Communicating Conservation

Are Zoos Learning From Their Visitors?

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### Author Statement

This project was, first and foremost, inspired by my love of zoos. I have been volunteering and working at Roger Williams Park Zoo for five years, and it is my second home. The incredibly hardworking and talented people I work alongside are my extended family. Our fearless leader, Dr. Jeremy Goodman, came back from an AZA Directors Conference last year with a fire in his belly, and it ignited a spark in me. If more people are beginning to question the existence of zoos, I hope that this one small thing can contribute to zoos gaining back some trust from the public. If even one zoo, large or small, benefits from this project, I will know I was successful.

This project would not have been possible without several people from my small corner of the zoo world. Carrie Hawthorne, who supervised me during my internship at Buttonwood Park Zoo, put an incredible amount of trust in me. With input from her and Paula Montgomery, I was able to spend my summer gaining invaluable experience with another zoo's community. Cyndi Lake, Brooke Fairman, and Stacy Greenberg were my partners in Roger Williams Park Zoo's Strategic Messaging Task Force Community Forums Committee, and were an integral part of figuring out what we wanted to learn from our audience. Lynne Mclain was always there with open ears and great advice. Without her friendship and support, this paper may not have seen daylight. Without Dr. Jeremy Goodman, my survey very likely would not have been seen by anyone. His credibility and the respect he has earned among his fellow AZA leaders is directly responsible for the level of response my survey received.

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## Introduction

Zoos have evolved to become vastly different than they were at their origin. From symbols of status and power in the form of private menageries, to public displays characterized by concrete and steel bars, and now with naturalistic habitats, zoos have become centers for education and conservation (Kreger and Mench 143; Mazur and Clark 185). In order to be an accredited member of the Association of Zoos and Aquariums (AZA), a zoo must have conservation and education programs that meet their requirements, in addition to their rigorous animal welfare standards ("About Us" *AZA.org*). In its mission statement, AZA says that its member zoos, "meet the highest standards in animal care and provide a fun, safe, and educational family experience. In addition, they dedicate millions of dollars to support scientific research, conservation, and education programs" ("About Us" *AZA.org*). For zoos outside the United States, the World Association of Zoos and Aquariums' (WAZA) standards are comparatively stringent ("About WAZA").

Now more than ever, zoos face an interesting, if not concerning, new challenge: justifying their own existence. More people are asking, "should zoos exist?" (Bergl; Choi). This did not happen overnight. Even with defining moments like *Blackfish*, the documentary about SeaWorld that emboldened animal rights groups and rocked the zoo and aquarium world, it is impossible to pinpoint one thing that has caused this trend (Marlbrough). While the "whys" of declining zoo favorability are beyond the scope of this capstone paper, Steve Burns, Chair of the Board of AZA summed up this issue well at the seventieth annual WAZA Conference.

What happened? We didn't change. We still have animals, lots of new exhibits. We still offer educational programs. We are still great places to bring your families. We didn't

change. It turns that it may be our problem. We might not have changed, but the world around us did. ("Proceedings" 5)

Though most in the zoo community grasp the seriousness of this issue, some are clouded by confirmation bias. They see smiling visitors, positive reviews, and hundreds of "likes" and "shares" on their social media posts, so they feel immune to this trend (Misra,

"Communicating"). The important thing for zoos to realize is that a community with a positive attitude toward them is not the same as a community with an understanding of their role in conservation (Choi; Rischbieth 2).

Communicating conservation—what it is, why we need it, what zoos are doing, what visitors can do—is complex. In order to survive, zoos need to do it well. In order to do it well, zoos cannot be satisfied with guessing what their visitors know and do not know—they need to ask (Rischbieth 2). The goal of this capstone project is to provide zoos with a sample survey for conducting visitor studies to find out what their visitors know about their conservation efforts. This project is a combination of a literature review to investigate what zoos are already doing, a case study of two New England zoos that have embarked on their own visitor studies, and original research in the form of a survey sent to leaders of AZA accredited institutions to find out more about the industry as a whole.

Modern zoos the world over are at a turning point. Their overall favorability is rapidly declining. People, especially millennials, are questioning whether it is acceptable to keep animals in captivity (Bergl, Choi). In 2016, the AZA Trends Committee released results of market research conducted on the public's opinions of zoos and aquariums starting in 2008 (Bergl; Choi). The Trends report showed a 14% and 17% decline in "Favorable" and "Very Favorable" opinions, respectively, between 2013 and 2016 (see Fig. 1). The consensus in the zoo community

seems to be that this report proved what most have suspected for some time, but there is still uncertainty in how to react. While the ethical issues of keeping animals in captivity is beyond the scope of this project, it will discuss how zoos are responding to their declining favorability. How zoos respond to this trend now is going to have a big impact later. If zoos languish, they will be left behind; viewed as relics of an age gone by. If they act too soon, they may be seen as defensive. Rushing to meet the challenge may not be in the best interest of the zoo or its audience. While zoos must take steps to address this trend in a timely fashion, funneling resources into new marketing campaigns or sweeping organizational changes without first taking time to hear from their communities may result in ineffective strategies.

Though the criticisms they face are largely the same, zoos' responses have been varied. Some zoos, thinking outwardly, have opted for complete rebrands. Cleveland Metroparks Zoo in Cleveland, Ohio, and Lincoln Park Zoo and Shedd Aquarium, both in Chicago, Illinois, have all created new mission statements and marketing strategies to better communicate what happens behind the scenes that the everyday visitor may not see (Coughlin; Ewinger; Johnson). Others are looking inward and adopting programs like Denver Zoo's Reaching Our Audience by Developing Mission Aligned Programs (ROADMAP). The Denver Zoo has offered training sessions for its ROADMAP program, so that other AZA facilities can learn how to effectively implement it. A few things should be kept in mind as zoos decide how to move forward. They need to move away from the reactivity of past years and adopt proactive communication strategies that get ahead of their critics and build a community of supporters who know what they are supporting (Rischbieth 4). They also need to be speaking with a unified voice. A handful of high-profile zoos making big changes is not going to save the industry as a whole (Carr and

Cohen). Lastly, while industry-wide change is essential, it has to happen at home. Zoos need to learn from their own individual audiences directly in addition to learning from each other.

#### Background

Zoos as we know them today were once menageries owned by the wealthiest members of society. These menageries have existed for almost as long as human civilization (Foster 64, Mazur and Clark 185). Animals have fascinated people since ancient times. Egyptian pharaohs, Mesopotamian kings, Greek conquerors, and Chinese emperors, displayed their collections amidst gardens of rare plants and ponds stocked with nonnative fish. Symbols of status and power, these exotic species collections were comprised of specimens collected on faraway expeditions, received as gifts from neighboring kingdoms, or taken from conquered peoples (Foster 64).

