



Impact Planning, Evaluation & Audience Research

Randi Korn & Associates, Inc.
2417 B Mount Vernon Avenue
Alexandria, VA 22301

Formative Evaluation
Safari Adventure

Prepared for the
Bronx Zoo
Wildlife Conservation Society
Bronx, NY

TABLE OF CONTENTS

SUMMARY AND IMPLICATIONS.....	iii
INTRODUCTION	I
Methodology.....	1
Data Analysis and Reporting Method.....	2
PROTOTYPE ACTIVITIES	3
Introduction.....	3
Animal Masks Interactive	3
Dung Beetle Interactive	4
Beehive Interactive.....	5
Safari Ranger Cart Interactive	5
Overall Experience Interview Findings	6
NATURE WALK PILOT TEST.....	9
Introduction.....	9
Findings	9
GIRAFFE FEEDING PILOT TEST.....	11
Introduction.....	11
Findings.....	11
FOCUS GROUPS WITH NON-VISITORS	12
Introduction.....	12
Findings	12
APPENDICES	13

SUMMARY AND IMPLICATIONS

The Wildlife Conservation Society (WCS) contracted Randi Korn & Associates, Inc. (RK&A) to conduct a formative evaluation as part of its Institute of Museum and Library Services (IMLS) grant project. This report presents the results of evaluations in four areas: prototype activities (a group of four interactive exhibits); a nature walk; a giraffe feeding; and focus groups with non-visitors.

The findings presented here are among the most salient. Please read the body of the report for a more comprehensive presentation of findings.

SUMMARY OF RESULTS

HOW NEWLY-DESIGNED ACTIVITIES SUPPORT FAMILY'S EXPERIENCES AT THE ZOO

All three experiences—the prototypes, nature walk, and giraffe feeding—tested very well in their overall support of family visitors' experiences at the Zoo. Each of the three experiences, described in more detail below, had their strengths, but as a whole the three activities helped visitors feel more connected to wild animals and nature (especially as compared to other more traditional exhibits in the Zoo) and encouraged intergenerational participation.

The difference in these experiences and those that currently exist in the Zoo did not go unnoticed by visitors—many of them said they wished the Zoo had more interactive activities that provided opportunities for them to gain an intimate understanding of the animals, such as why they behave or look the way they do. This was the case whether the activity included encounters with real animals (like the Ranger Cart or Nature Walk) or a simulated experience (like the Dung Beetle interactive)—both types of activities were appreciated and valued. Such findings are similar to those RK&A has found at other zoo studies. In a front-end study of the proposed *Safari Adventure* at the Bronx Zoo (RK&A, 2013) and a study of the children's zoo at Central Park Zoo (RK&A, 2012), interviewees were most interested in experiences that promoted direct interaction with animals. Likewise, in a front-end study for the Philadelphia Zoo's children's zoo, about one-third of children said their favorite aspect was interacting with animals, and about two-thirds of parents valued seeing their children interact with animals (RK&A, 2010).

Visitors also highly valued the activities facilitated by staff, such as the Ranger Cart and Nature Walk, where their learning could be taken a little deeper. We found similar findings at the Central Park Zoo (RK&A, 2013), where staff interaction came up unprompted as something family visitors value and seek out. In the study at Central Park Zoo, the most frequent suggestion for interpretation in the Zoo was more opportunities to converse with volunteers and ask them questions about the animals. Visitors appreciate that staff and volunteers can provide information customized to visitors' queries and can point out animals, or signs of animals, hidden in their exhibit environments.

PROTOTYPES

The Safari Adventure prototypes, which were mostly unfacilitated with the exception of a Safari Ranger Cart, were most valued for providing interactive, kid-friendly, and engaging experiences for family groups. The prototypes' popularity was evident by the fact that they stayed mostly crowded throughout the day and became even more crowded when animals were active in the Baboon Reserve. Unprompted, many visitors said they wished the Zoo had more similar experiences throughout the

grounds. The facilitated activity, the Safari Ranger Cart, had the longest dwell time and greatest intergenerational engagement, as adults and children looked at animals together and learned with the Ranger. Results indicate that visitors to the Cart learned about animal behavior and felt connections to the animals present through their close observations of animals and learning about them through the educator. The unfacilitated activities each had their own strengths. The Animals Masks activity was fun for the whole family, and particularly when visitors engaged in role playing, it helped them think more deeply about animal behaviors and also feel empathetic to animals. The Dung Beetle was an activity most engaged in by children with adults serving as spectators and facilitators of content; it gave visitors appreciation for dung beetles and triggered some thinking about the unique value of every living creature. The Bee Hive exhibit was least engaged with, perhaps because it was not very interactive and its focus seemed to be more on the bee's hive than on the bee itself—some visitors noted that they did not know what it was and others said it was not kid-friendly; however, for those who did use the activity, their appreciation for and understanding of the importance of bees was elevated.

NATURE WALK

The Nature Walk, which required advance registration, was well-received by all who participated. In particular, visitors valued that their children were able to explore and appreciate nature including plants and wild life—with children getting down to look at bugs and looking for evidence of animals. The educator skillfully interjected information but also let the participants direct the walk based on their interest and curiosities. Parents tended to stand back and let their children and the educator guide the walk, but it was evident in interviews that the adults also took a great deal away from the walk themselves—they all said the walk helped them and their children slow down and look closely at the nature and wildlife they may normally take for granted. The personalized attention and opportunities that the walk afforded made it something that all adults said they would be willing to pay for in the future. Since this activity takes visitors off the beaten path and requires a substantial time commitment, it will likely be most attractive to frequent Zoo visitors who want to deepen their experience of the Zoo. Infrequent visitors, such as tourists and those who visit only once a year or every few years, will likely be more interested in spending their time in the Zoo proper.

