



Jungle Trails

Accountability Evaluation Report

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Executive Summary

This is an evaluation study of a new installation of interpretive signage and eight interactives in the Jungle Trails exhibition area of the Cincinnati Zoo and Botanical Garden. The summative evaluation is framed by the overall evaluation question: Does the Jungle Trails area facilitate learning through family interactions? To address this question, four broad sub-questions were determined as indicators of success of the project:

1. Do families engage with the interactives?
2. Do families perceive a difference in the way they interact in Jungle Trails?
3. Does the 'family approach' to signage enhance the visit experience?
4. What is the overall perception of Jungle Trails?

The purpose of the evaluation is to examine program outcome effectiveness, quantify the proportions of messages and activities that resonate across participants, and inform the field on strategies for enhancing intergenerational learning.

This is a summative evaluation of a series of interactives and signage designed to engage intergenerational participants in learning about the exhibit. Data include written responses to a questionnaire that determine overall engagement and sense-making of the interactive experiences.

Four evaluation questions guided this study. Each question and the response based on the accountability evaluation findings follow:

1. Do families engage with the interactives?

To some degree.

Ultimately, what was noted was that engagement includes options other than full family interaction. For individuals, taking pictures or videos, observing others engaging, and similar passive activities are considered family interaction.

2. Do families perceive a difference in the way they interact in Jungle Trails?

Yes.

There was strong evidence that individuals perceived their experience in Jungle Trails led to different ways of engaging as a family. There were consistently and persistently positive perceptions of how the experience was different, facilitated engagement, and led to desired, perceived outcomes.

3. Does the 'family approach' to signage enhance the visit experience?

To a good degree.

A fair proportion of visitors noted the differences in the signs, and for some, the signs clearly communicated the intended cognitive and affective messages of the Jungle Trails. There was positive agreement about the signs enhancing the visit experience, and this agreement was far stronger for those who said they read the signs. There were, however, many visitors who did not notice the signs or did not note any differences in them. This is not unusual in that there are proportions of visitors who

do not pay attention to signs regardless of approach. It appears Jungle Trails did a very good job of increasing the proportion of visitors who are aware of and engage with the signage.

4. What is the overall perception of Jungle Trails?

This is a valuable addition to the zoo experience. There were several themes that emerged that suggest visitors see Jungle Trails as new, different, engaging, interesting, and valuable to the zoo experience. It appears that the Jungle Trails interactives and signs add appropriately to the mix of desired experiences in the zoo, ensuring a variety of experiences are presented for visitors.

Several of these findings may be valuable for other institutions exploring means of engaging visitors cross-generationally.

1. The creation of clear invitation for multiple individuals to engage and different entry points for engagement (heights of interactives, level of complexity) supports what the literature has offered, and in this project, have clear applications that can be modeled.
2. Create activities that cannot be accomplished by an individual, or is more effectively completed by two or more people.
3. Design for this type of interactive must allow for fluid flow between and among visitors. The more successful the interactive in this installation, the less clearly defined were the lines between groups engaging.
4. Intuitive activities with simple signage appeal (and are quickly used) and also communicate the key desired message outcomes (formative evaluation findings).
5. The consistency of message (family as troop) through the activities, the signs, and the titles create a strong theme.

Table of Contents

Executive Summary	3
Introduction.....	1
Methods.....	1
Sample	1
Measurement / Instrumentation.....	2
Data Analysis	2
Sample	2
Measurement / Instrumentation.....	2
Results.....	3
Do families engage with the interactives?	3
Do families perceive a difference in how they interact in Jungle Trails?.....	5
Does the ‘family approach’ to signage enhance the visit experience?.....	6
What is the overall perception of Jungle Trails?.....	8
Conclusions	8
Implications for the Field.....	9
Appendix A: Questionnaire.....	10

Introduction

This is an evaluation study of a new installation of eight interactives and signage in the Jungle Trails exhibition area of the Cincinnati Zoo and Botanical Garden. The summative evaluation is framed by the overall evaluation question: Does the Jungle Trails area facilitate learning through family interactions? To address this question, four broad sub-questions were determined as indicators of success of the project:

5. Do families engage with the interactives?
6. Do families perceive a difference in the way they interact in Jungle Trails?
7. Does the 'family approach' to signage enhance the visit experience?
8. What is the overall perception of Jungle Trails?

