Zoo Walkways: The Path to Connecting with Nature

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Abstract

Strategic Importance: Every zoo visitor travels along walkways. And with goals of connecting visitors to nature, why do those walkways not incorporate this idea or reflect the connection between natural free-play and learning? Why do zoos seek ways to curb play behavior and curiosity along those walkways versus embracing them for informal learning? What ‘sense of place’ is reflected along the walkways? Zoo walkways have the opportunity to be more once they recognize the need and opportunities for more. Aim: The aim of the workshop is to challenge zoo professionals to look at the zoo walkway as more than simply a way of moving visitors from one area to the next and to begin to see them from the eyes of the visitor especially the children. Zoo educators and designers must rethink our idea of the walkway in order to engage a child’s natural curiosity and sense of adventure beyond the gates of the children’s zoo or at the zoo playground. This will allow a more fully integrated zoo experience and reduce mixed messages that currently are being sent to the visitors. Objective(s): To review natural play behavior in children and see how zoos currently engage children beyond the children’s zoos and play areas. To review current walkway design to see what ‘sense of place’ we have created. To look toward a new future in walkway design. Method of Delivery: PowerPoint presentation. Evaluation: Conclusion: Zoo educators have a responsibility to discuss and push for the implementation of informal education elements which will enhance the zoo experience for children. Creating this dialogue about design, learning, and walkways will allow the creation of a more fully integrated zoo experience and reduce mixed messages.

Introduction

Leaving an African savanna exhibit one bright, sunny afternoon, I passed a cluster of boulders which served not only to hold a grade change but also defined the walkway edge and directed visitors to steps that took them to more exhibits.

There were essentially two rows of boulders: tall background boulders which contained the upper terrace of the savanna entry and lower foreground boulders which created texture and broke-up the otherwise solid rock wall. At their tallest, the background boulders were about two and a half meters in height while the foreground boulders were closer to one meter in height.

The boulders were smooth with rounded edges: distinct yet well-placed at the edge of the walk. You could have almost imagined yourself in an African kopje.

As I walked, I neared a father with his young son who was about 5 years old. The son had just stopped at the formation.

I slowed my pace a bit, curious to see what the boy would do as he grabbed the face of a low boulder. He tried to find the right grip that would let him climb to the top but his father who was obviously ready to get to the exit, gruffly asked what he was doing. To this, the boy cheerfully replied “[I] want to climb [the rock]”.

Without hesitation, the father snapped, “You can’t climb on that! This is a zoo not a playground! I’ll take you to the playground tomorrow. Let’s go.” And off they briskly walked toward the exit. No climbing, no exploring, no waiting.

While our goal is not to create “playgrounds with animals”, we must reconsider our understanding of how our younger visitors actually utilize and view our walkways. This understanding is important to the message that we are sending them about nature and conservation.

Currently, there is a disconnect between what is build and how it is used by visiting children. This disconnect creates a potentially negative view of nature: a mixed message.

Children and Zoos

According to the American Zoological Association (AZA), U.S. zoos and aquariums have significantly contributed to environmental
education over the last 10 years: 12 million children have visited during school field trips, 50 million children have visited with families, and 400,000 teachers have been trained in informal science education methods. Additionally, 93% of visitors feel that their families enjoy seeing animals at close proximity, while 94% feel that zoos and aquariums teach children how to protect wildlife and habitats. (AZA, 2011) These statistics highlight the important contributions zoos can make toward installing a conservation ethic in visitors. While these high percentages indicate positive connections to nature, how do visiting children feel?

Following the opening of its nature-themed playground at their entry, a central U.S. zoo stated that it “commonly receives comments from parents that their children would rather be at the playground or the fountain than viewing the many animals and exhibits.” (Wilkens, 2011) While this is great news for the designer, why didn’t this installation translate into increased interest in or exploration of the animal exhibits?

One reason could be that young children enjoy zoos as outdoor places to be with friends, to have fun, and to see the animals but not specifically to learn. Understanding this, we must ask ourselves if we are designing zoo public areas from a child’s perspective or from an adult’s perspective. The answer seems to be “from an adult’s perspective”: when describing his new Children’s Zoo design, the designer stated that “…zoos are not generally designed or constructed with consideration to how children actually view the zoo environment.” (Overdorf, 2006)

So, why is this?

