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Introduction

In the spring of 2014, personnel from the Exhibitions Department of the Smithsonian National Zoological Park (NZP) approached the Smithsonian Office of Policy and Analysis (OP&A) to undertake a study of visitors to the Zoo’s newly-renovated Elephant Community Center (ECC). The study was broken down into two components, to be reported upon separately:

- An interview study, focusing on visitor experiences with specific displays and interactives within the ECC; and
- A survey study, focusing on visitor demographics, attitudes, experiences, and satisfaction.

A draft report for the former was submitted in September 2014. This report covers the latter.

The opening of the ECC to the public in March 2013 marked the last phase of the Zoo’s Elephant Trails project, which overhauled the elephant habitat. The divided spaces, concrete floors, and steel bars of the old NZP Elephant House were replaced in the new ECC by a bright, open enclosure that allows the Zoo’s seven Asian elephants to interact and provides a more congenial environment for visitors.

The ECC also features a larger and more prominent selection of educational displays and interactives than the old Elephant House. These challenge visitors to compare their strength and weight to those of an elephant; dramatically illustrate pachyderms’ dietary needs and unique physical characteristics; and educate visitors in other ways about elephants and their world. Zoo staff were particularly interested in exploring how these displays and interactives affect visitors’ attitudes toward, interest in, and knowledge about elephants.
Survey Methodology

For this survey, OP&A used a pre/post design for comparison of entering and exiting visitor responses. Questionnaires were offered to randomly selected visitors 12 years of age or older. Respondents may be treated as a representative sample of the larger population of ECC visitors at the time of the survey in early August and mid-September 2014.

Survey administration consisted of sixteen 90-minute sessions (seven entrance, nine exit), each of which was divided into three 30-minute segments for administrative purposes. The entrance survey was completed by 702 visitors, with a response rate of 80%. The exit survey was completed by 711 visitors, with a response rate of 75%.

The survey instrument and distribution methodology were approved by the Smithsonian’s Institutional Review Board. Questionnaires are reproduced in Appendix A, and response frequencies are provided in Appendix B. Frequencies were calculated using data weighted to account for visitor flows during different survey administration sessions. Open-ended (write-in) comments are reproduced in Appendix C.

Where identical information was collected on the entrance and exit surveys—for example, with demographic questions—the frequencies reported in the Findings below represent figures from the exit survey. In no case were such frequencies significantly different from the entrance survey.

Unless otherwise noted, the criterion for reporting a relationship among variables as statistically significant is a 99% confidence level (p = .010) on a $\chi^2$ non-parametric test. The confidence level was set deliberately high because of the large number of cross-tabulations run for this study, and the resulting concern about Type I (“false positive”) errors. The 99% confidence level means that there is no more than a one-in-a-hundred chance that any given result reported here as significant represents an anomalous sample, rather than an actual characteristic of the underlying population.

In a few cases where the study team judged that marginally significant results (between $.02 \geq p > .01$) may be of interest, these are reported and identified as such. Other technical methodological issues are explained in footnotes as they arise.

Note that surveying was limited to the ECC; other parts of the Elephant Trails exhibit were excluded.

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1 For technical reasons, tests for statistical significance of cross-tabulated results were calculated using unweighted data.
Findings

BACKGROUND AND DEMOGRAPHICS

Visit History and Purpose

Well over half the survey respondents (57%) had made at least one previous visit to the National Zoo. However, the vast majority (82%) were first-time visitors to the renovated ECC.

Most respondents (82%) indicated they were at the Zoo for a general visit, while 7% claimed to be visiting to see the elephants and 11% to see some other animal(s). Write-in responses indicate that the animals visitors had in mind when they selected the last option were often the giant pandas.

Visit Groups

Less than one in ten respondents (8%) was visiting alone. Most were visiting with some combination of adults (69%), children under the age of 12 (40%), or youth ages 12-17 (14%).

Sex

Sixty percent of respondents were female, and 40% were male—a result in line with the demographics recorded in previous OP&A surveys administered at NZP.

Residence

Most respondents were from the United States (88%), with the remaining 12% residents of other countries. About 25% of all visitors were residents of the Washington, D.C. metropolitan region.

Age

The mean age of visitors was 35 and the median age was 32. By generation, respondents consisted of 9% Digital Natives (born after 1995); 42% Generation Y (born 1982-1995); 32% Generation X (born 1965-1981); 9% Trailing Baby Boom (born 1956-1964); 5% Leading Baby Boom (born 1946-1955); and 3% World War II Generation (born before 1946). (Figure 1, next page.)

To get a sense of how visitors of different ages reacted to the ECC, the age distribution of visitors was broken down into three categories that are more analytically tractable than the generational cohorts discussed above: “youngest” (under 28 years old), “middle” (28-40 years), and “oldest” (over 40) visitors. Each of these categories comprised approximately one-third of respondents. Statistically significant associations between this age variable and other variables of interest—for
example, satisfying experiences or overall exhibition rating—are reported in the appropriate sections below.

**Figure 1: Visitation by Generational Cohort**

![Pie chart showing visitation by generational cohort]

<table>
<thead>
<tr>
<th>Generation</th>
<th>Visitation Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Natives</td>
<td>3%</td>
</tr>
<tr>
<td>Generation Y</td>
<td>9%</td>
</tr>
<tr>
<td>Generation X</td>
<td>5%</td>
</tr>
<tr>
<td>Trailing Baby Boom</td>
<td>32%</td>
</tr>
<tr>
<td>Leading Baby Boom</td>
<td>42%</td>
</tr>
<tr>
<td>World War II</td>
<td>9%</td>
</tr>
</tbody>
</table>

**Overall Experience Rating**

Exiting visitors were asked to rate their overall experience in the ECC, using a five-point scale that has been applied by OP&A across Smithsonian exhibitions: poor, fair, good, excellent, and superior. OP&A has found that in general, visitors who are critical or unimpressed select poor, fair, or good. We will refer to these collectively as “lower three” ratings. Those who are basically satisfied tend to mark excellent; for most Smithsonian exhibitions, the most-common rating is excellent. Those who have very positive responses tend to mark superior.