The purpose of the evaluation is to examine program outcome effectiveness, quantify the proportions of messages and activities that resonate across participants, and inform the field on strategies for enhancing intergenerational learning.

Methods

This is a summative evaluation of a series of interactives and signage designed to engage intergenerational participants in learning about the exhibit.

Data includes written responses to a questionnaire that determine overall engagement and sense-making of the interactive experiences.

Sample

The sample was a convenience sample of adults with children who were present in the Jungle Trails exhibit area on Fridays and Saturdays in the end of August, 2013. The desired response was 150 completed, usable questionnaires. To achieve this, we assumed a 15% refusal rate maximum, and a 5% non-usable rate. Thus, the maximum number of asks was 180.

At the primary exit point of the Jungle Trails, an evaluator was positioned watching those leaving the exhibit area. Using continual ask, focal sampling, the evaluator approached an adult in the first group that crosses an imaginary line. The adult approached was asked to engage in a completing a short questionnaire. If the individual agreed, they were handed a clipboard and pen and allowed to complete the questionnaire.

The recruitment script stated:

Hi there! My name is _____ and I'm working with the Cincinnati Zoo and our research partner, Ohio State University Extension to try to find out what people think about our new experiences here on Jungle Trails. Would you be willing to take about 8 minutes to complete a short questionnaire about your experience today?

If no: Thank you ! Hope you have a great day here at the Cincinnati Zoo!

If yes: Great! If you can step over here, you can complete the questionnaire and then just return it to me when you're finished.

The evaluator had cards available if there were any questions. The cards read:

For questions on this study, please contact Dr. Joe E. Heimlich, OSU Extension, 333 W Broad Street, Columbus, OH, 43215. 614-228-8266 x2425.

For questions about your rights as a participant in this study or to discuss other study-related concerns or complaints with someone who is not part of the research team, you may contact Ms. Sandra Meadows in the Office of Responsible Research Practices at 1-800-678-6251.

Measurement / Instrumentation

The study used a questionnaire comprised of pictures of the exhibit components, two short scales, and one short open-ended question. There were minimal demographic questions included (membership in the zoo, prior visit to this exhibit and when). See Appendix A.

Data Analysis

This is a descriptive, correlational study. Primary analysis is of central tendencies on rank-item scales and cluster analysis of open-ended responses. Additional statistics include correlations and ANOVAs related to conditions and outcome measures, behavioral intentions, and entry values. Partially open-ended items will be analyzed using trend analysis. All data will be analyzed using SPSS.

Data were obtained through a written questionnaire administered at the exit of the Jungle Trails. This study was conducted under The Ohio State University Institutional Review Board #2013E0384.

Sample

The sample is a convenience sample of adults with children who were present in the Jungle Trails exhibit area on August 23 and 24, 2013. The goal was to have 150 completed instruments for analysis.

The evaluators stood at the primary exit from the Jungle Trails. Using a focal sampling with continual ask, adults present in intergenerational groups (including children) were approached and asked to participate. If the individual agreed, they were given a clipboard with the questionnaire and a pen.

Measurement / Instrumentation

This was a questionnaire-based evaluation study that had five parts:

1. Basic demographics
 - Ø Sex and group composition was recorded through observation
 - Ø Membership, prior visits, and date of last experience in Jungle Trails were asked
2. Activity engagement
 - Ø *With which activities did individuals and groups engage?*
 - Ø *Individuals responded to pictures of all eight interactives in terms of not seeing, seeing/not engaging, and engaging (and who)*

3. Outcome indicators
 - Ø *How do individuals and families interact with the elements*
 - Ø *Participants completed a nine-item, seven-point (1-7) scale*
 - Ø *The scale had a post-hoc reliability of .856*
4. Perceptual measures
 - Ø Individuals were asked three open-ended questions about the experience
 - Ø One question was about activity success
 - Ø A second question asked whether the individual noticed signage
 - Ø The third asked for an overall perception of Jungle Trails
5. Signage and perceptions
 - Ø Individuals completed an eight item, seven-point (1-7) scale
 - Ø The scale had a post-hoc reliability of .927

The observation guide was primarily open-ended notes on the engagement and interactions around the engagement. The notes were then analyzed using a coding structure based on front-end observations of family interaction behaviors.