During the Age of Enlightenment, the late seventeenth to early eighteenth century in Europe, zoos became places of scientific study. Scientists collected specimens to study their behavior and anatomy ("Zoo"). In the late eighteenth century, zoos were opened to the public. These early public zoos were places where people could satisfy their curiosities about exotic lands; where visitors could see animals from all over the world, displayed in small enclosures so as to fit as many in one place as possible ("Zoo", Mazur and Clark 185). Concrete and steel are strong and easy to sterilize, making them the choice materials for these early zoo displays.

Today, exhibits are naturalistic, made to emulate a species' natural environment. This encourages natural behaviors which promote the physical and mental health of animals in captivity (Jacobson 56). Zoos have not only changed their appearance, but their missions as well. The Wildlife Conservation Society (WCS), one of the first zoological societies in the United States, was incorporated on April 26, 1895 and laid out its goals in its first annual report:

...[T]he establishment of a free zoological park containing collections of North American and exotic animals, for the benefit and enjoyment of the general public, the zoologist, the sportsman, every lover of nature;... the systematic encouragement of interest in animal life, or zoology, amongst all classes of the people, and the promotion of zoological science in general. (*Zoo and Aquarium History* 162)

The Wildlife Conservation Society now has a mission statement that emphasizes its global conservation efforts: "WCS saves wildlife and wild places worldwide through science, conservation action, education, and inspiring people to value nature" ("About Us" *WCS.org*). The elements of this modern mission statement: conservation, education, and inspiring others, can be found in the mission statements of most, if not all, Association of Zoos and Aquariums (AZA)-accredited institutions.

In the 1990s, zoos started taking on the role of conservation organization. It was during this decade that conservation was cemented as part of zoos' identities (Hacker and Miller; Kreger and Mench). During this time, American zoos also partnered with the US Fish and Wildlife Service to breed and reintroduce species like the California condor, American bison, and American burying beetle (Kreger and Mench; "Conservation Success Stories"). These successful reintroduction programs gave zoos credibility and established valuable partnerships with wildlife management agencies.

### The Challenge of Communicating Conservation

Though modern zoos try to emphasize their conservation efforts, they are still very much "for the benefit and enjoyment of the general public" (*Zoo and Aquarium History* 162). More than 700 million people walk through zoo gates worldwide each year (Gusset and Dick). A majority of those visitors come for a fun outing with their family, and not necessarily to learn

about animals or contribute to conservation efforts. Though they are marked low on the list of visitors' motivations for visiting zoos, conservation and education programs are most often named as justification for visiting (Bergl, Choi).

In a zoo favorability survey, people listed including more conservation and education programs in their top three strategies that would improve their personal opinions of zoos. Those who responded that they do not visit zoos reported a lack of resources dedicated to conservation efforts as one of the top reasons. Increasing those resources was one of the top responses when asked what would make them more likely to visit (Bergl). In 2016, AZA-accredited institutions alone spent nearly \$216 million dollars on conservation efforts around the world ("Highlights"). It is challenging to communicate that to zoo visitors who are coming to see the animals and have a nice, safe outing with their family. It is made especially challenging when those visitors do not define "conservation" the same way the zoo does (Burns; Choi; Rischbieth 3). In another survey on zoo opinions, respondents were least likely to choose "protection of endangered species"—the main conservation goal of AZA accredited zoos—to describe conservation (Choi).

If zoos and zoo visitors are not even on the same page about how conservation is defined, zoos may be wasting their time and money on messages that are not getting across to their audiences (Rischbieth 3). Market research has shown that people are most likely to define conservation as a reduction in use of energy and water, whereas zoos are defining conservation as saving species from extinction (Choi). Though visitors may be aware of a zoo's education programs or its financial support of field science, they may not equate those with conservation.

In *Integrating Conservation- How Are Zoo Communications Staff Facing This Challenge*, a conference paper about the challenges of communicating conservation for zoo staff, J.R. Rischbieth of Zoos Victoria lays out four sources of these challenges: the zoo setting, the news

media, entertainment vs. education, and anti-zoo groups. Although an entire book could be written on the role that anti-zoo groups have played in the decline of zoo favorability and the platform they have been given through both traditional and social media, those issues are beyond the scope of this project. This capstone paper will focus mainly on how zoos are responding to this issue, and two of Rischbieth's sources are relevant to that topic: the zoo setting and entertainment vs. education.

Conservation, and zoos' role it in, are complex stories to tell (Rischbieth 2). Conservation issues do not fall neatly into one category. Agriculture, expanding suburbs, and increasing infrastructure result in habitat loss and fragmentation, introduced species increase resource competition, diseases can wipe out entire populations, and then there is climate change. These are all complex sources of conservation concerns that are challenging to teach on their own. Trying to teach these concepts and their effects on wildlife in a zoo setting is difficult for many reasons. First being the aforementioned reasons that people visit zoos-to see the animals and have a fun day with their families. Most zoo visitors do not enter the zoo with the specific goal of learning in mind, and give interpretive graphics at exhibits a cursory glance at best (Dilenschneider; Dingfelder). Because of this, many zoo graphics are primarily comprised of "fun facts." Secondly, zoos' role in conservation is not as simple as captive breeding and rerelease programs (Rischbieth 2). AZA-accredited zoos have one unifying, overarching goal: to save species ("SAFE: Saving Animals From Extinction"). The methods zoos employ to work toward this goal, however, are as diverse as the flora and fauna in these zoos. Conservation projects in zoos vary widely, from indirect efforts like influencing behavior change through education, to direct field conservation efforts such as land preservation and sending staff into the field ("Highlights").

The third reason why a zoo setting makes communicating conservation messages challenging is a lack of understanding from visitors in the connection between animal care and animal conservation (Rischbieth 2). There are two examples from the past five years that illustrate this part of the challenge of communicating conservation from a zoo's perspective. Unfortunately, both of these examples involve the death of perfectly healthy zoo animals. The first is Marius the giraffe, who was humanely euthanized in February 2014 at Copenhagen Zoo when he was about eighteen months old. Though it made sense from a conservation standpoint— Marius' genes were overrepresented in the captive gene pool and the resources required to keep him alive needed to be dedicated to a more genetically important giraffe in order to maintain a healthy and genetically diverse captive population (Eriksen and Kennedy)—asking people to accept the kind of clinical reasoning behind the decision was just asking too much.