GIRAFFE FEEDING

The Giraffe Feeding activity received the most visceral reaction from participants, with some being almost speechless from the excitement of their experience. Visitors spoke strongly about how the activity helped them feel connected to the giraffe, and unprompted, some of them said they felt more interested in conservation efforts. In addition to being awed by the experience, visitors also noted a couple behavioral observations about giraffes, such as how they use their tongue to grab the leaves to eat. Notably, there was no apparent difference in the experience of the visitors who received a 15-minute introduction by an educator and those who went straight to the feeding area and did not receive extra information. This was a very small sample size, so it is premature to draw conclusions about this lack of difference, but it does suggest that the experience of feeding the giraffe overshadowed the talk by the educator. This is important to mull over since the Zoo is considering offering a 90-minute program with a Zoo keeper that includes the feeding. All of the participants felt the brief experience of feeding the giraffe was valuable and said they would be willing to pay for it, but none were interested in paying \$150 for a 90-minute program. If we look to the Safari Ranger Cart as an example, it may be most effective for an educator to be present during the feeding (rather than before) to interpret the giraffe's appearance and behaviors as they arise naturally. Separating the experiences—information versus observation—may not be as effective as integrating them.

BARRIERS TO VISITING THE BRONX ZOO

Focus groups were conducted with 20 non-visitors who live in the immediate vicinity of the Bronx Zoo but have never visited to explore barriers to visiting the Zoo. All of the participants were Hispanic and

most spoke Spanish only. Participants were unanimous that the reason they do not visit the Bronx Zoo is the high cost of admission. Participants described some desire to visit the Zoo but said that, if they were to visit the Zoo, it would be with a large family group that may include grandparents, aunts, uncles, etc. versus just parents and their children, which is traditional in their culture. Such a large group makes the Zoo particularly cost prohibitive. Wednesday's pay-what-you-wish admission donation also did not ameliorate the issue with cost since participants said they or other members of their larger family group work on weekdays or they have school-aged children, so they would not be able to visit then. Furthermore, participants said these days were not really "free" anyway since some extras, such as Congo Gorilla Forest, are added costs; additionally, they still foresaw expenses such as food and the gift shop purchases—even though these are not mandatory parts of a Zoo visit.

CONCLUSION AND RECOMMENDATIONS

Positively, the Zoo has great opportunity to deepen current Zoo visitors' experiences and help visitors forge connections with wild animals through activities liked those tested for the evaluation. On the other hand, The Zoo faces real barriers in encouraging local non-visitors to visit, since cost barriers are so genuine. Given the findings, RK&A recommends the Zoo:

- ◆ Consider integrating more free-choice activities like the Safari Adventure activities throughout the Zoo. Essential qualities of these activities are that:
 - ❖ They provide opportunities for interactivity in "empty" spaces between animal exhibits in the Zoo.
 - ❖ They are kid-friendly and encourage participation from the entire intergenerational group.
 - ❖ They support family's experiences with animals through sharing content knowledge, allowing for observation, and providing opportunities for visitors to appreciate and empathize with wild animals.
- ◆ Consider offering programmed activities like the Nature Walk. Essential qualities are that:
 - ❖ The program puts them in nature.
 - ❖ The program allows for observation and interpretation.
 - ❖ The educator is flexible and able to allow participants to direct the activities and pursue curiosities.
- ◆ Consider offering activities like the giraffe feeding activity:
 - ❖ The program puts participants in close contact to wild animals.
 - ❖ The program allows visitors to observe and interpret animal behaviors.
- ◆ Consider the feasibility and benefit to engage in more targeted and widespread outreach programming targeted at the adults in family groups who live in the neighborhoods surrounding the Zoo. Since ticket price is the biggest barrier, consider offering a special neighborhood membership (that allows extended family to visit) and/or special neighborhood days, where people in specific zip codes may visit the Zoo for no cost or a reduced price.

REFERENCES CITED

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INTRODUCTION

The Bronx Zoo of the Wildlife Conservation Society (WCS) contracted Randi Korn & Associates, Inc. (RK&A) to conduct formative evaluation for *Safari Adventure*, a project funded by the Institute of Museum and Library Services (IMLS). This report presents the results of evaluations in four areas: prototype activities (a group of four interactive exhibits); a nature walk; a giraffe feeding; and focus groups with non-visitors.

The objectives of the evaluation are to explore:

- ◆ How families use the activities and experience the program;
- ◆ The overall meaning families construct from their experience, including how and to what extent the activities and program:
 - ❖ Help visitors forge connections to animals and the natural world;
 - ❖ Spark intergenerational learning;
 - ❖ Encourage visitors to think about living with and caring for wild animals;
- ◆ How the experiential nature of the activities and programs and close encounters with wild animals affects visitors' zoo experience and overall learning,
- ◆ And the reasons some families who live near the Zoo do not visit it and how they think of and feel about nature and close encounters with animals.

METHODOLOGY

RK&A employed two methods for this study: observations combined with interviews as well as focus groups. Each is described below.

OBSERVATIONS AND INTERVIEWS

To test the prototype activities, the nature walk, and the giraffe feeding, RK&A employed a combination of observations and interview. We conducted naturalistic observations recording open-ended notes about how visitors used and experienced the various activities and programs. We also conducted short-answer interviews to understand observed behaviors and interpret how participants experienced the activities and programs. Interviews took place after participants had finished using the activities and programs. Participants were asked to discuss their thoughts about and understanding of their experience as relates to the evaluation objectives above. See Appendix A, B, and C for these instruments. More specific information about recruitment and sample size is in the introduction of each section of the report.

FOCUS GROUPS

Focus groups engage a limited number of participants (8 to 10) in a roundtable discussion about topics presented by the facilitator. It is an efficient way of collecting data in a relatively short time. The method allows individuals to discuss their opinions and ideas, and the group dynamic may encourage participants to counter and/or build on one another's thoughts—as a result, the sum is often greater than the parts.