Results

There were 150 completed questionnaires. Of these, 101 were female, 39 were male, and for 12, the evaluator failed to capture the sex of the respondent. These individuals represented groups of a total of 121 males, 192 females, 99 boys, and 100 girls. In terms of groups, 45 were either individual or multiple adults of same sex with children. Of these, there were 34 that were women only, and 13 that were men only. This grouping includes intergenerational adults (e.g. grandparent and parent) and friends (often two or more women with each woman pushing a stroller).

There was a moderately high refusal rate, in great part due to a very high number of small children in strollers who were fussy or needing attention and gathering data on a half-price admission day. On Friday, there were 28 refusals with 107 agreed to completes for a 20.7% refusal rate. On Saturday, there were 52 completes and 29 refusals for a 35.8% refusal rate. The overall refusal rate for the study was 26.4%.

Slightly under half the respondents identified as members of the zoo (71 or 46.4%). Eighty-one (52.9%) were not members. Eighty-nine (58.2%) of the respondents had been through Jungle Trails before (62 or 40.5% had not), with approximately 1/5 of them having been through Jungle Trails since July 1, which means they had likely seen the installations prior to this visit. The others who had been through Jungle Trails (46 or 30.1%) had been in Jungle Trails prior to July 1, many of them referring back 2 to 3 years prior for their experience.

Do families engage with the interactives?

Overall, families were very likely to see the interactives (77.5%). This was almost equally divided among those who saw but did not engage, and those who saw and read or interacted with the experience. The concern about visibility (“did not see” with 22.5% response) clearly varies from Swing like a Gibbon which has a .7% “did not see” rating to the Primates Work Together scavenger hunt for which over half the respondents said they “did not see.” The second highest interactive not seen, the iPad interactive, does have the added challenge of being inside a building and not on the

path which suggests there may be some degree of groups not entering the building influencing the likelihood of seeing the interactive.

Of those with which groups engaged, Swing like a Gibbon and Balance like a Lemur were, by far, the most reported of the interactives with which families engaged, both of which had more than 2/3 of respondents reporting engagement. Both of these activities were also highly seen with only 0% and 1% reporting not seeing the two activities. Primates Work Together had both the greatest percent of those who did not see it (56.7%) and the lowest percent of those who read/did the activity (18.7%). Orangutans Find Fruit by Memory had 26.7% who reported not seeing it and the second lowest report of engagement (23.2%). Thumbs Up for Thumbs was the interactive most seen with which individuals did not participate (59.9%) while Big Brains at Work was third highest in both those who saw but did not do and those who read or did the activity. Table 1 (below) shows the numbers and percents of engagement with each of the interactives along Jungle Trails.

Table 1: Engagement with each of the interactives

	Did not see		Saw, did not do		Read or did		Of those that saw, read or did	
	N	%	N	%	N	%	N	%
Primates Work Together	85	56.7	37	24.7	28	18.7	65	43.1
Swing like a Gibbon	1	.7	46	31.3	103	68.7	149	69.1
Orangutans Find Fruit by Memory	40	26.5	75	50.0	35	23.2	110	31.8
Balance like a Lemur	0	0.0	46	30.3	102	68.9	148	68.9
Thumbs Up for Thumbs	8	5.3	88	59.9	53	35.6	141	37.6
Bonobos Drum to Keep in Touch	61	40.7	48	32.0	41	27.3	89	46.1
Big Brains at Work	12	8.1	73	49.0	64	43.0	137	46.7
iPad interactive	63	42.0	49	32.7	38	25.3	87	43.7
Overall rate		22.5		38.7		38.8		48.4

N=150

When considering those who saw and those who read or did the interactives, the overall rate was 48.4% of those who saw an interactive engaged with the interactive. The highest percentages of engagement were for Swing like a Gibbon (69.1% of those who saw the interactive engaged), followed closely by Balance like a Lemur (68.9%). The next two highest were also closely aligned with each other: Big Brains had 46.7% engagement and Bonobos Drum to Keep in Touch has 46.1%. the iPad interactive has 43.7% engagement while Primates Work Together had 43.1%. Thumbs Up for Thumbs had a 37.6% rate with Orangutans find fruit by Memory had 31.8%.

