	100			
20	98	20	100			
30	97	30	100			
50	98	50	100			
70	93	70	94			
90	94	90	98			
125	90	125	94			
175	95	175	95			
250	77	250	85			
350	91	350	93			
450	67	450	81			

Table 2. Refuge entrance fee contingent valuation bid response distribution for winter and summer Refuge visitors and community members.

Kilauea Point NWR winter Kilauea Point NWR Kilauea community							
visitors Bid amount Percent yes		summer		members			
		Bid amount	Percent yes	Bid amount	Percent yes		
(\$)	(%)	(\$)	(%)	(\$)	(%)		
5	85	5	86	5	71		
7	61	7	80	7	36		
9	39	9	67	9	30		
12	29	12	39	12	9		
15	28	15	30	15	11		
20	14	20	27	20	0		
25	11	25	14	25	9		
35	8	35	10	35	7		
50	5	50	5	50	13		
70	7	70	7	70	5		
90	5	90	8	90	7		

Table 3. Fee for shuttle, guide and Refuge entrance contingent valuation bid response distribution for winter and summer Refuge visitors and community members.

Kilauea Point NWR winter visitors Bid amount Percent yes (%) (%)			NWR summer	Kilauea community members			
		Bid amount (\$)	Percent yes (%)	Bid amount (\$)	Percent yes (%)		
5	88	5	93	5	54		
7	80	7	76	7	39		
9	67	9	50	9	29		
12	39	12	53	12	10		
15	30	15	32	15	7		
20	27	20	29	20	10		
25	12	25	4	25	6		
35	10	35	6	35	0		
50	5	50	7	50	13		
70	7	70	2	70	4		
90	6	90	0	90	3		