RK&A conducted two distinct focus groups comprised of parents who live in the vicinity of the Bronx Zoo but have not visited in the last year (if ever). Participants were recruited by WCS staff through a

local elementary school connection. The focus groups were conducted on site at the Bronx Zoo and facilitated by RK&A (see Appendix D for the focus group script). Each focus group lasted about 60 minutes. As is customary, WCS provided a \$50 honorarium and free passes to the Zoo to each focus group participant.

DATA ANALYSIS AND REPORTING METHOD

Observations, interviews, and focus groups produce descriptive data that are analyzed qualitatively, meaning that the evaluator studies the data for meaningful patterns and, as patterns and trends emerge, groups similar responses. Data are presented as narrative bullets within themed sections.

SECTIONS OF THE REPORT:

1. Prototype Activities
2. Nature Walk Pilot Test
3. Giraffe Feeding Pilot Test
4. Focus Groups with Non-Participants

PROTOTYPE ACTIVITIES

INTRODUCTION

The *Safari Adventure* prototypes were tested during one weekday and one weekend day in May. RK&A approached 46 groups of visitors at the Bronx Zoo, and 35 groups agreed to participate, for a participation rate of 76 percent. The 35 participating groups consisted of 131 visitors. Groups ranged in size from a couple individuals to as many as eight; the median group size was 3.5 visitors. All groups consisted of adults and children.

Of individual respondents:

- ◆ More than one-half are female (74 participants), and nearly one-half are male (57 participants).
- ◆ More than one-half are children (73 participants), and almost one-half are adults (58 participants).
- ◆ Adults ranged in age from 18 to 49 years, and the median age of adults is 35 years.
- ◆ Children ranged in age from newborn to 13 years, and the median age of children is 4 years.
- ◆ Almost three-quarters have visited the Bronx Zoo previously, while one-quarter are first-time visitors.
- ◆ One-half are Bronx Zoo members, while the other one-half are not Zoo members.

Below we first present the observational findings for each of the four individual prototypes—Animal Masks, Dung Beetle, Beehive, and Safari Ranger Cart, following by interview findings for the overall experience of using the four prototypes as a group. Please note, that even though evaluators asked visitors to use all four prototypes, not all families did (although they all used more than one prototype).

ANIMAL MASKS INTERACTIVE

PROTOTYPE DESCRIPTION

The Animal Masks Interactive was displayed on a table near the animal viewing area. The table featured eight animal masks (four zebra masks, two lion masks and one hyena mask), printed instructions on a standing sign and five laminated cards outlining predator/prey scenarios. The instructions posed questions for visitors to consider as they tried on the masks and encouraged visitors to “Try on our animal masks and act out these scenarios, or create your own!” The sign also encouraged adults to play as well as children. The laminated cards provided scenarios for play (“If you are a lion, stay hidden! If you are a zebra, stay alert!”). The laminated cards and instructions were written to leave room for visitors to interpret their own interactions and spark family and group conversation about animals and their relationships with one another.

OBSERVATION FINDINGS

How visitors used the exhibit:

- ◆ In almost all visitor groups, at least one person put on a mask. In about one-half of visitor groups, both adults and children put on the masks.
- ◆ Many groups took pictures with the animal masks. In some instances, the children tried on the masks and adults took pictures, but adults were often photographed wearing the masks as well.

- ◆ About one-half of groups engaged with the masks beyond just taking a picture. Several of these groups made animal noises, but did not act out any of the scenarios. A few of these groups were observed reading the questions printed on the informational sign or reading the scenario cards, however these groups did not engage in scenario-based play.
- ◆ A few groups actively engaged in scenario-based animal play. For example, one female visitor read the scenario cards aloud while child ran around acting out the scenes.

Extent to which adults and children participate in and interact at the Animal Masks activity:

- ◆ Children were more likely than adults to actively participate in the activity, putting on masks and making animal noises, even if they did not actively role-play. However, in about one-half of groups, at least one adult put on a mask.
- ◆ A few adult/child groups engaged in active collaborative play; for example, one man was seen chasing his children around while wearing a hyena mask.
- ◆ In several groups, the adults facilitated the experience by putting masks on younger children, or reading scenarios or questions to children.
- ◆ In some groups, adults took a more passive role, only taking pictures. These adults did not put masks on and were not observed actively engaging with the children beyond picture-taking.

DUNG BEETLE INTERACTIVE

PROTOTYPE DESCRIPTION

The Dung Beetle Interactive included a table with directions and a large “dung ball” that visitors could try to roll with their feet and was located near the entrance to the prototyping area. The table featured a sign with information about how and why dung beetles roll dung balls and instructions about how to use the dung ball (“A dung beetle can roll a dung ball up to 50 times its own weight! Can you roll a dung ball, too?”). The interactive aimed to allow kids to empathize with animals and help form a bond with the natural world, as well as helping visitors to look at animals in a new light.

OBSERVATION FINDINGS

How visitors used the exhibit:

- ◆ One-half of visitor groups were observed rolling the dung ball with their hands rather than their feet. Only a few of these visitors ultimately rolled the ball with their feet.
- ◆ Several children were observed engaging with the activity correctly: rolling the dung ball with their feet while supporting themselves with their hands.

Many visitors, mostly adults, read the information that accompanied the dung ball. Some silently to themselves, and some aloud to their children. For example, some adults talked to children about whether or not they were able to roll the dung ball and were observed reading the signage that asked “Can you roll a dung ball?”

Extent to which adults and children participate in and interact at the Dung Ball activity:

- ◆ Only children were observed rolling the ball with their feet; several adults rolled the ball with their hands.