The formative evaluation provided some insights into why groups may not participate, and there were a few comments provided on the summative instrument that supported those reasons and offered clarity on others. For some visitors, the “time budget” becomes an issue, and some comments noted they would return to engage with the activities, but for the day, they just walked through. For others, it is the age of their children—written comments included reference to children being too young but looking forward to coming back with them when slightly older and

other comments to the children being “too old”—or because certain elements were occupied when they walked past and therefore they did not engage.

Do families perceive a difference in how they interact in Jungle Trails?

Overall, there is a positive perception on the interactives and signs supporting family interaction. The findings suggest that people *had fun* and *engaged in a different way* at the Zoo. Although all responses were positive, *compare ourselves to primates* had the lowest mean with a weakly positive mean of 4.41 (on a seven-point scale) and a slightly elevated standard deviation. In examining the distribution, there is a bi-modality in the findings with the dominant mode being neutral (4), but a secondary mode being strongly agree (7).

One item that could have shifted the overall mean around engagement was *took picture...* which had a large deviation (2.09 with an expected deviation around 1.50). This might be influenced by whether the group had a camera, or normally uses a camera to document group experiences. In examining the distribution, there is a strong skew to positive with a dominant mean being strongly agree (with the next two high frequencies being for 6 and 5, respectively). In terms of distribution, there is a flatness across response categories 4, 3, and 2 with a slight bump on response category 1. This suggests the preponderance of individuals did use the camera or video to some degree, but there is a proportion (between 1/4 and 1/5) of respondents who do not.

In order to compare responses from men and women, a t-test was performed. No items were statistically significant using Levene’s Test for Equality of Variances; therefore, equal variances were assumed. Women had higher mean scores than men across all items (summed difference was women= 5.41 on a 7-point scale with men= 4.95). The summed score difference of .46 was statistically significantly different at the .05 level *a priori*. By item, however, there were only two with statistically significant differences—participation in activities together (mean difference of .97) and having fun together (mean difference of .50). Table 2 (on the next page) shows all mean scores as well as the T and p values.

Of the various interactives, the one most consistently identified as the more successful one was Balance like a Lemur. There were 29 out of 77 comments that explicitly identified this activity because it was seen as “active,” “hands-on,” and “fun,” and that it requires “teamwork” in order to “put your troops to the test.” Following this, Big Brains at Work had 11 specific mentions because families had to “work as a team” and “we like solving problems.” It was also seen as an opportunity where “all of us participate” and “hands-on” requiring the “family working tougher to move the rock.”

There were a few comments that clearly aligned the activities with the desired outcomes. Working together showed up several times, while other comments noted that the children “seemed to learn through doing/comparing themselves to the animals” while another reflected that they had “been talking about animals swinging” as a tie to the Swing like a Gibbon activity. Several comments related to solving problems or working together. One person reflected that they “liked them all very much with the family focus.”

In exploring who the respondents reported as engaging with each interactive, not surprisingly for all the interactives, children are the dominant group participating with 143 noted incidents. Family (32), female adult with child/ren (31), and male adult with children (27) were fairly close in number of incidents reported, but disproportionate to the numbers related to group composition.

There were 10 incidents of adult males only engaging in activities and four incidents of adult women only interacting with the activities.