The second example is Harambe the Gorilla, who was shot by Cincinnati Zoo emergency response staff in May 2016 after a young boy fell into his enclosure. Understandably, people within and without the Cincinnati Zoo community had a visceral reaction to this loss. The Zoo's response was, "Wait! Don't be distracted! Look at what's happening to wild gorillas!" ("Cincinnati Zoo Devastated by Death of Beloved Gorilla"). It is incredibly challenging for zoo staff to direct people's energy from "there is more that could have been done to save Harambe" to "there is more that can be done to save wild gorillas." That can be attributed in part to zoo visitors' emotional connection to Harambe. He may have made zoo visitors love gorillas, but his plight is so much more concrete and therefore accessible to people than the more abstract idea of the plight of wild gorillas.

Zoos would not be zoos without their animals, like Marius and Harambe, who serve as ambassadors to their wild counterparts. Their "job" is to educate visitors by creating an

emotional connection that will compel those visitors toward stewardship of natural habitats (Hacker and Miller 359). However, zoos often send mixed messages. Zoos post pictures and videos of their most popular animals on every available social media platform until they become local, even national or international celebrities ("Baby Hippo Fiona"). The result is that when something draws the ire of the public, like the decision to euthanize Marius or the tragic death of Harambe, zoos find themselves scrambling to ask their audience to look beyond the individual to see the bigger picture. Steve Burns said, "It seems that many people can understand and relate to the plight of one individual animal, but cannot grasp the plight of a species" ("Proceedings" 4).

At least a part of this problem is self-made. After all, it is the zoo industry that anthropomorphizes animals like Marius and Harambe. They are given human names and presented in such a way that visitors connect with them on a human level. The conundrum is that this connection is exactly what zoos want to develop between their audience and their animals. Emotional connections trigger attitude changes, which is part of the reason visitors' connections with the animals are so important—caring about something leads to a desire to protect it (Leubke et al.). To overcome this challenge, zoos need to bridge the communication gap between caring for individuals and caring for species.

## The Impact of Effective Conservation Communication

Whether or not people actually learn at zoos has been hotly debated for the last few decades (Falk et al. 2007, 2010; Marino et al.). While the value of zoos as an educational resource is not a new topic, it has become a more focused discussion in recent years. There are studies and papers now that discuss the merits of all types of zoo education ranging from exhibit graphics to high-exposure classroom programs (Balmford et al.; Dingfelder; Hacker and Miller; Luebke et al.; Skibins and Powell). As people in the zoo community become more aware of the

issues facing their field, more is being written about specific facets of zoo education like climate change awareness and ambassador animal programming (Geiger et al. 107; Fernandez et al.; Hinton; Kreger and Mench; Sickler).

Decades of research has demonstrated the impact a zoo can have on the visitor. While it is accepted that the general visitor does not gain much in the way of factual knowledge, research has shown the shift in attitudes or knowledge of conservation behaviors resulting from a zoo visit, which is perhaps more important (Balmford et al.; Dingfelder; Falk et al., "Why"; Hacker and Miller; Luebke et al.; Skibins and Powell). Even at the most basic level, simply seeing an animal and talking about it with others has a huge impact. The connections made during these visits form the basis for developing stronger environmental attitudes (Dingfelder). When visitors see active animals up close, they believe that animal is more important in the wild and they report intention to get involved in conservation actions more than visitors who do not (Hacker and Miller 359). Even the least active animals have a measurable and predictable impact on a visitor's affect, which correlates strongly with meaning-making (Luebke et al. 73). Zoos and their staff members are also getting people to talk about climate change and engage with the complex science of this important issue in meaningful ways (Geiger, Hinton, Jacobs). Balmford et al. found that while zoo visitors are slightly more concerned about conservation issues than the general public, visitors exiting zoos were, on average, twice as likely to name a useful activity they could participate in to help or advance conservation causes. This and other research refute many naysayers' claim that zoos are "preaching to the choir," or, a self-selected audience that is predisposed to pro-conservation calls to action (Balmford et al. 128; Skibins and Powell 539).

The approximately two hundred thirty zoos and aquariums accredited by the AZA try to occupy five roles all at once: animal care, educational resource, research institution, conservation

organization, and entertainment venue. The attitude in much of the industry is that the "entertainment venue" image is at odds with the others (Fernandez et al. 2; Kreger and Mench 143; Mazur and Clark 188; Tomas et al. 105). This may stem from the societal notion that education is "boring" and should be kept separate from the fun of pure entertainment, which is evident in the way that zoos present themselves to the public (Carr and Cohen; Dilenschneider). While zoos try to be everything at once, they often engage in a precarious balancing act; juggling their identity as a reputable conservation organization and their perception as an entertainment venue for family fun (Carr and Cohen; Rischbieth 3; Tomas et al. 105). Some zoos have found that the only solution to this issue is to dedicate certain staff members, or even separate social media accounts, to the communication of entertaining content, and others to the communication of conservation messaging, these roles never overlapping (Misra, "Communicating"; Rischbieth 3).

A zoo's self-made quandary is that one cannot exist without the other: entertainment attracts visitors through the gate, yet audiences cite an institution's educational value and participation in ex-situ and in-situ conservation efforts as a justification for visiting that institution (Bergl; Choi; Dilenschneider). This does not have to be a quandary, however, and can actually work to a zoo's benefit. Zoos want to emphasize their education and conservationcentric missions, but they find it difficult to do so without the revenue that entertainment generates. The aforementioned research illustrating the impact of a zoo visit suggests that education, conservation, and entertainment go hand-in-hand. It demonstrates how powerful effective conservation communication can be. Rischbieth's research suggests that zoos are "victims of their own success," that they are so good at marketing themselves as entertainment venues, it is hard for audiences to see them as anything else (3). It is important to note that

Rischbieth's research subjects were zoo staff members, and as Colleen Dilenschneider, Chief Market Engagement Officer at IMPACTS Research & Development points out, it is easy for staff to get wrapped up in the internal idea that entertainment is demeaning and takes away from educational value. To summarize a very confusing situation: zoos are often perceived as entertainment venues; internally, they they may resent this image; overwhelmingly, they market themselves as entertainment venues anyway because they feel it is the only way to bring in revenue. If zoos are to survive, they must learn to leverage their entertainment value to communicate their conservation and education messages.