- ◆ In many cases, adults facilitated the activity for their children by providing encouragement as the children tried to roll the dung ball; in a few instances, adults physically held children to help them.
- ◆ In some instances, adults took on a supervisory or passive role while the children tried the activity. A few were observed sitting at the picnic table situated near the dung ball.

BEE HIVE INTERACTIVE

PROTOTYPE DESCRIPTION

The Bee Hive Interactive included a table with an informational sign and a stand-alone bee hive that had pull-out panels with information about African beekeeping, and was located near the entrance to the prototyping area. The informational sign explained why “beekeeping is an important, sustainable industry that has great impact on the lives of rural Africans,” including information on how bees boost the economy and how bees help the environment. The sign also encouraged visitors to “Explore the hive to learn more!” The bee hive featured several panels that visitors could remove from the hive to read more information about how bees use the hive to produce honey and how it is harvested.

OBSERVATION FINDINGS

How visitors used the exhibit:

- ◆ At least one member of one-half of visitor groups were observed using the Beehive activity.
- ◆ Of those who used the interactive,
 - ❖ Several opened the beehive and read at least one panel of information.
 - ❖ Several read the informational sign on the table but did not read any of the information in the beehive.
 - ❖ A few opened the beehive, but did not read any of the information inside.

Extent to which adults and children participate in and interact at the Beehive activity:

- ◆ Most visitors who engaged with the beehive activity were adults who used it independently and did not engage with anyone while they read the information.
- ◆ A few intergenerational groups used the Beehive together; in these cases, the adult tended to read a panel aloud to a child. A few talked about the beehive, usually expressing surprise about its appearance.
- ◆ Adults often engaged with the beehive while their children were engaged with other activities.

SAFARI RANGER CART INTERACTIVE

PROTOTYPE DESCRIPTION

The Safari Ranger Cart Interactive included a simple cart with binoculars and observation sheets. The cart was located at the back of the testing area, near the fence overlooking the Somba Village Baboon Reserve. During most of the testing period, a Zoo Educator or Friend of the Zoo (FOZ) volunteer staffed the cart, asking and answering questions, and facilitating the experience. There was no direct signage associated with the Safari Ranger Cart interactive. The interactive experience was designed to

see if contact with a knowledgeable zoo facilitator creates a stronger connection with wildlife than just viewing an animal in an exhibit alone.

OBSERVATION FINDINGS

How visitors used the exhibit:

- ◆ Almost all visitor groups were observed interacting with the Safari Ranger Cart in some way.
- ◆ The majority of visitor groups used binoculars to observe the animals. In most cases, adults and children shared binoculars, but in a few cases, each member of a group had his/her own.
- ◆ Many groups asked questions or talked with the Educator or FOZ volunteer; in some instances, this interaction was initiated by the visitor, in other cases, it was initiated by the Educator or FOZ volunteer. Educators and FOZ volunteers engaged visitor groups by asking what they saw in the African Safari and providing additional information about the animals.
- ◆ Several children climbed on the fence in order to see the animals. Adults were also seen lifting children so that they could see the animals more clearly.
- ◆ A few children used the binoculars to look at other aspects of the surrounding area (e.g., grass, pavement).

Extent to which adults and children participate in and interact at the Safari Ranger Cart activity:

- ◆ Many adults facilitated the experience for children. In addition to helping children use the binoculars, these adults provided physical assistance (lifting children so they could see, etc.).
- ◆ Several groups engaged in a collaborative way at the Safari Ranger Cart. These adults and children looked at the animals together and actively engaging in conversation within their group as well as with the Educator or FOZ volunteer.
- ◆ A few adults took on a supervisory role, not actively engaging with the activity.

OVERALL EXPERIENCE INTERVIEW FINDINGS

Favorite activity:

- ◆ Many adults and children said they liked the Safari Ranger Cart the most because they enjoyed using the binoculars to get a closer view of the animals. A few adults also said they liked that there was a volunteer at the cart to provide more information about the animals.
- ◆ Many adults and children said they also liked the Animal Masks. Many adults liked that the masks engaged their children by allowing them to pretend to be animals. A few also talked about the tactile experience of the masks, stating that it was good to have something children could “pick up and put on.” A few also said they liked the scenarios that were provided.
- ◆ Several adults and children liked the Dung Ball most. They liked that the activity was physically interactive. For example, one child said, “it was as if you were a beetle rolling a ball 50 times your weight. You felt like the animal.” A few also liked it because it was a unique experience.
- ◆ A few adults and children liked the Beehive the most because they learned so much new information.

Least favorite activity:

- ◆ The majority of adults and children liked the Beehive least, saying the activity was difficult to understand and was less likely to engage children. Several said they were afraid of bees or that children might be afraid.
- ◆ Several adults and a few children liked the Dung Ball the least. A few adults said it was inappropriate for young children because it was too heavy for them to roll. A few also talked about germs since participants had to put their hands on the ground; one girl said, “I knew what I was supposed to do, but it was too dirty.”
- ◆ A few adults and children liked the Animal Masks the least. Several of the adults said young children were afraid of the masks or uncomfortable putting the masks on. A few interviewees did not think the masks were interactive, or were uninterested in the scenarios presented. A few were also concerned about the germs that could spread.
- ◆ A few adults and children said the Safari Ranger Cart was their least favorite activity, but this was only the case during times when the animals in the African Safari were not active.

Adult comfort with activities:

- ◆ The majority of adults said they felt comfortable engaging with the activities. One adult said, “It didn’t feel like a kid thing at all. It felt like [it was] for everyone.”
- ◆ Many adults felt comfortable explaining things or reading signage to their children. These adults said things like, “I can tell her the scenarios of the masks, what the animals are,” and “when I was reading about the bees I was trying to tell her in kids’ language what I was reading.”
- ◆ A few adults were a little uncomfortable with the activities because of the chance of germs. The dung ball and the masks were each mentioned a few times.