Children seek fun, adventure, and play. While these experiences are addressed in Children’s Zoos and playgrounds, they are not reflected in the remainder of the zoo. But the reality is that we must consider what happens beyond those play areas because families spend an inordinate amount of time outside of them.

Beyond the play areas, in the public spaces, children should be as engaged as they are at the exhibits and within

*Nature-themed children’s play areas are increasingly seen in zoos. They provide safe free play opportunities for visiting children.*
the play areas.

Why?

Children, Play, and Learning

Numerous studies have shown a connection between free play and learning in children. Free play is important for children of all ages. It allows children as young as 18 months of age to build upon newly developing gross and fine motor skills. As they mature, these skills become more refined and new skills are added: exploration evolves into social interaction where taking turns, sharing, negotiating, listening, developing ideas, and fantasy become important. And as the child enters elementary school, these evolving skills begin to turn toward and influence their social and environmental consciousness. (Frost et. al., 2004)

It is these developing social skills and environmental awareness that should be of interest to zoos because positive memories about and within nature during this phase of development serve as a foundation for environmental stewardship. This reflects itself in feelings of ownership of an outdoor areas including “caring for”, “concern over”, and “responsibility for” those areas which remind them of the places where they experienced positive outdoor events in the past. (Frost et. al., 2004) These are the beginnings of conservation-minded feelings that zoos should seek to encourage.

Of the zoo provided formal and informal learning opportunities including informational signs, keeper talks, and immersion exhibit design, the most engaging area for children is the Children’s Zoo and / or playground. It is here that they engage in free play. Free play: play that is exploratory, imaginative, without adult rules, and child-directed. Young children stay with parents for great lengths of time having fun while learning.

How can we create the same enthusiasm that we see in the Children’s Zoo and playground in the remainder of the zoo?

We have taken the first step by understanding that children learn about themselves and the environment through free play. Now, we must look at our walkways, and realize that they more often than not lack the fun, interactive experiences that children seek. For visitors, zoo walkways are generally functional rather than interactive: they are long, smooth, consistent in width, passive, and have limited opportunities for exploration.

By remembering that children learn through interactive and participatory play, we start to see the disconnect along our walkways.

Currently, zoo walkways resemble roadways which take visitors through the zoo without slowing them down or encouraging them to

Zoo walkways resemble roadways where visitors travel from point A to point B with limited experiential opportunities in between. The zoo walkway on the left and the subdivision roadway on the right are similar in form, function, and visual character. Both images were taken just past the entries.
explore except when they stop at an exhibit. In these instances, they function much the same as highway rest stops by allowing the visitor to pause and view the scenery.

**Mixed Messages**

In 1992, Jon Coe discussed the importance of integrating context, content, and message at an exhibit as a tool to decrease visitors walking away with mixed messages. Mixed messages occur when the context (the perceived environment surrounding exhibit guests) does not align with the content (what the graphics say) and the message (the entirety of what they walk away with) is therefore not consistent. (Coe, 1992) While this concept has greatly influenced zoo exhibit design, the same change is not reflected along the walkways.

Zoo walkway design remains a product of its history as a living museum and constraints such as budget and liability. Walkways are designed to efficiently convey visitors from exhibit A to exhibit B in a logical manner and serve to reinforce “zoo-appropriate learning” which is generally passive and observational.

But zoo walkways are more than that: they are reflections of an animal’s habitat as well as serving as the face of the zoo. A walkway is where the visitor becomes familiar with the zoo, its animals, and its mission. It is here that they see the conservation ethic of the zoo reflected.

The problem is that zoo walkways discourage interaction and participation. They are full of “don’t”: rocks are installed but climbing is not allowed; planting beds are wide but fencing restricts encroachment; and animal tracks are placed in the paving but edging and dense vegetation restricts exploration or tracking.