About a quarter of respondents (22%) rated their overall experience in the ECC superior. A slightly higher proportion rated it in the lower three categories: good (24%), fair (4%), poor (0%). Half selected excellent (50%). (Figure 2, next page.)

These results compare favorably with other NZP exhibits. The 22% superior rating is higher than that for the American Trail in 2014 (16%), NZP as a whole in 2004 (14%), and the Bird House in 2014 (13%). It is quite close to the superior rating for the Asia Trail in 2007 (26%)—an exhibit that has the advantage of hosting the Zoo’s most popular animals, the giant pandas. (Figure 3, next page.) The ECC also did as well as any other NZP exhibit studied by OP&A in terms of lower three ratings: its 28% lower three rating was comparable to the 27% registered at the Asia Trail, and much better than the 43% registered at the Bird House or the 39% at both the American Trail and NZP as a whole.
Figure 2: ECC Overall Experience Rating

Figure 3: Comparative Overall Experience Ratings for NZP Attractions
Not surprisingly, overall satisfaction with the ECC was strongly associated with the presence of elephants at the time of respondents’ visits. Respondents who saw one or more elephants in the ECC were more likely to rate their overall ECC experience superior (23% vs. 12%) and less likely to give it a lower three rating (25% vs. 48%). In other words, when elephants were present, the ratio of lower three to superior ratings was about one-to-one. When they were not present, lower three ratings outnumbered superior ratings by about four-to-one. Fortunately, a large majority of visitors—90%—did see elephants during their time in the ECC.

Figure 4: Overall Satisfaction, With and Without Elephants Present

It is worth noting, however, that among the minority of visitors who did not see elephants in the ECC, half still rated the ECC either superior or excellent. This is somewhat surprising, because the absence of visible animals in a zoo exhibit is usually associated with acute disappointment.

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2 As discussed below, respondents who selected “seeing real, living elephants” as a particularly satisfying experience were also far more likely to rate the ECC superior and less likely to rate it in the lower three.  
3 Although the questionnaire explicitly queried about elephants within, and satisfaction with, the ECC rather than the Elephant Trails exhibit more generally, some respondents may have been thinking in terms of the latter. This may help to explain this result.
EXPECTATIONS AND REALITY

Expected Versus Actual Satisfaction

Exiting visitors’ actual satisfaction with the ECC substantially exceeded entering visitors’ expected satisfaction. As noted above, 22% of exiting respondents called the ECC superior, compared to only 13% of entering respondents who anticipated a superior experience. Likewise, while 40% of entering visitors anticipated a lower three rating for their overall experience, only 28% of exiting visitors actually chose the lower three. (Figure 5.)

Figure 5: Overall Satisfaction, Expected (Entering Visitors) vs. Actual (Exiting Visitors)

Features Within the ECC

Entering visitors were invited to choose, from a list of seven features plus an open-ended “other” choice, the features they expected to find within the ECC. The list was as follows:

- One or more elephants
- Zoo personnel interacting with elephants
- Zoo personnel I can talk to
- Information displays about elephants in general
- Information displays about the National Zoo’s own elephants
- Information displays about caring for elephants in zoos
- Interactive (hands-on) exhibits

* = Difference significant at 99% confidence level
Exiting visitors were asked which of these features they had in fact saw within the ECC. The results are shown in Figure 6.

**Figure 6: Expected and Experienced Exhibit Features**

![Bar chart showing expected vs. actual features](chart.png)

* = Difference significant at the 99% confidence level

The features actually encountered by visitors closely tracked expected features for several elements. Most notably, almost everyone expected to see elephants (91%), and almost everyone did (90%). However, several notable divergences were also discovered.

First, visitor expectations for access to Zoo personnel—in terms of either seeing them caring for the animals or being able to engage with them personally—far outstripped the actual presence of such personnel.

- For “Zoo personnel interacting with elephants,” the gap was 43% expected vs. 6% experienced.
- For “Zoo personnel I can talk to,” the gap was 35% expected vs. 15% experienced.

Among those who saw “Zoo personnel I could talk to” in the ECC, 32% rated their experience superior and 18% gave it a lower three rating. For other visitors, the figures were 20% superior and 30% lower three.
Second, a gap between expectations and experience in the opposite direction showed up with respect to interactives. Far fewer entering visitors expected to find interactive stations in the ECC (35%) than actually reported seeing them (52%). However, “unexpected” does not mean “unwelcome”—exiting visitors who reporting seeing interactives were significantly less likely to give the ECC a lower three overall rating (23%) than were other respondents (34%).

A less dramatic gap between expectations and experience occurred with the feature “information on elephants in general”—60% expected vs. 70% experienced.

**ATTITUDES TOWARD ELEPHANTS**

Zoo personnel were interested if the time that visitors spent in the ECC had a measurable impact on attitudes toward elephants. Two questions on the survey probed for such effects.

One asked visitors to rate their level of concern for the fate of wild elephant populations on a five-point scale, from “not concerned” to “extremely concerned.” The other asked about respondents’ interest in elephants on similar five-point scale, from “not interested” to “extremely interested.” Results for entering and exiting visitors were then compared.