## Visitors Are Learning From Zoos. Are Zoos Learning From Visitors?

Due to recent research conducted by the AZA, there is a wealth of information about the public's opinions of zoos and their attitude toward conservation issues. Most of this research is market research, however. While many zoos do localized studies with their own audiences, much of this research concerns specific programs. There is a dearth of studies of localized audiences concerning their perceptions of their local zoo's role in global conservation. The AZA Trends Committee has put out a request to member institutions: take the research that has been done in the market and bring it home to your community (Passarelli et al.). With many organizational changes already in motion at some zoos, it is important to question the rationale behind these changes (Coughlin; Ewinger; Johnson; "ROADMAP"). Are they based on research the institutions have done with their audiences? Unfortunately, that question may be difficult to answer because many of these studies, as with the two case studies discussed later in this paper, go unpublished. As time goes on, hopefully the AZA will not only continue to encourage the completion of localized audience research, but also encourage members to share the results of this research.

## The Rapid Decline of Zoo Favorability

Since 2013, public opinion of zoos has taken a sudden downturn. Market research conducted by the AZA Trends Committee Action Learning Team illustrates this alarming trend. When asked whether they have a favorable or unfavorable opinion of zoos, respondents who answered "favorable" declined 14% in just three years. Respondents who answered "very favorable" declined 17% in the same time period (see Fig. 1).

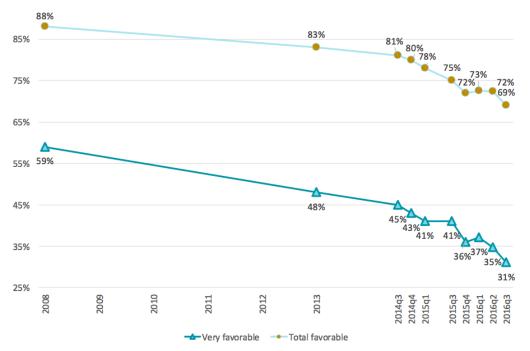


Fig. 1 Do you have a favorable or unfavorable opinion of each of the following? [Zoos] from Julianne Passarelli et al., Favorability Trends, AZA Annual Conference, Sep. 2016.

Along with an overall decline in favorability of zoos, the public's view of animals in captivity has also shifted. While the number of people who are completely against zoos has remained about the same, the number of people who have no objection to animals being in captivity has decreased, and the number of people who are uncomfortable with *certain* species being in captivity has increased (see Fig. 2). This is what many in the media have called "The Blackfish Effect" (Marlborough). Activists have latched onto this uncertainty, and focused their

efforts primarily on getting elephants and cetaceans out of captivity. These efforts have already been successful in some institutions (Fraser; Nixon).

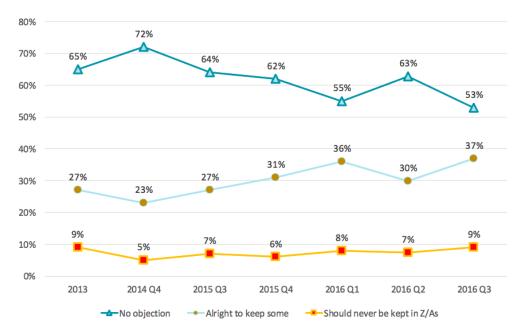


Fig. 2 Which of the following statements comes closest to your own view? from Julianne Passarelli et al., Favorability Trends, AZA Annual Conference, Sep. 2016.

## Which Strategies Are Zoos Already Employing to Combat Their Declining Favorability?

### Major Changes for Some Pioneering Institutions

Even before the AZA Trends Committee released their findings about declining zoo favorability, many in the industry had a sense that the public's opinions were changing. Especially after the release of the documentary *Blackfish*, when the very existence of zoos was being questioned, there were whispers about what would happen next. Some institutions immediately put changes in motion to better their brand and tell their stories.

Cleveland Metroparks Zoo has been a part of the fabric of the community in Cleveland, Ohio since 1882. In 2015, Zoo staff began "exploring what conservation means to people and how best to tell our story to them." (Ewinger). The Zoo designed a new logo, one that put an emphasis on their global conservation work, and developed a new slogan. This slogan, "securing a future for wildlife," was chosen after research in their local community showed the greatest response to that option. In April 2017, Cleveland Metroparks Zoo's new logo and slogan were introduced to the public in a multimedia campaign that reiterated their commitment to global conservation efforts (Ewinger).

Lincoln Park Zoo in Chicago, Illinois, has been a leader in urban wildlife research for many years. In March 2017, they solidified their position as leaders in this field with a new 100year vision, to "inspire communities to create environments where wildlife will thrive in our urbanizing world" (Johnson). Like Cleveland Metroparks Zoo, Lincoln Park Zoo has created a new logo that emphasizes their conservation efforts, and a new tagline: "For Wildlife. For All." (Johnson). Lincoln Park Zoo is also making every effort to tell its story. The Zoo's Urban Wildlife Institute, which collects data about Chicago's wildlife populations using camera traps to inform wildlife-friendly urban planning, has set up a network with other zoos to conduct similar research. The Zoo has crowdsourced some of its data by inviting their local community to help identify animals caught on camera, involving its audience directly in conservation work (Johnson).

Shedd Aquarium, also located in Chicago, Illinois, released a new mission statement in the Spring of 2017: "Sparking compassion, curiosity and conservation for the aquatic animal world" (Coughlin). This new mission and the Aquarium's campaign to promote it emphasize the three pillars of this organization: compassion, or empathy for all animals and recognizing their importance in the world, curiosity, or our natural desire to make connections with animals and learn about the world around us, and conservation, saving wild species and wild spaces (Coughlin). Shedd Aquarium has also streamlined their admission policies and added to existing free admission dates, making it more accessible to all.

Some zoos have opted to tackle the zoo favorability issue from the inside out, and are adopting Denver Zoo's Reaching Our Audience by Developing Mission Aligned Programs (ROADMAP). This program includes two parts: a Guest Interaction Guide and Program Content Standards. The Guest Interaction Guide is an in-depth staff training to educate staff at all levels about age-appropriate mission-aligned connections with visitors. They believe that every interaction is an opportunity to allow guests to engage visitors with their mission. The Program Content Standards ensure that every educational program, from keeper talks to school classes, is outcomes-based and centered on their mission. Denver Zoo has offered workshops over the past year to walk other zoo professionals through the program so they can bring it back to their institutions ("ROADMAP").

Zoos Victoria, a network of three Australian zoos, has created a plan that incorporates internal changes as well as changes to their external marketing. In 2015, they released their Community Conservation Master Plan. In this plan, they proclaim that their vision is to "become the world's largest zoo-based conservation organization," and they state their new mission.