What the Zoo wanted visitors to take away:

- ◆ About one-half said that the Zoo wanted people to think about life from the perspective of the animals. Many of these interviewees referenced the Animal Masks and the Dung Beetle activities, saying things like, “[The activities were about] putting yourself in the place of the animals. Being the one to roll the dung ball or acting out the animal scenarios.”
- ◆ Several also spoke generally about animals, saying that the Zoo wanted people to think about animals in their natural habitat or how different animals live together. These interviewees often referenced the Safari Ranger Cart or the binoculars, saying things like, “[To get a] glimpse of animals in the natural habitat.”
- ◆ A few said the Zoo wanted people to look more closely at the animals. For example, one person said, “I think they wanted us to pay attention to some of the tiny details of [the] animals. I was just going to look around with [the binoculars], but the guide said that if you looked closely you could see different species.”
- ◆ A few spoke generally about the activities being a learning tool. These interviewees often talked about how the activities are interactive. A few specifically referenced the Educator or FOZ volunteer who was providing more information about the animals.

What the activities make visitors feel about animals:

- ◆ Several interviewees said the activities made them appreciate the animals or provided more understanding of how all animals have a role in the ecosystem. For example, one interviewee

said, “[The activities] did make you feel a little more understanding at a different level than just looking at them as a human.”

- ◆ Several interviewees said that the close proximity to the animals made them feel connected to animals and the natural world. The majority of these interviewees talked about the binoculars or the Safari Ranger Cart and looking at the live animals in the exhibit. For example, one interviewee said, “I like the close proximity we have to the animals and the binoculars to get a closer look. You almost feel like you are in there with them.”
- ◆ Several interviewees said that the activities put them in the place of the animal or made them feel like an animal, thus making them feel more connected to animals and the natural world. Most of these interviewees talked about how they felt like a lion, zebra or hyena when they put on the mask.
- ◆ Several talked about the interaction between animals and the fact that different animals live in the same space. This idea came up both when asked about animal behavior, how the activities made interviewees feel about animals, and about caring for wild animals. Again, these interviewees frequently referred to the live animals that could be seen near the activities, and said things like, “Different animals can actually get along.” A few of these interviewees learned about animal interaction from the Animal Mask activity.
- ◆ Several said they learned about animal behavior. A few interviewees said they learned about dung beetles and how they use the dung of other animals. A few also learned about baboon behavior, saying things like, “[The FOZ volunteer] talked about baboons showing their butt when they are submissive.”

How *Safari Adventure* exhibits compare to other Bronx Zoo activities:

- ◆ Most interviewees said that the *Safari Adventure* exhibits were different than other things they did at the Zoo. For example, many of them said the prototype area was more interactive than other parts of the Zoo. Many of these interviewees spoke about interaction generally, but a few specifically referred to activities such as the Dung Ball and the Animal Masks.
- ◆ A few talked about the increased level of access to the animals as compared to the rest of the Zoo, thanks to the binoculars at the Safari Ranger Cart.
- ◆ A few said they liked that there was additional information provided, often referencing the Educator or FOZ volunteer at the Safari Ranger Cart. For example, one interviewee said, “[There is] more detail here. [I] would love an educator at every section.”

How exhibits might make visitors look different at wild animals and nature in their own environment:

- ◆ Many interviewees said that the exhibits would not make them look differently at animals in their own environment.
- ◆ Several interviewees said that the exhibits taught them to pay more attention to animals and respect wild life, although they did not provide specific ways in which this might happen.
- ◆ Several interviewees said that when they see wild animals and nature in their own environment, they will think about what they learned during their *Safari Adventure* experience. Often these interviewees tied their examples to dung beetles and bees, but some spoke more generally about wild animals in an urban environment. For example, one interviewee said, “[I] thought about how animals in our lives adapt when a high rise is built. What does it mean for their mating?”

NATURE WALK PILOT TEST

INTRODUCTION

Nature Walks, facilitated by an educator along the Bronx River Walk, were tested through observations and interviews one weekend day in June. WCS recruited families to participate in one of two Nature Walks by sending out an email blast to lists of members and other interested individuals. Four family groups total came to the Zoo to participate—one family group in the first walk and three family groups in the second walk. A total of four adults and eight children participated, and children in the family groups ranged in age from 5 to 12—half were female and half were male. Three of the family groups indicated they are members of the Zoo.

Nature Walks consisted of a 30 to 45 minute walk along the Bronx River, facilitated by a zoo educator. Each child was given a backpack to wear during the program, which included: binoculars, bird and flower guides, an animal track guide, magnifying glass, insect trap, and a plastic bag for collecting specimens (they returned all items at the end of the program). The educator also carried and used a “birdsong identifier.” The educator used inquiry to encourage families to explore the nature around them and look for signs of wildlife.

FINDINGS

- ◆ Families spoke very positively about the nature walks. They said they liked the slow, self-directed pace, getting close to nature, and seeing a part of the Zoo none of them had seen before (the Bronx River). One mom, in particular said she enjoyed watching her daughter interact with the educator and was surprised to realize how much her daughter knows about animals.
- ◆ In both nature walks, the educator straddled a line between conveying information and making specific “stops” but also allowed the families to direct the pace and content. For instance, in the second group, the children spent a great deal of time down on the ground with the bug jars—even though it slowed the walk down, it was clear how much they enjoyed themselves and the educator allowed for this detour.
- ◆ All the participants, except one five year old girl, were actively engaged and paying attention throughout the Nature Walks. Some children asked and answered questions, while others were more quiet.
- ◆ All of the participants, including the adults, took binoculars and most used them along the walk.
- ◆ In one case, a father had to spend a great deal of time supervising his five-year old daughter as she wandered off the path and complained, while his older children fully participated.
- ◆ Most participants said what they enjoyed most about the Nature Walk was identifying the animals (mostly birds) by sight or by the evidence they left behind (like the tree trunks the beavers had gnawed on).
- ◆ When asked what they liked least, two parents said they wished the walk had been longer. One said he wished his daughter had not wandered off so often, which caused him to miss parts of what the educator said.