No significant differences between entering and exiting visitors were detected in responses to either of these questions. This result held up when results were broken down by age.4

It should be noted, however, that absolute levels of self-reported concern about and interest in elephants were quite high, with 62% of exiting visitors rating their concern about elephants as a 4 or 5, and 66% rating their interest in elephants as a 4 or 5.

**KNOWLEDGE OF ELEPHANTS**

Zoo personnel were interested if the time that visitors spent in the ECC had a measurable impact on their knowledge of elephants. Eight survey questions were designed to probe for such effects.

Four of these were true-or-false “quiz” questions covering simple facts about Asian elephants that were emphasized in the ECC: their (1) endangered status, (2) high intelligence, (3) social nature, and (4) long-established presence at NZP. The phrasings were as follows:

- “Asian elephants are endangered” (True)
- “Elephants are highly intelligent animals” (True)
- “Elephants are solitary animals” (False)
- “The National Zoo has a long history of caring for elephants” (True)

---

4 “Oldest” (over 40) visitors were significantly more likely to be concerned about and interested in elephants than other visitors. However, this difference held across both entering and exiting cohorts, so it has no implications with respect to the ECC experience.
The other four questions were paired follow-ups to the true-or-false questions that asked respondents to rate their confidence in the answer they provided on a five-point scale from "just a guess" to "100% sure."

This was not a difficult set of questions, and correct answers could be guessed in most cases by anyone with a passing acquaintance with elephants. Indeed, in all cases except one, the correct response rate among entering visitors was high, and no statistically significant increase was detected among exiting visitors. The one exception was the question about NZP’s history of caring for elephants. Here, there was a significant increase in the percentage of exiting visitors giving the correct response (70%, versus 60% for entering visitors), a significant decrease in the percentage indicating they did not know the answer (29% vs. 39%), and a significant increase in the percentage claiming they were “100% sure” of their answer (43% vs. 32%).

A significant increase in the percentage of respondents who were “100% sure” about their answer to the question on elephants’ intelligence was also observed (71% vs. 62%). (Table 1.)

<table>
<thead>
<tr>
<th>Table 1: Elephant Knowledge Questions (Entrance Vs. Exit)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>True or False: Asian elephants are endangered</strong></td>
</tr>
<tr>
<td>(% correct response)</td>
</tr>
<tr>
<td>Entrance</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>71%</td>
</tr>
<tr>
<td><strong>How certain are you of your response? (% marking “100% sure”)</strong></td>
</tr>
<tr>
<td>Entrance</td>
</tr>
<tr>
<td>30%</td>
</tr>
<tr>
<td><strong>True or False: Elephants are highly intelligent animals</strong></td>
</tr>
<tr>
<td>(% correct response)</td>
</tr>
<tr>
<td>Entrance</td>
</tr>
<tr>
<td>93%</td>
</tr>
<tr>
<td><strong>How certain are you of your response? (% marking “100% sure”)</strong></td>
</tr>
<tr>
<td>Entrance</td>
</tr>
<tr>
<td>62%</td>
</tr>
<tr>
<td><strong>True or False: Elephants are solitary animals</strong></td>
</tr>
<tr>
<td>(% correct response)</td>
</tr>
<tr>
<td>Entrance</td>
</tr>
<tr>
<td>71%</td>
</tr>
<tr>
<td><strong>How certain are you of your response? (% marking “100% sure”)</strong></td>
</tr>
<tr>
<td>Entrance</td>
</tr>
<tr>
<td>51%</td>
</tr>
<tr>
<td><strong>True or False: NZP has a long history of elephant care?</strong></td>
</tr>
<tr>
<td>(% correct response)</td>
</tr>
<tr>
<td>Entrance</td>
</tr>
<tr>
<td>60%</td>
</tr>
<tr>
<td><strong>How certain are you of your response? (% marking “100% sure”)</strong></td>
</tr>
<tr>
<td>Entrance</td>
</tr>
<tr>
<td>32%</td>
</tr>
</tbody>
</table>

* = Difference significant at 99% confidence level
Correlations between answering a knowledge question correctly and confidence in one's answer can provide another perspective on learning effects at the ECC. Even if exiting visitors were no more likely to answer a knowledge question correctly than entering visitors, a higher correlation on exit between correct answers and confidence would imply that visitors absorbed information in the ECC that made them more certain about their answer. This is in fact what the data show. (Table 2.)

Table 2: Elephant Knowledge Questions (Answer/Confidence Correlations)

(Numbers are Pearson correlation coefficients)

<table>
<thead>
<tr>
<th>Sure Elephants</th>
<th>Entrance: 0.026</th>
<th>Elephants Intelligent</th>
<th>Entrance: -0.028</th>
<th>Exit: 0.105*</th>
<th>Elephants Social</th>
<th>Entrance: 0.295*</th>
<th>Exit: 0.478*</th>
<th>NZP History of Elephant Care</th>
<th>Entrance: 0.060</th>
<th>Exit: 0.221*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sure Endangered</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sure Intelligent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sure Social</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sure NZP Has History with Elephants</td>
<td></td>
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<td></td>
<td></td>
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</tbody>
</table>

* = Correlation significant at 99% confidence level

On entrance, only one correlation between a correct answer and confidence in that answer was significant at the 99% confidence level (on the question about elephants’ social nature). On the exit survey, however, only one of these correlations was not significant (on the question about elephants’ endangered status).