To galvanise communities to commit to the conservation of wildlife and wild places by connecting people and wildlife in the following ways: Opening the door by providing exceptional wildlife encounters that reach beyond the boundaries of our properties;

Leading the way by communicating and demonstrating the role of conservation and research in all we do;

Catalysing action through inspiring experiences that motivate participation leading to conservation and sustainability outcomes. ("Community Conservation Master Plan")

In order to inspire lasting behavior changes and galvanize support for their conservation efforts, Zoos Victoria uses "profound experiences" to engage their visitors. They define a profound experience as, "an emotive wildlife experience that creates deep personal impact, activates intrinsic values and results in lasting behaviour change" ("Community Conservation Master Plan"). By crafting this detailed plan, Zoos Victoria is being proactive in branding itself as a conservation organization.

In order to learn more about what zoos are doing to combat their declining favorability, three survey projects, two existing and one original for the purpose of this capstone paper, will be explored. The two existing audience research projects were conducted at Buttonwood Park Zoo, a small zoo, and Roger Williams Park Zoo, a midsize zoo.

Case Study: Buttonwood Park Zoo

#### Background

Established in 1894, Buttonwood Park Zoo (BPZ) is the twelfth oldest zoo in the United States. This small zoo sits on seven acres of land within Buttonwood Park, in scenic New Bedford, Massachusetts ("Zoo History and Facts"). Its mission is, "The Buttonwood Park Zoo creates experiences for exploring and enjoying the natural world" ("Zoo Mission"). Visitors here are primarily local, and many self-report living within walking distance of the Park and Zoo. For some, visiting is a weekly tradition (Misra, "Buttonwood"). In the 1990s, BPZ closed down for a complete renovation. It reopened in 2000 with the theme "Berkshires to the Sea," housing only species native to the region between the Berkshire mountains and Buzzards Bay, Massachusetts ("Zoo History and Facts").

Although the Zoo grounds have remained largely unchanged in the seventeen years since it reopened, many developments have been going on behind the scenes recently. In the past several years, BPZ hired a new Director, Curator of Education, and Head of Public Relations and Marketing, who each brought with them many ideas for improvement. The Zoo released a new Master Plan in 2016, which laid out its vision to become a "nationally recognized conservation based institution focused on preserving important species indigenous to our region and keystone species found throughout the world" ("Buttonwood Park Zoo Master Plan 2016"). Historically a city zoo, BPZ is currently in the process of privatizing, and will be owned and run completely by the nonprofit Buttonwood Park Zoological Society. This major shift has created a desire from staff for changes to many of their practices across-the-board (Hawthorne). In an effort to improve the visitor experience at BPZ, staff will be trained using Denver Zoo's ROADMAP program. Training full-time, part-time, and seasonal staff from every area of the zoo will increase staff knowledge about the zoo, its purpose, and their role in making it successful. This training also aims to improve visitor experiences in every part of the zoo, from the cafe to the carousel.

Buttonwood Park Zoo just completed the first phase of its new Master Plan, and for the first time in 17 years, it has a brand-new exhibit: Rainforests, Rivers, and Reefs. This diverse new exhibit houses species from many different taxa primarily from South American tropical regions, with the ability for individuals to move between exhibit spaces using overhead chutes ("Our View"). This exciting new development is also the beginning of a move away from housing only local New England species. While the Zoo still feels it is important to educate visitors about the wildlife in their backyard, and will continue to do so, BPZ wants to highlight

its global conservation initiatives with global species exhibits ("Buttonwood Park Zoo Master Plan 2016").

Due to all of these recent developments, and in response to reports of declining zoo favorability, Buttonwood Park Zoo wanted to learn from their audience about the Zoo's perceived role in the community. Toward this end, staff planned to conduct some visitor studies. The purpose of these studies was to give present and future BPZ staff a snapshot of their audience and the impact of their programming. The data collected was intended to help staff create a framework from which to design programming and marketing strategy. It would also serve to lay the groundwork for ongoing evaluation (Hawthorne).

## Methods

### On-grounds data collection

Data for this study was collected in front of various exhibits throughout the Zoo. Participants included adults over the age of 18. Visitors were randomly selected by choosing every fifth adult to pass a predetermined point, within hearing range of the Visitor Studies Intern administering the survey. If the selected visitor agreed to participate in the study by filling out a short survey, they were given a one-page survey attached to a clipboard with a pen. If they declined to participate, the count started over. Data was collected on BPZ grounds on weekends during the highest visitation hours from June through August 2017. To avoid biasing the participant's answers, no additional information was given about the study or the Zoo. When the participants returned the completed survey, the intern recorded the date, time, and exhibit on the back of the page. If surveys were answered with the input of more than one person, if the intern had to read the survey aloud to the participant, or if the visitor requested to take the survey without being the fifth person, the survey was marked as non-random. To identify any questions that needed to be modified or removed, two test versions were created and administered as prototypes (n=10 and n=12, respectively). Issues with some of the questions were evident shortly after beginning, so prototype samples were small.

## Online data collection

Since the timeframe for this study was relatively short, Zoo staff wanted to maximize the number of respondents by sending the survey to BPZ members via email. Questions were loaded into a survey on the Zoo's Constant Contact account and sent to the BPZ mailing list. Wording of some questions on the online survey differed slightly from the on-grounds survey. For example, "Why did you visit the Zoo today?" was changed to "Why do you visit the Zoo?" for the online survey. Participants of both surveys were asked their reasons for visiting, their status as a member of BPZ, and some general questions about Zoo amenities. They were given six statements relating to conservation issues and the Zoo's conservation and education programs, and asked to state whether they agreed or disagreed using a rating scale with five points ranging from "Strongly Disagree" to "Strongly Agree" (See Appendix A). They were also asked how they would describe the Zoo's role in the community and how they would define the word "conservation" (Choi).

#### Results

Combining results from both the online and on-grounds survey, there were 247 respondents. Buttonwood Park Zoo members comprised 72.8% of respondents. When asked why they visit the Zoo, 81.1% of respondents reported that they visit BPZ because it's a great place to bring their family, see animals, and because it is so close to home (Misra, "Buttonwood"). This supports BPZ staff's claim that it is a family zoo for locals.

Respondents were asked to rank the Zoo's various roles on level of importance. "Animal care," "entertainment venue," "educational resource," "family attraction," and "conservation and environmental advocacy" were listed alongside a five-point scale from Most Important to Least Important. Respondents were instructed to draw a line connecting each role to its level of importance. In prototyping the surveys, respondents more clearly understood this method over simply being asked to rank the roles one through five. Calculating the mode of responses for each role yielded these results: "entertainment venue" was ranked Most Important, "educational resource" and "conservation and environmental advocacy" were both ranked Somewhat Important, "animal care" was ranked Less Important, and "family attraction" was ranked Least Important" (Misra, "Buttonwood").