- ◆ All the adults said they believed the purpose of the tour is to instill an appreciation for nature and wildlife, in particular, to look more closely and pay more attention to nature and wildlife around us.
- ◆ Some adults and children said they learned a few bits of information, mostly having to do with the characteristics of various animals, such as why male birds are brighter colors and why beavers have big teeth.
- ◆ Adults participated in the nature walks alongside their children; however, they tended to hang back, allowing their children to interact with the educator, by asking and answering questions.
- ◆ Even though parents did not speak much on the tour and stood behind their children for the most part, it was clear through interviews that they were paying close attention.
- ◆ All of the adults said they would be willing to pay for a Nature Walk in the future.

GIRAFFE FEEDING PILOT TEST

INTRODUCTION

Giraffe feedings, facilitated by a curator, were tested via interviews one weekday in June. One feeding was introduced by an educator who talked about giraffe behavior and adaptations; the other was not. The evaluator and WCS recruited families from the walk-in visitors in the area next to the giraffe exhibit and invited them to participate in a 15 minute giraffe feeding. Four family groups total participated—two in each feeding. A total of six adults and six children participated, and children in the family groups ranged in age from 4 to 11—half were female and half were male. None of the families were Zoo members.

FINDINGS

- ◆ Families were extremely positive about the experience of feeding and being up close to the giraffe. In fact, most were nearly speechless after the experience of feeding the giraffe; their faces “said” a lot—smiles, eyes wide, looks of disbelief. They tended to describe the experience using one word, like “amazing,” “breathtaking,” and “exhilarating.”
- ◆ Adults from two families commented that the experience had been calming for their normally hyper young children. One was nearly in shock at the difference in her five year olds son’s behavior before and then during and immediately after the feeding. He had completely calmed down.
- ◆ Adults and children in three families said, unprompted, that the experience of being face to face with a wild animal made them feel connected to the animal in way they would not otherwise. They said, in turn, it made them want to get more involved in conservation efforts and the Zoo overall.
- ◆ When asked what they learned about animal behavior, all the groups talked about the way the giraffe used her tongue to “grab” the leaves and pull them to her mouth.
- ◆ There were no differences between the group with no educator introduction and the other group that had been given an introduction prior to the feeding (which included information about giraffe behavior), indicating visitors were more focused on what they had observed than what they heard.
- ◆ None of the participants said they would be willing to pay \$150 to take part in a 90-minute program that includes a giraffe feeding. The amount they said they would be willing to pay ranged from \$10 to \$50. Of course, this must be understood within the context that these participants had experienced the feeding for free so it was likely hard to envision paying so much. On the other hand, members may be likely to pay more for a 90 minute program.

FOCUS GROUPS WITH NON-VISITORS

INTRODUCTION

RK&A conducted two focus groups with parents who live in the immediate vicinity of the Bronx Zoo, but have not visited in the last year, if ever. A total of 22 parents participated in the two focus groups on June 14, including three men and 17 women. Each focus group was conducted at the Zoo and lasted one-hour. Participants were given tickets for free admission to the Zoo as a thank you.

All of the participants were Hispanic, and most of the participants spoke Spanish only (the ones who spoke English translated for everyone throughout the focus groups). The majority had not completed high school (65%); two had completed college. The number of children living at home ranged from 1 to 6, with a median of 3 children. The number of adults living at home ranged from 1 to 4, with a median of 2 adults.

Even though participants were recruited based on the fact that they had not visited the Bronx Zoo recently, nearly all indicated they had been to the Zoo at least one time before, many in the last year. One-third indicated they had been to other zoos or aquaria some time in the past, including Central Park Zoo.

FINDINGS

- ◆ All participants said they spend to spend most of their leisure time (mostly weekends) with large groups of friends and extended family. They indicated they prefer to be outside, such as in a park where they can picnic, barbeque, and play games.
- ◆ All the participants were adamant that the reason they do not visit the Zoo is the high price.
- ◆ Even though they were all aware of the free day on Wednesdays, they emphasized that Wednesdays are not an option for them since most of them work and have school aged children. Many noted that the zoo is not really free on those days since you must still pay for the extras, like Congo Gorilla Forest, plus food and items from the gift shop.
- ◆ Many participants said they have very large families (such as up to five children), which is another barrier for visiting. They said a family trip to the Zoo would be extremely expensive (one said she has to pay her electricity bill instead).
- ◆ Most participants said they would be more likely to visit the Zoo if they were with a group of extended family and/or friends. But, they noted that gathering a large group of friends and family who can all afford to pay the Zoo entrance or who are all available on a free Wednesday is not realistic.
- ◆ Notably, even though all the participants said they and their children love animals, they did express some trepidation at the thought of getting close to a wild animal (and did not express interest in a petting or feeding zoo). And, in the first focus group, a large gorilla approached the glass window in the room where the focus groups were held and rested his feet against the glass, yet only a couple of the participants expressed awe or interest—only a couple got up for a closer look. It is unclear why they were seemingly disinterested, but it was noticeable.