- On the intelligence question, correlation rose from insignificant to weak (0.105).
- On the social nature question, correlation rose from weak (0.295) to moderate (0.478)
- On the NZP history question, correlation rose from insignificant to weak (0.221)
- On the endangered-status question, correlation was insignificant on both entrance and exit

---

5 Correlation is a measure of linear association between two variables—in this case the knowledge-question variable (coded as 0 [correct] or 1 [incorrect]) and the confidence variable associated with that question (coded as 1 ["just a guess"] through 5 ["100% sure"]). The most commonly-used measure of correlation (the Pearson correlation coefficient) takes an absolute value between 0 and 1, with 0 indicating no correlation and 1 (or -1) indicating perfect correlation. In this context, perfect correlation would mean everyone who answered a given knowledge question correctly was “100% sure” of his/her reply, and everyone who answered a question incorrectly was “just guessing.” A correlation of 0 would indicate completely random pairings of correct answers and confidence scores. In between, higher correlations are interpreted as stronger associations between correct answers and confidence in those answers.
Although in two out of three cases the correlation remained weak even upon exit, these results nevertheless provide some evidence of learning with respect to all the knowledge questions except the question on elephants' endangered status.\(^6\)

**VISITOR EXPERIENCES**

Visitors exiting the ECC were invited to choose, from a list of six experiences plus a write-in “other” option, the experiences they found particularly satisfying. The list was as follows:

- “Seeing real, living elephants”
- “Watching zoo personnel interacting with elephants”
- “Talking with zoo personnel”
- “Learning about the lives of elephants in zoos”
- “Getting a sense of what it takes to care for zoo elephants”
- “Doing interactive (hands-on) exhibits”

The basic (unadjusted) frequencies with which these experiences were selected as especially satisfying are given as the left-hand (blue) bar in Figure 7.

![Figure 7: Satisfying Experiences in the ECC](image)

\(^6\) The issue of Asian elephants' endangered status was not stressed as heavily in the ECC as in the Elephant Outpost (the other part of the Elephant Trails habitat with arrays of educational displays).
The unadjusted frequencies shown in Figure 7 need to be interpreted with caution, however, especially insofar as they seem to suggest that few visitors found access to zoo personnel a satisfying experience. As noted, zoo personnel were usually not present in the ECC at the time of survey administration. Thus, the more relevant figure is the percentage of visitors who found access to Zoo personnel to be a satisfying experience among the minority of respondents who actually had such access. This alters the picture very substantially, as shown in the right-hand (orange) bars in Figure 7.

- Among respondents who saw “Zoo personnel interacting with elephants” in the ECC, 28% marked this as a satisfying experience—the second most-cited satisfying experience after actually seeing elephants.
- Among respondents who saw “Zoo personnel I could talk to,” 21% cited talking to Zoo staff as a satisfying experience.

The same logic of adjustment applies to the relationship between seeing elephants (which were not always present in the ECC, although they were much more likely to be present than Zoo personnel) and marking “seeing real, living elephants” as a satisfying experience. Among those who saw elephants, this experience was rated as satisfying by 92% of respondents. The other experience choices need no adjustment, as these were available to all survey respondents at all times.

Certain experiences were positively associated with the overall exhibition ratings: 7

- “Seeing real, living elephants” (24% of visitors who marked this as a satisfying experience rated the ECC superior and 25% gave it a lower three rating; for others, the figures were 10% superior and 48% lower three).
- “Learning about the lives of elephants in zoos” (34% superior and 18% lower three, versus 18% and 31% for others, respectively).
- “Doing interactives” (26% superior and 19% lower three, versus 20% and 32% for others, respectively).
- “Getting a sense of what it takes to care for elephants in zoos” (31% superior and 19% lower three, versus 20% and 30% for others, respectively).

In a rare case where age was found to be associated with another variable of interest, the oldest respondents (over 40 years of age) were significantly more likely to mark “talking to zoo staff” as a satisfying experience (12%) than the middle (5%) or youngest (3%). The difference was even more striking when the focus was confined to visitors who actually saw zoo personnel to whom they could talk: 36% for the oldest visitors, 20% for the middle group, and 5% for the youngest.

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7 “Talking with Zoo personnel” (35% superior and 15% lower three, versus 21% superior and 29% lower three for others) was significant at the 95% confidence level, but not the 99% confidence level (p = .032). The reason for the relatively low level of significance is probably the low number of data points (n = 46).

8 Marginally significant (p = .017).
**USE OF INTERACTIVES**

While tracking studies are generally better for getting accurate data on use of interactives, the exit survey did ask respondents to indicate which of the various interactives within the ECC they used, in order to cross-tabulate interactive use with other variables of interest such as age and overall experience rating.

To increase the chances that visitors would correctly associate the interactives they used with the list on the questionnaire, respondents were given a floor plan that identified the various interactives’ locations using the names on the questionnaire. (Figure 8.)

**Figure 8: Interactive Identification Floor Plan**

Figure 9 (next page) shows the frequencies for use of the various interactives. These data show that the strength test and scale were used most commonly; the photo booth, video books, and vocalization interactive were least-used; and the timeline, cutouts, and flip books fell in between.
Use of a number of these interactives was positively associated with overall rating:

- **Timeline**: 30% of users rated the ECC *superior* and 17% rated it in the *lower three*, compared with 19% *superior* and 32% *lower three* among other visitors.
- **Cutouts**: 28% *superior* among users versus 19% *superior* among others, and 22% *lower three* ratings among users versus 31% *lower three* ratings among others.\(^9\)
- **Strength test**: 27% *superior* among users, versus 17% *superior* among others.
- **Video books**: 32% *superior* among users versus 20% *superior* among others.\(^10\)

**APPEAL OF NEW ECC FEATURES**

Entering visitors were shown a list of design improvements in the ECC compared to the old Elephant House, and were asked to rate how important they considered each improvement to be on a five-point scale, from “not at all important” to “extremely important.”\(^11\) The features listed were the following:

- Clear views of the elephants (e.g., no bars on enclosures)
- A large, open enclosure where elephants can interact
- Enhanced interpretive elements (labels and wall text)
- Inclusion of hands-on, interactive educational elements

\(^9\) Marginally significant (p = .012).
\(^10\) Marginally significant (p = .018).
\(^11\) This scale was anchored only at the end points, with 1 designated “not important,” 5 designated “extremely important,” and no labels on the scale points between.
- A bright elephant enclosure with natural light
- A soft sand floor for elephants (as opposed to hard concrete)
- An environmentally friendly/“green” building design

**Figure 10: Importance of ECC Design Improvements**

Perhaps unsurprisingly, most respondents tended to rate most of the features relatively highly. However, looking at relative differences among the figures does bring out some interesting points. This comparison can be seen in Figure 10.