When asked what "conservation" meant to them, 62.5% of respondents chose "protecting areas in nature," while just 17.7% chose "protecting endangered species" (Misra, "Buttonwood"). Of the respondents who chose "other," 82% felt the definition of conservation encompassed all available choices, 9% answered "recycling," and 9% mentioned conserving resources (see Fig. 3). These results echo market research, where 37% of respondents described "conservation as "protecting areas in nature," and just 11% described it as "protecting endangered species" (Choi). Going forward, it will be integral for BPZ to convey to its visitors that the work they do to save endangered species is conservation.

Shown in Figure 4, nearly half of respondents were unsure whether or not Buttonwood Park Zoo engaged in global conservation efforts (Misra, "Buttonwood"). However, nearly 80% of respondents agreed or strongly agreed that by visiting the Zoo, they contribute to conservation efforts. Respondents agreed or strongly agreed that zoos help care for entire species, not just the individual animals in the zoo 77.5% of the time.

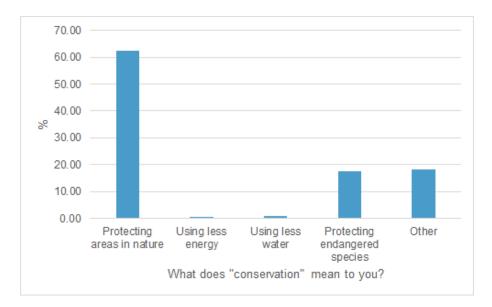


Fig. 3 Buttonwood Park Zoo, Audience Survey

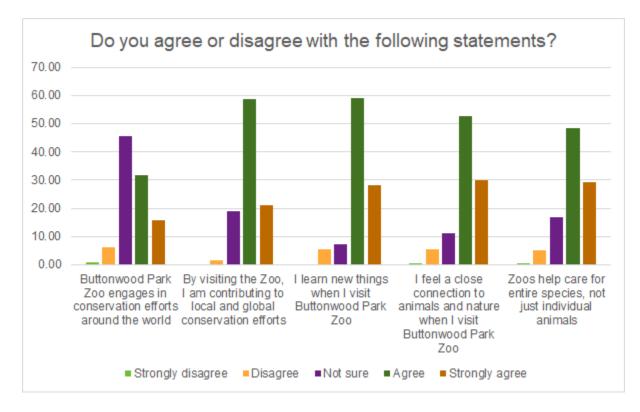


Fig. 4 Buttonwood Park Zoo, Audience Survey

#### Implications

Buttonwood Park Zoo staff will use the data collected in this survey to inform future marketing decisions, design programming, and train staff (Hawthorne). It is clear that this zoo is well-loved by locals, and BPZ should embrace its image as an entertainment venue for local families. They should hone this image and use it to grow their community. However, the results of this survey suggest a lack of awareness about BPZ's conservation efforts. In the coming years, they should focus on communicating their dedication to saving species.

Case Study: Roger Williams Park Zoo

## Background

The third oldest zoo in the United States, Roger Williams Park Zoo (RWPZ) opened in 1872. This forty-acre zoo is a part of the larger Roger Williams Park in Providence, Rhode Island ("Our History").

Roger Williams Park Zoo strives to engage guests in an extraordinary and unique educational experience to improve their understanding of and appreciation for the natural world. We contribute significantly to the conservation of our earth's animals, plants and other natural resources by challenging ourselves and our audience to act as responsible environmental stewards. ("Our Mission")

This midsize zoo draws over 675 thousand visitors each year from all over New England and beyond. The Zoo is home to over 160 species of mammals, birds, reptiles, amphibians, and invertebrates from the African plains, South American rainforests, Asian mountains and forests, and North America (Mariani).

Like Buttonwood Park Zoo, Roger Williams Park Zoo has undergone many changes in the last few years. Major new exhibits were opened in 2012, 2013, and 2014, and its twenty-year

Master Plan was released in 2015. Not slowing down at all, RWPZ began work on the first phase of its Master Plan in 2016 ("20-Year Master Plan"). The Faces of the Rainforest, an immersive, living, indoor rainforest will open in June of 2018, followed by the construction of a new education center. After members of the AZA Trends Committee presented the findings of their zoo favorability study at the 2016 AZA conference, RWPZ staff started discussing these alarming trends in earnest. The decision was made to begin work on a new Strategic Plan. The Zoo created a Strategic Messaging Task Force with several committees, each made up of members from every department, each charged with a specific task ("Strategic Messaging Task Force"). The Community Forums Committee (CFC) was tasked with creating surveys and focus groups to learn from RWPZ's external audiences. This committee's first survey focused on the Zoo's purpose and role in the community.

#### Methods

The CFC's survey was sent out via SurveyMonkey to Roger Williams Park Zoo's entire mailing list, which is comprised of Zoo members, event attendees, program registrants, and anyone who has opted in to the RWPZ e-newsletter. Approximately 191 thousand people received this survey in their inboxes (see Appendix B).

This survey consisted of some questions from the AZA Trends Committee survey, and some original questions to find out what the audience thought RWPZ's mission was, what they perceived to be its purpose, and how they aligned with certain issues (Passarelli et al.).

#### Results

With over one thousand responses, the response rate for this survey was just about 1%. Of the respondents, 63% were RWPZ members. Respondents were asked to describe the mission of RWPZ, and those responses were categorized using emic coding. When asked to describe RWPZ's mission, over 60% of respondents mentioned conservation and/or education. Others mentioned entertainment, animal care, connecting people and animals, and making money ("What Does the Zoo Mean to You?"). Over 10% of respondents did not know the mission at all (see fig. 5).