Table 2: Mean scores on perceptions of interaction overall and by men versus women

The signs and/or activity(ies) affected me and/or my family members, because we:	Overall		Men		Women		Independent t	
	Mean	StdDev	Mean	StdDev	Mean	StdDev	T (equality of means)	P value
Participated in activities together	5.44	1.33	4.69	1.30	5.66	1.28	-3.798	.000**
Had fun together	6.02	1.15	5.63	1.48	6.13	1.02	-2.176	.031**
Engaged in a different way than usual at the zoo	5.69	1.27	5.36	1.33	5.79	1.27	-1.696	.092
Learned more about primates	5.28	1.60	4.92	1.59	5.34	1.67	-1.299	.196
Looked at the primates differently	5.04	1.57	4.58	1.36	5.13	1.67	-1.760	.081
Talked to each other about primates	5.13	1.70	5.00	1.64	5.06	1.80	-.187	.852
Compared ourselves to other primates	4.41	1.87	4.17	1.89	4.39	1.94	-.594	.554
Took pictures or videos of each other doing an activity	4.91	2.09	4.64	2.05	4.90	2.16	-.616	.539
Created positive memories that we will remember/talk about later	5.90	1.22	5.67	1.33	5.94	1.21	-1.098	.274
SUM	5.34	.98	4.95	1.00	5.41	.98	-2.351	.020*

N=138-143

Does the 'family approach' to signage enhance the visit experience?

Not surprisingly, there is only slight agreement to the statement "*I read the signs in Jungle Trails.*" It is well understood that visitors to zoos divide into 1) individuals who read all (or many/most) of the signs, 2) those who read few or none beyond the title, and 3) a group who read depending on context or particular interest. The normal distribution would support this interpretation. The two highest scores (clearly positive) were for the signs providing new information (\bar{x} =5.59, Std. Dev=1.44) and that the signs added to the quality of the family experience in Jungle Trails (\bar{x} =5.58, Std.

Dev=1.42). The lowest mean score (with a high deviation and a platimodal distribution¹) was for reading signs aloud to each other.

In comparing men's responses to women's, no items were statistically significant using Levene's Test for Equality of Variances; therefore, equal variances were assumed. There is only one statistically significant difference between responses from men and women - "added to the quality of family experience" in which men were slightly negative in their responses and women were slightly positive (gap score of .47; T=-2.220 p=.028, significant at the .05 level *a priori*).

Table 3: Mean scores on perceptions of signage overall and by men versus women

	Overall		Men		Women		Independent t	
	Mean	StdDev	Mean	StdDev	Mean	StdDev	T (equality of means)	P value
I read the signs in Jungle Trails	4.70	1.40	4.67	1.41	4.66	1.53	0.36	.972
The signs appeal to me	5.15	1.46	4.92	1.38	5.22	1.51	-1.030	.305
The signs gave me information I didn't know before	5.59	1.44	5.31	1.49	2.70	1.41	-1.358	.177
My family read the signs aloud to each other	4.11	1.96	3.72	1.83	4.19	2.03	-1.209	.229
The animal perspective was interesting	5.27	1.50	4.92	1.59	5.34	1.43	-1.472	.143
The signs are appropriate for adults	5.73	1.32	5.42	1.56	5.85	1.17	-1.719	.088
The signs are appropriate for children	5.43	1.51	5.19	1.64	5.49	1.46	-.998	.320
Added to the quality of my family's experience in Jungle Trails	5.58	1.42	5.14	1.52	5.74	1.34	-2.220	.028
Sum	5.07	1.33	4.83	1.34	5.12	1.34	-1.113	.268

In responding to a prompt regarding signage, 45.9% of those offering comments (N=85), did not notice or saw no difference in signage from other Zoo interpretives. There were, however, many individuals who noted different aspects of the signs in the exhibit. The comment that had the most offerings was that the experience was interactive. This was followed by the signs being colorful, which had five positive responses. The signs being digital were noted by six of the respondents.

Several individuals noted the fact there were digital (electronic) signs, while several others saw them as colorful. A couple of respondents noted there were "bar codes" or "QR codes" on the signs.

Several comments were strongly on the desired outcomes of the exhibit. A couple noted that the signs were "more related to self—put self in place of animal" and "related to our life and activities"

¹ A platimodal distribution is one where there is a somewhat even distribution across all or many of the responses. For this item, responses 1, 4, 5, and 6 were each between 22 and 26 responses.)

while other individuals saw the signs as being complementary to the exhibit, being jungle-themed, and coming from an animal perspective.