APPENDICES

APPENDIX A: SAFARI ADVENTURE PROTOTYPES, OBSERVATIONS AND INTERVIEW GUIDE

ID # _____
Adults (gender and ages) _____ Children (gender and ages) _____
First time to Zoo? _____ Zoo members _____

Intro:

Hello, my name is _____. The Zoo is currently in the process of developing some new exhibits about African animals for families and we invite you to try them out. There are four activities here—these African animal masks with suggested activities, the Bee Hive, this Dung Beetle exhibit, and the safari cart. We would love you to try all four. Please use them as you would normally, and let me know when you are finished. At that point, I'd like to ask you some questions about them, and I'll have a gift for your children. *These exhibits are designed for families, so we encourage adults and children to participate.*

Observations

Take open-ended notes, paying particular attention to the following:

- How do adults and children use the activities? Record exactly how they use each activity (*refer to exhibit objectives*).
- In which activities, and to what extent, do adults participate? Children?
- How, if at all, do adults and children interact with one another? What is the nature of their interactions (facilitation, collaborative play, supervisory)?
- Record as much verbatim conversation as possible. How do visitors talk to each other? To staff? About the animals?

Total time: _____

Interview (with at least one adult in the group)

1. Pretend you are trying to convince a friend to use these activities—how would you describe them to him/her (What would you say that would make them want to come see them?)

Of the four, which exhibit did you like most? Did your children seem to like most? Why is that?

Of the four, which exhibit did you like least? Did your children seem to like least. Why is that?

As a group, what is it about these exhibits that you liked most?

As a group, what is it about the exhibits that you liked least?

2. These activities were designed for families to use as a group. In what way did they feel comfortable for you, as an adult, to participate? What role did you feel comfortable taking on?

In what ways, if any, did they feel uncomfortable for you, as an adult, to participate?

3. As a group, what did they make you think about (what do you think the Zoo wanted you to think about)?

What about the Animal Masks specifically—what did they make you think about?

The Bee Hive?

The Dung Beetle?

The Safari Cart?

4. What did the activities make you feel about or toward animals? Which activities made you feel that way?

[If these ideas do not come out unprompted, ask:]

How, if at all, do the exhibits make you feel connected to animals and the natural world?

What did you find out about animal behavior?

What did you find out about the ways we are similar to animals?

What did you find out about caring for wild animals?

5. How do these exhibits compare to a typical visit to the Zoo?

Tell me how, if at all, they are better than a typical Zoo visit? Not as good?

6. How, if at all, do think these exhibits might make you look at wild animals and nature in your own environment differently?

Please give me an example.

APPENDIX B: SAFARI ADVENTURE NATURE WALK, OBSERVATIONS AND INTERVIEW GUIDE

ID # _____

of families observed: _____ (total # of families that participate) _____

Observations

Each observer should specifically observe about half the families. Take open-ended notes, paying particular attention to the following:

--How do adults and children participate in the nature walk? Record exactly how they participate.

--Describe the educator's role and facilitation, nature of questions he/she asks, amount of talking he/she does.

--Which of the provided tools do children and adults use and how?

--Describe the interactions that happen between the educator and participants (verbal and non-verbal); to what extent do participants follow the educators' lead versus do their own thing?

--Describe behaviors that indicate a positive experience and a negative experience.

---In which activities, and to what extent, do adults participate? Children?

--How, if at all, do adults and children interact with one another? What is the nature of their interactions (facilitation, collaborative investigation, supervisory)?

--Record as much verbatim conversation as possible. How do visitors talk to each other? To staff? About the animals?

Total time: _____

Interview (with at least one adult in each family group observed)

Family #1 _____

Adults (gender and ages) _____

Children (gender and ages) _____

First time to Zoo? _____

Zoo members _____

Intro:

Hello, my name is _____. As the educator explained, the nature walk is a new idea the Zoo is trying out and I would like to ask you some questions about it.

1. Pretend you are trying to convince a friend to sign up for one of these nature walks—how would you describe it to him/her (What would you say that would make them want to participate?)

Of everything you did on the walk, what did you like most? Did your children seem to like most? Why?

Of everything you did on the walk, what did you like least? Did your children seem to like least? Why?

2. The walk is designed as a family activity. In what way did the walk feel comfortable for you, as an adult, to participate? What role did you feel comfortable taking on?

In what ways, if any, did the walk feel uncomfortable for you, as an adult, to participate?

3. Overall, what did the walk make you think about (what do you think the Zoo wanted you to think about)?

4. What did the activities make you feel about or toward animals? Which activities made you feel that way?

[If these ideas do not come out unprompted, ask;]

How, if at all, did the walk make you feel connected to animals and the natural world?

What did you find out about animal behavior?

What did you find out about the ways we are similar to animals?

What did you find out about caring for wild animals?

5. How do these exhibits compare to a typical visit to the Zoo?

Tell me how, if at all, they are better than a typical Zoo visit? Not as good?

6. How, if at all, might the nature walk make you look at wild animals and nature in your own environment differently?

Please give me an example.

APPENDIX C: SAFARI ADVENTURE WILD ANIMAL FEEDING, INTERVIEW GUIDE

ID # _____

Adults (gender and ages) _____

Children (gender and ages) _____

First time to Zoo? _____

Zoo members _____

Educator present? Yes No

Intro:

Hello, my name is _____. As the educator explained, the giraffe feeding is a new idea/program the Zoo is trying out and I would like to ask you some questions about it.

Interview (with at least one adult in the group)

1. Pretend you are trying to convince a friend to sign up for a giraffe feeding—how would you describe it to him/her (What would you say that would make them want to participate?)

What did you like most about it? Did your children seem to like most? Why?

What did you like least? Did your children seem to like least? Why?

2. In what way you feel comfortable to participate? What role did you, as the adult, feel comfortable taking on?

In what ways, if any, did the activity feel uncomfortable for you? Or what concerns did you have?

3. Overall, what do you think the Zoo wanted you to think about as a result of this activity?

4. How, if at all, did the walk make you feel connected to animals and the natural world?

What did you find out about animal behavior?

What did you find out about the ways we are similar to animals?

What did you find out about caring for wild animals?