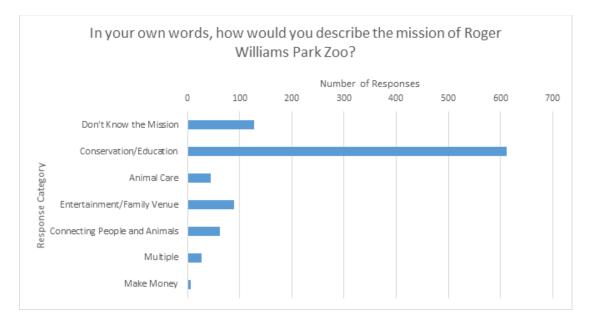


Fig. 5 Roger Williams Park Zoo, "What Does the Zoo Mean to You?" survey

Respondents were asked to rank the Zoo's various roles on level of importance. "Animal care," "entertainment venue," "educational resource," "family attraction," and "conservation and environmental advocacy" were rated on a scale from one to five, with one being the Most Important. "Entertainment venue" and "conservation and environmental advocacy" were rated the Least Important, with an average rating of 4.31 and 2.95, respectively ("What Does the Zoo Mean to You?"). The Most Important role, with an average rating of 2.46, was "animal care" (see Fig. 6). Standard deviation of these responses was high, at 1.22 for entertainment venue and 1.24 for animal care, the Least and Most important roles, respectively. Because of this high response variation, it may be more helpful to look at the mode of responses, rather than the

mean. The ranking based on most frequent response was as follows, from Most to Least important: "animal care," "conservation and environmental advocacy," "educational resource," "family attraction," "entertainment venue" ("What Does the Zoo Mean to You?").

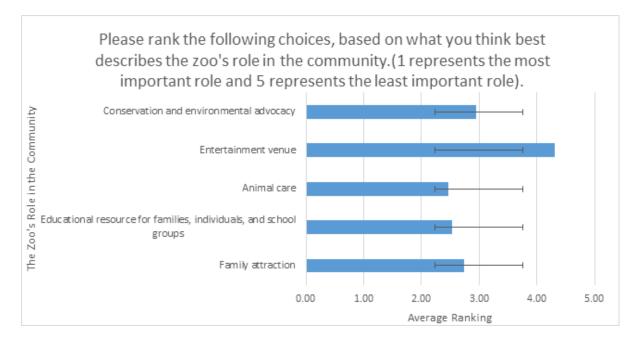


Fig. 6 Roger Williams Park Zoo, "What Does the Zoo Mean to You?" survey

Respondents were also asked to rate their level of agreement with certain statements relating to environmental issues on a scale from one to five, one being "Strongly Agree" and five being "Strongly Disagree." Responses to this question gave Zoo staff an idea of what the audience thinks about their place in conservation as well as the Zoo's ("What Does the Zoo Mean to You?"). On average, respondents agreed that zoos play an important role in protecting the environment, and that visiting zoos makes them feel more connected to nature. They disagreed, on average, that zoos do not help animals. Respondents also disagreed that they will be unaffected by the effects of climate change, but were unsure about the things they can do to help save the planet (see Fig. 7).

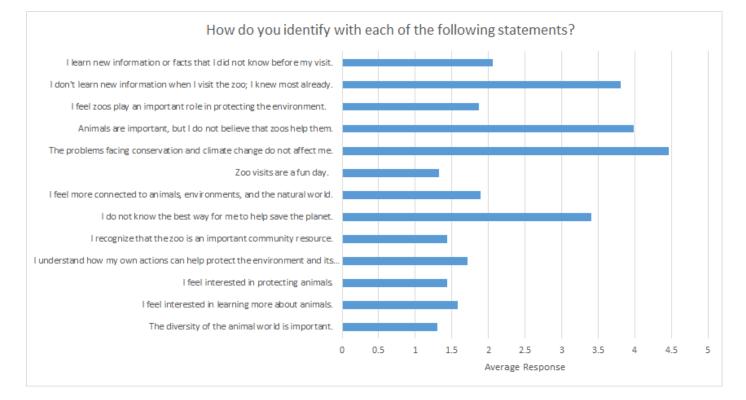


Fig. 7 Roger Williams Park Zoo, "What Does the Zoo Mean to You?" survey Implications

Results from this survey will be used to inform discussions during forthcoming focus groups with key audiences and stakeholders in the community. These data will also help shape RWPZ's new Strategic Plan, and eventually a new mission statement. It is clear from these results that although RWPZ's audience may not describe it as a conservation organization in so many words, they are aware of the Zoo's efforts in regards to conservation and education.

As a direct result of some of the feedback from this survey, Zoo staff set out a plan to "tell their story" by making the public more aware of behind-the-scenes animal care practices. In Summer 2017, RWPZ opened its giraffe and elephant pavillion with an event called, "Elephant Barn Open House," free to a certain number of Zoo visitors on a first-come, first-served basis. These guests were given behind-the-scenes tours by elephant and giraffe keepers, who were able to demonstrate and explain some of the amazing work they do every day. The Public Relations department also invited local news outlets to cover stories on two of the Zoo's elderly giraffes, who both require special care. Southern New England news viewers were treated to stories about Amber, the oldest Maasai giraffe in North America, who is completely blind, and Sukari, whose arthritis is treated with acupuncture. Both storytelling efforts were very well-received, even making national and international headlines, and the Zoo plans to do more in the upcoming year (Blakely; Mclain; Niezgoda).

Going forward, RWPZ will focus on storytelling as a means of showing its community some of the amazing work that goes on behind-the-scenes. The Zoo should craft a Strategic Plan that concentrates on proactivity rather than reactivity. RWPZ should also commit to making changes that make sense for their whole community, internal and external.

## **Survey of Leaders of AZA Institutions**

#### Background

In order to learn more about the zoo industry's response to declining favorability trends, a survey was created by RWPZ's Education Program Registrar and sent to leaders of AZA-accredited institutions (see Appendix C). The goals of this survey were to determine if favorability issues are being discussed at an organizational level across the industry, ascertain what strategies zoos are employing in response to the trends, and to establish whether the rationale behind these strategies are backed by audience research.

### Methods

Dr. Jeremy Goodman, Executive Director of Roger Williams Park Zoo sent the survey to his colleagues with an email (Goodman). This survey was sent to approximately 250 zoo and aquarium directors and CEOs (hereafter directors) via the AZA Director's listserv.