There were a number of individual comments that suggest respondents like the signs (e.g. “really like,” “loved them,” “noticed them,” “very visual and informative). A couple noted they were “just new” while another felt the signs made them “want to read the signs.” The signs, for different individuals, had “better graphics,” and were “eye-catching” and “attractive” were comments supporting the intention of the signs, as were the comments that the exhibit was “informative” or that it “gave information that was accessible to the whole family.” A couple of individuals noted the exhibit was “friendly” or “kid-friendly.” Other individual comments related to the signs being smaller, more engaging, or more friendly than other Zoo signs.

What is the overall perception of Jungle Trails?

Respondents were asked how they would describe Jungle Trails to a friend. The most commonly used word was “fun” and often in conjunction with the second most commonly used words of interactive or activities, but also with a few comments of educational. A couple of responses referred specifically to the purpose of the activities as one noted they “liked the activities to imitate the animals,” while others said “the activities help kids get an understanding of the animals,” and “many things to do that primates in the wild make look easy.” Another reflected that “we really enjoyed the new activities; my husband and I were discussing them as we walked along the trail.”

Several individuals also noted the context or the setting itself as a major influence. Comments such as “you feel like you are part of the habitat” or “you feel like you’re in the middle of the jungle” were common as were mentions of plants, the trail, and the shade.

Other frequently stated words included “interesting” and “cool.” There were some who noted that it was family-oriented. Statements such as “really cool for everyone” and “comfortable for families to explore” illustrate this theme. Another group noted the value of Jungle Trails for children with statements such as “kept the kids’ full attention” and “more engaging and fun for the kids.” One individual bounded the family and the kids by noting “I enjoyed watching my children play.”

One individual noted that Jungle Trails differentiates this Zoo from others and a couple of individuals identified preference for this experience as in: “so far, this has been my favorite part of our Zoo trip.” One respondent who had been many times before noted: “I got bored with Jungle Trails. Now looking forward to coming again!”

Conclusions

Four evaluation questions guided this study. Each question and the response based on the accountability evaluation are presented below.

1. Do families engage with the interactives?

To some degree.

Ultimately, what was noted was that engagement includes options other than full family interaction. For individuals, taking pictures or videos, observing others engaging, and similar passive activities are considered family interaction.

2. Do families perceive a difference in the way they interact in Jungle Trails?

Yes.

There was strong evidence that individuals perceived their experience in Jungle Trails led to different ways of engaging as a family. There were consistently and persistently positive perceptions of how the experience was different, facilitated engagement, and led to desired, perceived outcomes.

3. Does the 'family approach' to signage enhance the visit experience?

To a good degree.

A fair proportion of visitors noted the differences in the signs, and for some, the signs clearly communicated the intended cognitive and affective messages of the Jungle Trails. There was positive agreement about the signs enhancing the visit experience, and this agreement was far stronger for those who said they read the signs. There were, however, many visitors who did not notice the signs or did not note any differences in them. This is not unusual in that there are proportions of visitors who do not pay attention to signs regardless of approach. It appears Jungle Trails did a very good job of increasing the proportion of visitors who are aware of and engage with the signage.

4. What is the overall perception of Jungle Trails?

This is a valuable addition to the zoo experience. There were several themes that emerged that suggest visitors see Jungle Trails as new, different, engaging, interesting, and valuable to the Zoo experience. It appears that Jungle Trails interactives and signs add appropriately to the mix of desired experiences in the zoo, ensuring a variety of experiences are presented for visitors.

Implications for the Field

Several of these findings may be valuable for other institutions exploring means of engaging visitors cross-generationally.

1. The creation of clear invitation for multiple individuals to engage and different entry points for engagement (heights of interactives, level of complexity) supports what the literature has offered, and in this project, have clear applications that can be modeled.
2. Create activities that cannot be accomplished by an individual, or is more effectively completed by two or more people.
3. Design for this type of interactive must allow for fluid flow between and among visitors. The more successful the interactive in this installation, the less clearly defined were the lines between groups engaging.
4. Intuitive activities with simple signage appeal (and are quickly used) and also communicate the key desired message outcomes (formative evaluation findings).
5. The consistency of message (family as troop) through the activities, the signs, and the titles create a strong theme.

Appendix A: Questionnaire



Jungle Trails!