The top-ranked design features were those that served to make the ECC environment more pleasant for elephants (sand floor), visitors (clear views of the elephants), or both (open enclosure; natural light). These features were rated 5 ("extremely important") by between half and two-thirds of respondents in all cases, and were rated 1-3 by less than one-sixth of respondents in all cases.

The bottom-ranked design features were those having to do with the addition or enhancement of interpretative elements (labels and wall text; interactives). In both cases, these were rated 5 by about one third of respondents, and rated 1-3 by about two-fifths.

Green design was somewhere in between the previously-discussed groups.
Discussion

It should come as no surprise that ultimately, the point of entering the ECC for most visitors is to see elephants. Visitors overwhelmingly selected this as an expectation for their visit to the ECC before entering, and as a satisfying experience upon exiting. Failing to see elephants was by far the strongest predictor of low overall satisfaction with the ECC.

However, it is instructive that half of the respondents who did not see elephants in the ECC still rated their overall experience as excellent or superior. If visitors were rating the ECC only on the basis of their encounters with live elephants, that result would be unexpected. This suggests that while viewing elephants is the most important factor in the visitor experience, visitors do weigh other considerations in their overall assessment.12

The most striking finding of the survey was the substantial difference between expected overall satisfaction ratings among entering visitors and actual ratings given by exiting visitors. The significant rise in superior ratings and decline in good/fair/poor ratings is a very positive finding, although the reasons behind it are unclear.

Another notable finding was the subtle but persistent evidence of learning within the ECC. The knowledge effects in this instance generally involved strengthening visitors’ certainty about basic facts they may have already known at some level. The largest learning effect involved strengthening visitors’ knowledge of the National Zoo’s history of elephant care, rather than knowledge of elephants per se.

The biggest gap between entering expectations and exiting experiences concerned access to zoo personnel. While the absence of zoo personnel may not have been problematic for all or even most visitors, findings from this study suggested that access to such personnel would be a plus for some visitors, particularly older ones.

No significant differences between entering and exiting visitors were detected with respect to concern for or interest in elephants. However, this may be partly because concern and interest were high among entering visitors. With respect to concern for elephants, it should also be noted that the messages of endangerment and conservation are not stressed to the same extent in the ECC as elsewhere in the Elephant Trails habitat.

Entering respondents’ rankings of the importance of new ECC design features, and their expectations for offerings within the ECC, suggest that visitors did not generally expect as much interactive and educational content as the ECC in fact contains. However, some visitors clearly appreciated this interactive and education content, as evidenced by the facts that several of the ECC

12 The sample size of visitors who did not see elephants was too small to yield insight into the factors that influenced their overall rating.
interactives and displays received considerable attention and, in some cases, interactives and learning experiences were associated with greater overall satisfaction—although we should be careful not to attribute any causality to this association.
Appendix A: Questionnaires

Elephant Community Center – National Zoo
Summer & Fall 2014

Is this your first visit to the National Zoo?

- Yes  
- No

Is this your first visit to the National Zoo’s renovated Elephant Community Center (Elephant House) since it opened in March, 2013?

- Yes  
- No

What do you expect to find in the Center today?

- One or more elephant(s)
- Zoo personnel interacting with elephants
- Zoo personnel I can talk to
- Information displays about elephants in general
- Information displays about the National Zoo’s own elephants
- Information displays about caring for zoo elephants
- Interactive (hands-on) exhibits
- Other (please specify):

How do you think you will rate your overall experience in the Elephant Community Center when you leave today?

- Poor  
- Fair  
- Good  
- Excellent  
- Superior

Please choose the best answer to complete this statement: I came to the Zoo today...

- to see the elephants.
- to see some other animal(s): ____________________
- for a general visit.

How concerned are you about the fate of elephant populations in the wild?

<table>
<thead>
<tr>
<th>Not concerned</th>
<th>Extremely concerned</th>
<th>Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 02 03 04 05</td>
<td>01 02 03 04 05</td>
<td>01 02 03 04 05</td>
</tr>
</tbody>
</table>

How interested are you in elephants?

<table>
<thead>
<tr>
<th>Not interested</th>
<th>Extremely interested</th>
<th>Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 02 03 04 05</td>
<td>01 02 03 04 05</td>
<td>01 02 03 04 05</td>
</tr>
</tbody>
</table>

Are you a member of the Friends of the National Zoo (FONZ)?

- Yes  
- No

With whom are you visiting the Zoo today?

- I am alone
- I am with: adults age 18 and over
- I am with: youth age 12 to 17
- I am with: youth age 11 or under

Some changes in the new Center are listed below; please indicate how important you consider each of these changes, in terms of enhancing the Center:

<table>
<thead>
<tr>
<th>Not at all important</th>
<th>Extremely important</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 02 03 04 05</td>
<td>01 02 03 04 05</td>
</tr>
</tbody>
</table>

Clear views of the elephants (e.g., no bars on enclosures)

A large, open enclosure where elephants can interact with each other

Enhanced interpretive elements (labels and wall text)

Inclusion of hands-on, interactive educational elements

A bright elephant enclosure with natural light

A soft sand floor for elephants (as opposed to hard concrete)

An environmentally-friendly “green” building design

To help us get a sense of our visitors’ background knowledge, please respond to the following statements, and if you answer True or False, please indicate how sure you are of your answer:

1. Asian elephants are endangered.

- True  
- False  
- Don’t Know  

If you choose True or False, how sure are you?