Design of this fashion does not acknowledge young children’s natural learning process or curiosity. By observing children within the zoo, but outside of the play areas, natural play behaviors can be seen in those behaviors that make zoo professionals wince: climbing on rocks and fencing (fine and gross motor skill development), jumping off rockwork (gross motor skill development), walking through planting areas (fine motor skill development), and more. This is because many young children are not yet interested “zoo-appropriate learning”…plus, they are outside where normal interactive free play in other circumstances would be accepted.

So, while concerns about liability, maintenance, budget, and others dictate how public areas are designed or not designed, could the habitat conservation message that zoos seek to present be being diminished?

What is the lack of positive interactive outdoor experiences teaching children about nature? What are we teaching them when our nature

![Natural elements intended to immerse the visitor in the exhibit setting, restrict interaction and participation in the setting. Design limitations, signs, and barriers limit natural play behaviors in children and result in inappropriate behaviors such as climbing on fencing and rockwork and trekking through planting areas.](image)
experience is filled with “don’t”? And how do walkways that resemble roadways and restrict interaction contribute to a positive nature experience?

Nature as a Backdrop

As we have seen, young children learn through play and develop an environmental ethos through positive encounters and memories in nature. When you consider that visitors spend an inordinate amount of time walking along our walkways, you will see that those walks are insufficient and are contributing to a mixed message.

Although young children may not fully understand terms such as “conservation ethics” or “habitat”, we, as zoo professionals, need to remember that for children nature must be more than merely be a backdrop to be viewed.

Nature should conjure images of fun, discovery and exploration. We should seek to encourage the development of positive memories including free the play areas and the areas immediately adjacent to the animal exhibits.

Zoo professionals need to look at walkways with the same perspective as they examine the animal exhibits: with an eye toward environmental enrichment and behavioral modification. That is, if the children are going to climb on the fencing, scramble up the rockwork, and walk through planted areas, why not provide these opportunities in locations that are safe, planned, and manageable.

Much the same as using the natural behavior of animals to elicit a desired behavior or action, we can use walkway design to respond to and to guide the natural play behaviors of visiting children. Designing with children’s play behaviors in mind just as the exhibits are designed with the animal behaviors in mind, will allow the design to elicit positive behaviors versus destructive or undesired behaviors.

Analyzing the behavior of children along various walkways within our zoos will allow us to

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Steps in Walkway Analysis

Step #1: Select a trail section
Step #2: Photograph the trail
Step #3: Trace the trail image onto trace paper for use in analysis.
Step #4: What do you see from an educator’s perspective?
Step #5: What additional items do you see along and adjacent to the trail?
Step #6: Are there any signs of off-trail usage?
Step #7: How have you seen children use this trail?
Step #8: What natural children’s play behavior’s do we have the opportunity to engage?
Step #9: What might we add to enhance the trail so integrate children’s natural behavior’s and curiosity?
understand how they are utilizing them and what elements we can highlight. This will provide a base for integrating natural play behavior into informal learning as well as a base for changing our view in such a manner that we no longer see walks and their adjacent planting areas as background but rather as “part of” the zoo experience. They become part of the immersive experience as well as the animal habitat(s).

**Walkway Analysis**

The use of a multi-step analysis would allow for the review and evaluation of both proposed and existing walkways. Because zoo educators work with children on a daily basis, their input on informal learning would provide a foundation for desired play behaviors.

And an upfront review of proposed walkways during each design phase (including the construction documentation phase) would allow the seamless integration of educational programs and concepts into the design. In this manner, educational information would be integrated so that it would be flexible and would allow change over time as programs were modified, added or removed. Educational information and concepts would then not have to rely solely on available post-construction space and graphics.

Analyzing existing walkways would create an understanding of a particular walkway from a child’s perspective. This evaluation would aid in the development of new design ideas and programs that would create a more flexible and interactive space.

The analysis would include studying and observing the walkway from multiple viewpoints including from an educator’s perspective (i.e. what type of graphics were available and what age range they address; what access do children have for viewing animals; does the walk accommodate large and small groups; etc.) and from a young child’s perspective (i.e. what viewing opportunities are available; what climbing or exploratory opportunities are provided; can I “get away” from my parents; etc.). Additionally, observations of use patterns and children’s behaviors both seen and implied by wear patterns would be needed. For example, were children seen walking through planting areas or were trampled plants noted; were the barriers worn along their tops or face; etc.