Thank you for giving us a few minutes of time to give the Zoo some feedback. The Zoo and its research partner, Ohio State University Extension, are very interested in knowing what *you* think of the new activities along the Jungle Trails!



Are you a member of the Cincinnati Zoo & Botanical Garden? Yes No

Have you been through the Jungle Trails exhibit before today? Yes No
 If yes, approximately when was the last time? Month: Year:

Here are pictures from along the trail. For each, check if you do not remember seeing the activity on your visit today. If you did see it, please tell us if you saw, but did not do anything at that activity, or if you read the signs or did the activity. If you did the activity, also tell us who participated (me, Mom, Dad, kids, everyone, son, girl, boy, etc.).

	<p>Did not see this activity</p>	<p>Saw, but did not do this activity</p>	<p>Read or did this activity</p>	<p>Who participated in this activity:</p>
	<p>Did not see this activity</p>	<p>Saw, but did not do this activity</p>	<p>Read or did this activity</p>	<p>Who participated in this activity:</p>
	<p>Did not see this activity</p>	<p>Saw, but did not do this activity</p>	<p>Read or did this activity</p>	<p>Who participated in this activity:</p>

	<p>Did not see this activity</p>	<p>Saw, but did not do this activity</p>	<p>Read or did this activity</p>	<p>Who participated in this activity:</p>
	<p>Did not see this activity</p>	<p>Saw, but did not do this activity</p>	<p>Read or did this activity</p>	<p>Who participated in this activity:</p>
	<p>Did not see this activity</p>	<p>Saw, but did not do this activity</p>	<p>Read or did this activity</p>	<p>Who participated in this activity:</p>

	<p>Did not see this activity</p>	<p>Saw, but did not do this activity</p>	<p>Read or did this activity</p>	<p>Who participated in this activity:</p>
	<p>Did not see this activity</p>	<p>Saw, but did not do this activity</p>	<p>Read or did this activity</p>	<p>Who participated in this activity:</p>

If you did not see any of the activities, skip the next set of questions and jump down to the 🌟

If you saw or did any of the activities, we'd like to know how they related to your experience **with the animals**. For each of the following, to what degree do you think seeing/doing one or more of the activities affected you. If it did not at all affect your experience, you'd circle a 1. If it strongly influenced you, you'd circle a 7. If it were somewhere in the middle, you'd circle a 3, 4, or 5.

The sign(s) and/or activity(ies) affected me and/or my family members, because we:

	Strongly Disagree					Strongly Agree	
Participated in activities together	1	2	3	4	5	6	7
Had fun together	1	2	3	4	5	6	7
Engaged in a different way than usual at the Zoo	1	2	3	4	5	6	7

Learned more about primates	1	2	3	4	5	6	7
Looked at the primates differently	1	2	3	4	5	6	7
	Strongly Disagree						Strongly Agree
Talked to each other about primates	1	2	3	4	5	6	7
Compared ourselves to other primates	1	2	3	4	5	6	7
Took pictures or videos of each other doing an activity	1	2	3	4	5	6	7
Created positive memories that we will remember/talk about later	1	2	3	4	5	6	7

Was there one specific activity that seemed to be more successful than the others? If so, which one and why did it work best for your family?

- ★ In Jungle Trails, the Zoo is experimenting with a different approach to signs. Did you notice any difference between the signs here and in the rest of the Zoo? If so, what did you notice?

Thinking about the signs, how effective do you believe they were in each of the following (from not at all to completely).

	Not at all			Completely			
I read the signs in Jungle Trails	1	2	3	4	5	6	7
The signs appeal to me	1	2	3	4	5	6	7
The signs gave me information I didn't know before	1	2	3	4	5	6	7
My family read the signs aloud to each other	1	2	3	4	5	6	7
The animal perspective was interesting	1	2	3	4	5	6	7
The signs are appropriate for adults	1	2	3	4	5	6	7
The signs are appropriate for children	1	2	3	4	5	6	7
Added to the quality of my family's experience in Jungle Trails	1	2	3	4	5	6	7

In just a few words, tell us how you'd describe Jungle Trails and these activities to a friend or a colleague? What would you tell them?

Thank you!