<table>
<thead>
<tr>
<th>Not at all sure</th>
<th>Extremely sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 02 03 04 05</td>
<td>01 02 03 04 05</td>
</tr>
</tbody>
</table>

2. Elephants are highly intelligent animals.

- True  
- False  
- Don’t Know  

If you choose True or False, how sure are you?

<table>
<thead>
<tr>
<th>Not at all sure</th>
<th>Extremely sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 02 03 04 05</td>
<td>01 02 03 04 05</td>
</tr>
</tbody>
</table>

3. Elephants are solitary animals.

- True  
- False  
- Don’t Know  

If you choose True or False, how sure are you?

<table>
<thead>
<tr>
<th>Not at all sure</th>
<th>Extremely sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 02 03 04 05</td>
<td>01 02 03 04 05</td>
</tr>
</tbody>
</table>

4. The National Zoo has a long history of caring for elephants.

- True  
- False  
- Don’t Know  

If you choose True or False, how sure are you?

<table>
<thead>
<tr>
<th>Not at all sure</th>
<th>Extremely sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 02 03 04 05</td>
<td>01 02 03 04 05</td>
</tr>
</tbody>
</table>

Please tell us about yourself...

Where do you live?

- United States. Zip Code: ____________
- Other country. Please specify: ____________________

What is your sex?

- Male  
- Female

What is your age? ____________

Thank you for your time and thoughts!
Is this your first visit to the National Zoo?
- Yes
- No

Is this your first visit to the National Zoo’s renovated Elephant Community Center (Elephant House) since it opened in March, 2013?
- Yes
- No

Please rate your overall experience in the Elephant Community Center today:
- Poor
- Fair
- Good
- Excellent
- Superior

Which of the following did you see in the Elephant Community Center today?
- Mark all that apply
- One or more elephant(s)
- Zoo personnel interacting with elephants
- Zoo personnel I could talk to
- Information displays about elephants in general
- Information displays about the National Zoo’s own elephants
- Information displays about caring for zoo elephants
- Interactive (hands-on) exhibits
- Other (please specify):

Which of the following interactive displays did you use in the Elephant Community Center today?
- Mark all that apply
- Timeline
- Elephant cut-outs
- Strength test
- Video “books”
- Elephant vocalization interactive
- Photo booth
- Scale
- “Meet Our Elephants” flip books

To help us get a sense of your background knowledge, please respond to the following statements, and if you answer “True” or “False,” please indicate how sure you are of your answer:

1. Asian elephants are endangered.
- True
- False
- Don’t Know

If you chose True or False, how sure are you?
- 0
- 1
- 2
- 3
- 4
- 5
Just a guess 100% sure

2. Elephants are highly intelligent animals.
- True
- False
- Don’t Know

If you chose True or False, how sure are you?
- 0
- 1
- 2
- 3
- 4
- 5
Just a guess 100% sure

3. Elephants are solitary animals.
- True
- False
- Don’t Know

If you chose True or False, how sure are you?
- 0
- 1
- 2
- 3
- 4
- 5
Just a guess 100% sure

4. The National Zoo has a long history of caring for elephants.
- True
- False
- Don’t Know

If you chose True or False, how sure are you?
- 0
- 1
- 2
- 3
- 4
- 5
Just a guess 100% sure

Thank you for your time and thoughts!
### Appendix B: Response Frequencies

Differences significant at a 99% confidence level are highlighted.

<table>
<thead>
<tr>
<th>Question</th>
<th>Entrance</th>
<th>Exit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is this your first visit to the National Zoo?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>40%</td>
<td>43%</td>
</tr>
<tr>
<td>Is this your first visit to the renovated ECC since it reopened in March, 2013?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>84%</td>
<td>82%</td>
</tr>
<tr>
<td>Please rate your (expected) overall experience in the ECC today</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Superior</td>
<td>13%</td>
<td>22%*</td>
</tr>
<tr>
<td>Excellent</td>
<td>48%</td>
<td>50%</td>
</tr>
<tr>
<td>Good</td>
<td>36%</td>
<td>24%*</td>
</tr>
<tr>
<td>Fair</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>Poor</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>What do you (expect to) find in the ECC today?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elephants</td>
<td>91%</td>
<td>90%</td>
</tr>
<tr>
<td>Zoo personnel interacting with elephants</td>
<td>43%</td>
<td>6%*</td>
</tr>
<tr>
<td>Zoo personnel to talk to</td>
<td>35%</td>
<td>15%*</td>
</tr>
<tr>
<td>Information on elephants in general</td>
<td>60%</td>
<td>70%*</td>
</tr>
<tr>
<td>Information on NZP elephants</td>
<td>50%</td>
<td>56%</td>
</tr>
<tr>
<td>Information on caring for elephants in zoos</td>
<td>40%</td>
<td>43%</td>
</tr>
<tr>
<td>Interactives</td>
<td>35%</td>
<td>52%*</td>
</tr>
<tr>
<td>Other</td>
<td>3%</td>
<td>2%</td>
</tr>
</tbody>
</table>
I came to the Zoo today...