From these observations an understanding would develop about how the space was used by visitors. Based on these observations, potential educational programs could be developed and elements added or removed to address destructive use by the visitors. For example, if “trails” and “paths” were seen in planting areas, elements such as stepping pads or low “fallen logs” (i.e. balance beams) could be used to allow access to the planting area without trampling the plants. Elements such as these would encourage the development of both fine and gross motor skills while creating a continual immersive, interactive experience for children.

In the same way that a well-designed animal exhibit requires the cooperation of the designer and the animal curators, good walkway design should include the cooperative work of the designer and the zoo educators.

The inclusion and consideration of educational programs, beyond simply adding design elements, allows the space to function in multiple ways and allows it to change over time which for members and frequent visitors adds a new and exciting level of interest.

Each zoo and every walkway is a unique experience that should be considered on its own merit.

**Conclusion – Joy of the Journey**

Zoos have a unique ability to bridge the gap between the real outdoors and an idealized zoo version.

While adults enjoy and understand the benefits of passive viewing of nature and wildlife, young children get bored and rush through the zoo experience. Children learn actively through physical contact and challenge. They visit zoos to see animals, be with friends, and be outdoors, not necessarily to read signs and “learn”. But how can we expect children to appreciate being in nature without experiencing it? We need to discard the notion that children should only play in designated children’s area and learn only through signs, observation, and adult-led programs. Acknowledging play as a natural
Walkway Analysis

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<tr>
<td>Wide walks for large groups / fam.</td>
<td>Long, linear trail of equal width</td>
<td>Trampled plants and exposed soil</td>
<td>End seems more interesting</td>
<td>Add elements to “distract” from end</td>
</tr>
<tr>
<td>Benches for animal viewing</td>
<td>Safety fencing</td>
<td>Compacted soil at animals viewing</td>
<td>High dense fence - hard to see over</td>
<td>Change fencing for ease of viewing</td>
</tr>
<tr>
<td>Informational signs</td>
<td>Large planting bed</td>
<td></td>
<td>Wide plant beds are enticing</td>
<td>Create exploration opportunities</td>
</tr>
<tr>
<td></td>
<td>Defining concrete curb</td>
<td></td>
<td>Bench is too far from animals</td>
<td>Remove curb and change paving</td>
</tr>
<tr>
<td></td>
<td>Evergreen plant screening</td>
<td></td>
<td></td>
<td>Add elements to stand / climb on</td>
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A simple multi-step analysis allows the zoo professional to breakdown the elements found along a particular walkway.

Observations from the analysis could be utilized to address zoo needs as well as the informal learning needs of visiting children.

More than simply installing one or two play elements, the results of the walkway analysis could lead to a more immersive design that tied the walkways into the adjacent animal habitats / exhibit.

Slowing children down along their journey will also provide flexible opportunities for educational programs.

Reviewing existing walkways for play potential is the beginning to creating more immersive, interactive outdoor zoo experiences.

The walkway to the left takes visitors past animal exhibits (on the right) and a large planting bed (on the left). From a child’s perspective, it is a straight shot running space, leading to “something” interesting at the far end.

What existing elements can be used to create more informal learning opportunities for young children?
learning opportunity for young children just as it is a learning opportunity for young animals, will allow zoo professionals to better design the public spaces within our zoo.

Providing natural play and exploration opportunities along the zoo walkways would create positive learning experiences with an educational foundation and would further connect context, content, and message.

As noted at the beginning, while we are not trying to create playgrounds with animals, we must consider the creation of interactive spaces that reflect our conservation message, our love of the outdoors, and our concern and interest in animals and habitat. We must consider the entire zoo as “the experience” while we consider and give weight to the various learning styles and abilities of our young visiting audience.

The destination of zoos has always their animal exhibits. But serious design consideration should be given to the walkways…the habitat…the journey.

It has been said that “happiness lies in the journey, not the destination”, so let’s take a more thorough look at the journey.

Bibliography