5. How does this activity compare to a typical visit to the Zoo?

6. How, if at all, might the activity make you look at wild animals and nature in your own environment differently?

Please give me an example.

7. Last, would you be willing to pay \$XX to participate? Why or why not?

APPENDIX D: NON-VISITOR FOCUS GROUP SCRIPT

Welcome to this focus group to discuss the Bronx Zoo. My name is Stephanie Downey. I'm from Randi Korn & Associates, a museum consulting firm.

I know all of you must be very busy, so I want to thank you for taking time out of your schedules to be here tonight.

There is a formal name for this kind of gathering. It is called a focus group. Focus groups are used to test public response. All kinds of organizations use focus groups to understand perceptions the public has of a variety of ideas. We are meeting today because the Bronx Zoo wants to hear your feedback about the Zoo and ideas they are developing for exhibits.

I am a consultant. I do not work for, nor am I associated with the Zoo. Rather, I have been hired to conduct focus groups, analyze the responses, and report the findings. I am telling you that I am a consultant to let you know that I want us to have a frank discussion. All that you say, positive and negative, will help the Zoo.

I am audio recording our conversation to make sure I have an accurate record of everything said today. I'm also going to be taking notes as we talk so I apologize if I'm sometimes looking down at my paper rather than at you. No names will be included in any reports. Your comments are confidential.

Don't feel like you have to respond to me all the time. Feel free to have a conversation with one another about these questions. I am here to ask questions, listen, and make sure everyone has the chance to share. It is important that everyone has a chance to speak.

First, I'd like to go around the room and have each of you tell us your first name so we know how to pronounce it.

The Bronx Zoo is interested in talking with people in the neighborhood who have not visited the Zoo with their families recently to understand what perceptions you have of the Zoo.

1. First I want to talk about how you spend time with your family outside of school and work. A visit to the zoo with your family is a leisure activity, and the zoo recognizes that we all have limited time for leisure activities. So, first let's talk about way you spend time with your family outside of work and school.

When you and your children have free time, like when you are not working or going to school or other time commitments, how do you tend to spend that free time? What sorts of activities do you tend to do as a family?

Some activities cost money, like museums and amusement parks, but others are free, like the park. Tell me what kinds of family activities are you willing to spend money on? Why is that?

Some activities are inside and others are outside. So far you have mentioned XXX. What other outdoor activities do you like to do with your family. Why is that?

And, in a typical week, how much free time do you have to spend with your children and family?

You have mentioned (repeat back the activities they named). What are the reasons you spend your free time doing those activities? Why do you choose those activities over other possibilities? What is it about those activities that is appealing to you?

2. As I said, you were chosen to participate in this focus group because you haven't visited the Bronx Zoo with your family recently. So, now let's talk about how you feel about zoos.

Generally speaking, when I mention a Zoo, what comes to mind for you?

How many of you have visited a zoo or aquarium some time in your life? What zoos were those?

What can you recall about your visit to the zoo? Please describe what you can remember about it (what zoo, who you were with, what you did).

What did you like about it? What did you not like?

What comes to mind when you hear the Bronx Zoo mentioned? What do you imagine it to be like?

What do you imagine a trip to the Bronx Zoo with your family would be like/include?

Think about the overall experience of visiting, including arriving, buying tickets, and making choices about what to do.

What do you think you (and your children) might like about it?

What do you think you (and your children) might not like?

What are your reasons for not choosing the Bronx Zoo as an activity to do with your family in your free time? For instance, what would make you choose (list activities named earlier) over the zoo? What is it about the zoo that is less appealing to you than those activities?

What, if anything, could the Bronx Zoo do to make it more appealing to you?

3. Lastly, I want to show you some ideas the Bronx Zoo has for visitors. They are thinking about building a new exhibition called Safari Adventure. I have some information about it here. I will read it out loud and you can all follow along and then I'll ask you some question about it.

Overall, what does this communicate to you? What does it bring to mind?

Tell me more about that.

Where do those ideas come from?

What do you like most about what is written here? Why?

What is least interesting or do you like least about those ideas? Why?

This mentions nature. How would describe your relationship with nature?

How would you like your children to relate to nature? How much time do they spend in nature?

What would you hope your children would think or feel about nature after a trip to a zoo?

How would you describe your relationship to animals in general? What about your children?

What would you hope your children would think or feel about animals after a trip to a zoo?

Those are all the questions. You have been a great group. Thank you for your time!

The goal for Safari Adventure is to give caretakers practical messages about how they can raise kids that care about nature, while giving kids a unique opportunity to interact with and care for animals.

Exhibit Development and Design: The exhibit will support the themes of humans living with and around nature—speak to the challenges of human livelihoods and resource extraction identified in our strategic plan, both globally and locally in our community, as we work to create space for local wildlife. In addition, this experience will present basic principles of animal biology and habitat ecology, in ways that are developmentally appropriate for our audience of children and families. The exhibit will aim to encourage adults to foster a respect for nature in children, while strengthening in those adults an environmental ethic we know that many zoo visitors share. Preliminary learning goals for this exhibit (to be refined by input from scholars and community): (Not at the timeframe of this study, though)

- ◆ Adults will learn how important it is for kids to spend time in nature, and will become more aware of other green/nature spaces in the community where they can go for low-cost nature experiences.
- ◆ Adults will learn about the state of wildlife and the planet and become more informed about ways they can help.
- ◆ Adults will learn about some of the scientists who are working to save wildlife, here in the Bronx and worldwide.
- ◆ Kids will think about what it's like to be a (non-human) animal.
- ◆ Kids will learn that animals need homes and food, just like people.
- ◆ Kids will make connections between the animals of Africa and animals in their everyday lives.
- ◆ Kids will learn that there are many different ways to care for animals, and get to practice caring for animals: as a scientist, veterinarian, or pet owner.