<table>
<thead>
<tr>
<th>Reason</th>
<th>Entrance</th>
<th>Exit</th>
</tr>
</thead>
<tbody>
<tr>
<td>For a general visit</td>
<td>76%</td>
<td>82%</td>
</tr>
<tr>
<td>To see the elephants</td>
<td>11%</td>
<td>7%</td>
</tr>
<tr>
<td>To see some other animal(s)</td>
<td>13%</td>
<td>11%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How concerned are you about the fate of wild elephants?</th>
<th>1 = Not concerned</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5 = Extremely concerned</th>
<th>No opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = Not concerned</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>2</td>
<td>3%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>3</td>
<td>19%</td>
<td>18%</td>
<td>18%</td>
<td>18%</td>
<td>35%</td>
<td>40%</td>
</tr>
<tr>
<td>4</td>
<td>36%</td>
<td>32%</td>
<td>32%</td>
<td>32%</td>
<td>36%</td>
<td>36%</td>
</tr>
<tr>
<td>5 = Extremely concerned</td>
<td>35%</td>
<td>40%</td>
<td>40%</td>
<td>40%</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>No opinion</td>
<td>6%</td>
<td>8%</td>
<td>8%</td>
<td>8%</td>
<td>8%</td>
<td>8%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How interested are you in elephants?</th>
<th>1 = Not interested</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5 = Extremely interested</th>
<th>No opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = Not interested</td>
<td>1%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>2</td>
<td>4%</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>3</td>
<td>28%</td>
<td>27%</td>
<td>27%</td>
<td>27%</td>
<td>27%</td>
<td>27%</td>
</tr>
<tr>
<td>4</td>
<td>38%</td>
<td>35%</td>
<td>35%</td>
<td>35%</td>
<td>35%</td>
<td>35%</td>
</tr>
<tr>
<td>5 = Extremely interested</td>
<td>27%</td>
<td>31%</td>
<td>31%</td>
<td>31%</td>
<td>31%</td>
<td>31%</td>
</tr>
<tr>
<td>No opinion</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
</tr>
</tbody>
</table>

<p>| Are you a FONZ member? | Yes | 5% | 5% |</p>
<table>
<thead>
<tr>
<th>True or False: Asian elephants are endangered</th>
<th>Entrance</th>
<th>Exit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correct (True)</td>
<td>71%</td>
<td>73%</td>
</tr>
<tr>
<td>Incorrect</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>27%</td>
<td>23%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How sure are you of that answer?</th>
<th>Entrance</th>
<th>Exit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = Just a guess</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>2</td>
<td>5%</td>
<td>7%</td>
</tr>
<tr>
<td>3</td>
<td>27%</td>
<td>21%</td>
</tr>
<tr>
<td>4</td>
<td>32%</td>
<td>31%</td>
</tr>
<tr>
<td>5 = 100% sure</td>
<td>30%</td>
<td>35%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>True or False: Elephants are highly intelligent</th>
<th>Entrance</th>
<th>Exit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correct (True)</td>
<td>93%</td>
<td>96%</td>
</tr>
<tr>
<td>Incorrect</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>6%</td>
<td>4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How sure are you of that answer?</th>
<th>Entrance</th>
<th>Exit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = Just a guess</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>2</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>3</td>
<td>9%</td>
<td>8%</td>
</tr>
<tr>
<td>4</td>
<td>24%</td>
<td>18%</td>
</tr>
<tr>
<td>5 = Completely certain</td>
<td>62%</td>
<td>71%</td>
</tr>
</tbody>
</table>

---

13 Difference significant at 90% confidence level
14 Difference significant at 95% confidence level
<table>
<thead>
<tr>
<th>True or False: Elephants are solitary animals</th>
<th>Entrance</th>
<th>Exit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correct (False)</td>
<td>71%</td>
<td>74%</td>
</tr>
<tr>
<td>Incorrect</td>
<td>7%</td>
<td>9%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>22%</td>
<td>17%</td>
</tr>
<tr>
<td>How sure are you of that answer?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 = Just a guess</td>
<td>4%</td>
<td>5%</td>
</tr>
<tr>
<td>2</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>3</td>
<td>19%</td>
<td>15%</td>
</tr>
<tr>
<td>4</td>
<td>23%</td>
<td>23%</td>
</tr>
<tr>
<td>5 = 100% sure</td>
<td>51%</td>
<td>53%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>True or False: NZP has a long history of caring for elephants</th>
<th>Entrance</th>
<th>Exit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correct (True)</td>
<td>60%</td>
<td>70%*</td>
</tr>
<tr>
<td>Incorrect</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>39%</td>
<td>29%*</td>
</tr>
<tr>
<td>How sure are you of that answer?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 = Just a guess</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>2</td>
<td>8%</td>
<td>5%</td>
</tr>
<tr>
<td>3</td>
<td>27%</td>
<td>24%</td>
</tr>
<tr>
<td>4</td>
<td>26%</td>
<td>23%</td>
</tr>
<tr>
<td>5 = Completely certain</td>
<td>32%</td>
<td>43%*</td>
</tr>
</tbody>
</table>

| Visiting alone                                               | Yes     | 5%  | 8% |
| Visiting with adults                                         | Yes     | 71% | 69%|
| Visiting with youth 12-17                                    | Yes     | 18% | 14%|

15 Difference significant at 90% confidence level
<table>
<thead>
<tr>
<th>Visiting with children &lt; 12</th>
<th>Entrance</th>
<th>Exit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>42%</td>
<td>40%</td>
</tr>
<tr>
<td>U.S. Resident</td>
<td>Yes</td>
<td>92%</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>43%</td>
<td>40%</td>
</tr>
<tr>
<td>Female</td>
<td>57%</td>
<td>60%</td>
</tr>
</tbody>
</table>

How important do you consider these changes in the renovated ECC? (Entrance only)

<table>
<thead>
<tr>
<th></th>
<th>Clear views of elephants</th>
<th>Open enclosure</th>
<th>Enhanced interpretation</th>
<th>Interactives</th>
<th>Natural light</th>
<th>Sand floor</th>
<th>Green design</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Not) 1</td>
<td>0%</td>
<td>0%</td>
<td>2%</td>
<td>3%</td>
<td>0%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>2</td>
<td>2%</td>
<td>1%</td>
<td>6%</td>
<td>11%</td>
<td>3%</td>
<td>3%</td>
<td>5%</td>
</tr>
<tr>
<td>3</td>
<td>13%</td>
<td>11%</td>
<td>30%</td>
<td>29%</td>
<td>13%</td>
<td>10%</td>
<td>16%</td>
</tr>
<tr>
<td>4</td>
<td>26%</td>
<td>23%</td>
<td>29%</td>
<td>28%</td>
<td>32%</td>
<td>26%</td>
<td>28%</td>
</tr>
<tr>
<td>(Extremely) 5</td>
<td>58%</td>
<td>64%</td>
<td>33%</td>
<td>30%</td>
<td>51%</td>
<td>61%</td>
<td>50%</td>
</tr>
</tbody>
</table>

Which of the following interactives did you use in the ECC today? (Exit only)

<table>
<thead>
<tr>
<th></th>
<th>Timeline</th>
<th>Cutouts</th>
<th>Strength test</th>
<th>Video books</th>
<th>Vocalization</th>
<th>Photo booth</th>
<th>Scale</th>
<th>&quot;Meet Our Elephants&quot; Flip Books</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>24%</td>
<td>27%</td>
<td>45%</td>
<td>15%</td>
<td>17%</td>
<td>11%</td>
<td>42%</td>
<td>31%</td>
</tr>
<tr>
<td>Experience</td>
<td>Percentage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td>------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seeing elephants</td>
<td>87%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watching personnel interact</td>
<td>6%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>Learning about elephants in zoos</td>
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<td>Learning about caring for elephants in zoos</td>
<td>16%</td>
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<td>Interacts</td>
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<td>Other</td>
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<td>None</td>
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Appendix C: Open-ended Comments

Responses reproduced verbatim with minor edits for clarity. Unintelligible or illegible responses excluded. Responses present on multiple surveys are not repeated.

I came to the Zoo today to see some other animal(s): ...

“Pandas”; “giant pandas”; “baby panda”; “Bao Bao” (104)\(^{16}\)
“Red pandas” (3)
“Otters” (3)
“Giraffes” (3)\(^{17}\)
“Lions” (3)
“Lion cubs” (2)
“Tigers” (2)
“Monkeys” (2)
“Amazonia” (2)
“Sloth bears” (2)
“Naked mole rats” (2)
“Lemurs”
“Sea lions”
“Seals”
“Gorillas”
“Reptiles”
“Fish”
“Vultures”
“Big cats”
“Clouded leopard”
“Birds”
“Shrew (elephant shrews”
“Apes”
“Penguins”
“Polar bears”
“Zebras”

\(^{16}\) Approximately two-thirds of the 154 write-in responses noted giant pandas.

\(^{17}\) Including one with “☺” appended.
“Gibbons”
“People watching”
“Petting zoo”
“Hippo”
“Bison”
“Wolves”
“Panda store”

**(Entrance) What do you expect to find in the Center today? Other: ...**

“Rides!” (2)
“Not really sure.”
“Staff enforcing rules.”
“Humane treatment”
“Trees”
“Rhinos”
“I play with elephants”
“A herd”
“Hands-on exhibit”
“Conservation/poaching”
“Ability to touch elephants”
“Elephants up close”

**(Exit) Which of the following did you see in the Center today? Other: ...**

“Elephant tusks”
“Poop”
“Picture taking”
“Elephants playing”
“Multiple views from locations”
“Zoo people”
“A little bird”
“Elephant smell”
“Zoo personnel setting out food”
“Volunteers doing surveys”
Which of the following experiences were especially satisfying to you in the ECC today?

Other: ...

- Just watching the elephants—eating, playing, etc.
- [The elephants] were eating
- Overall experience
- The scope of the enclosure; looks appealing.
- Seeing elephants playing and problem solving (treat wheel).
- Seeing [the elephants] thrive in a new, large environment. Beautiful!
- Learning about elephants' self-recognition
- How they feel themselves
- Pee and poo tubes
- The intake/output display
- Elephants playing
- Education [with respect to this] species
- The elephants at this zoo
- General interest and taking pictures
- Vocal thank you for donation
- Additional animals
- We liked the poop!
- The experience

**Miscellaneous Comments**¹⁸

- “Strength test was fun.”
- “Video books did not work.”
- “Only the bulls [are solitary]”
- “Photo Booth was broken. Flip books were weird.”
- “[Elephants are not solitary,] except some males.”
- “Bulls tend to be solitary.”
- “I used to be [a member of FONZ], and may be again”
- [“Overall experience was excellent,] apart from people blocking the way.
- “The exhibit looks amazing.”
- “[Whether elephants are intelligent animals] depends on your definition of intelligence.”

¹⁸ Includes both comments written on survey forms and spoken comments noted by survey administrators at the time completed surveys were being delivered.
“I want to play with the elephants. I love them.”

“[Question about solitary elephants is] true for older males; false for females and younger males.”

“[I came to the Zoo today] for a walk.”

“[Is the question about solitary elephants a trick question?] Males are solitary; females and young aren’t.”

“Scale was off. 😞”

“[How would I know if NZP has a history of caring for elephants?] I’m from New York.”

“My hope is the elephants will be kept together as a herd and not separated by gates as I observed them today, with more room to roam together as nature intended.”