## Results

#### **Internal Discussions About Zoo Favorability**

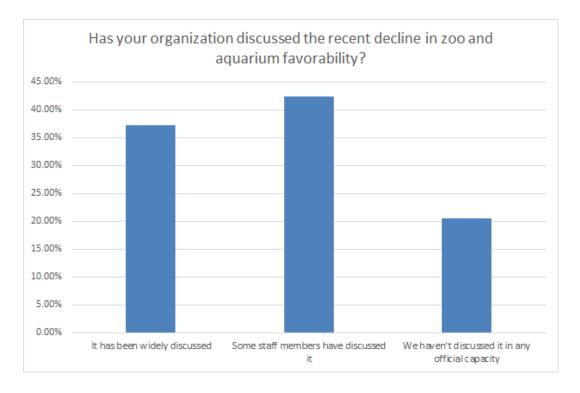
A total of sixty-nine directors of AZA- accredited zoos and aquariums (hereafter zoos) completed the Communicating Conservation survey, for a response rate of 28%. Respondents represent organizations from forty three of the fifty United States, and three locations outside of the United States (Misra, "Communicating"). Of these respondents, about 20% had not discussed favorability trends in any official capacity at their institution. Favorability trends have been widely discussed in 37% of respondents' institutions, and discussed by some members of 42% of responding institutions (see Fig. 8). This was a surprising result, since more than half of respondents reported that zoo favorability issues have not been discussed widely in their organization. Further research could determine details about this. Why aren't they discussing it? Could it be that only upper-level management is involved in these talks? If so, are zoo directors placing enough value on input from all staff members? This survey focused on zoo directors because they are privy to all institutional knowledge. Further study could include zoo staff at all levels.

Survey respondents were asked, with the knowledge that zoos face many different challenges, if addressing zoo favorability issues is a priority for their organization (Misra, "Communicating"). Responses were given on a five-point scale from "It's not a priority" to "It's our #1 priority." Three respondents answered "It's not a priority (5.26%), eight responded "It's low on the list" (14.04%), three were unsure (5.26%), thirty-nine reported that "It's high on our list" (68.42%), and four said "It's our #1 priority" (7.02%). Of the respondents who answered that zoo favorability has been widely discussed in their organization, all but one, or 92.85%, reported this issue as high priority or the number one priority for that organization. This suggests

that these zoos are taking the issue seriously and making it a priority to address it. About 35% of respondents who reported that some members of their staff have discussed zoo favorability marked the issue as low or no priority for their organization. Just over half (55.17%) marked it as a high priority issue (Misra, "Communicating"). These results suggest that directors who see addressing zoo favorability issues as a priority for their organization are discussing it with their staff to try to come up with solutions. This could be another area expanded upon with further research. Why are so many zoos not making this issue a priority? Is a lack of resources at fault? It is possible that some in the field do not see this as a priority because it is not affecting them personally (Misra, "Communicating")?

## **Combating Declining Favorability**

Respondents were asked what, if anything, their organization is doing to combat declining favorability, and these open-ended responses were categorized using emic coding. One respondent said, "While we are aware of the overall trends, locally we do not see the same challenges" (Misra, "Communicating"). Another respondent expressed a similar sentiment, saying, "We have a very positive local following and also focus on local history, which means the trend on negative feelings is not impacting us much" (Misra, "Communicating"). These two responses represent less than 3% of the directors who responded, so it does not seem to be a common theme. A trend that did become apparent in these results is that zoos feel they are doing enough for conservation but are not communicating about it not enough. Twenty-seven respondents (39.13%) said that they are enhancing communication about their existing missions, and seven (10.14%) reported that they have or are in the process of creating new branding or messaging. Just one respondent mentioned increasing their actual conservation programs.



## Fig. 8 Asha Misra, Communicating Conservation survey

Other trends included increasing focus on animal care practices and conservation programs in external communications (23, 33.33%), increasing the number of education programs and signage that deals with animal care and conservation (12, 17.39%), and retraining staff along with increasing staff-visitor interactions (11, 15.94%). Nine respondents said that their institutions were making no changes to combat declining favorability (13.04%) (Misra, "Communications").

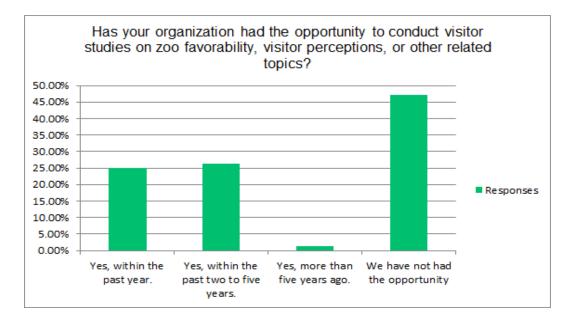
Another major theme apparent in this data as well as previous research, is the idea that zoos want to "tell their stories" (Johnson; Misra, "Communicating). Zoos want to put a face on what they do by training staff on how to have conversations with the public about everything they do for conservation (Misra, "Communicating"). They want to increase behind-the-scenes exposure to showcase all of the incredible animal care they provide. One respondent even mentioned developing a network television show that aired nationally and gave viewers an indepth look at what it takes to run a zoo (Misra, "Communicating").

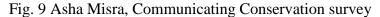
One director responded that they were, "rolling out a separate Conservation & Research Facebook page to be able to share more stories about the good work we do and support." This response is surprising, since it seems that separating their fun and promotional posts from posts about their conservation efforts suggests that they are making content for two separate audiences. They are effectively relegating the conservation posts to a separate, smaller, audience, only exposing their main audience to entertaining content. As discussed earlier in this paper, continuing to ignore the connections between fun and education may do more harm than good. Further research would be beneficial in finding out the reasoning behind these changes or the decision not to make any. While respondents were asked about research conducted at their institutions, they were not asked directly whether or not institutional changes were based on research. Only four respondents mentioned engaging with or listening to their communities.

### Are Zoos Researching Their Audience's Perceptions?

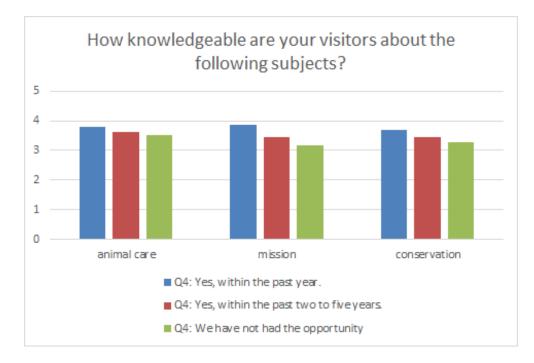
When asked how their organizations are addressing declining favorability, only four respondents mentioned engaging with or listening to their communities. Respondents were asked when their organization last had the opportunity to conduct visitor studies on zoo favorability, visitor perceptions, or other related topics. They chose from these four options: "yes, within the past year," "yes, within the past two to five years," "yes, more than five years ago," or, "we have not had the opportunity" (Misra, "Communicating"). The overall percentage of respondents whose organizations have not conducted this research is 47.22%. A quarter of respondents reported conducting research within the past year, and another 26.39% have done research within the past five years (see Fig. 9).

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Respondents were asked to rate their audience's level of knowledge on certain topics. Four topics, "your animal care practices," "your mission," "your conservation efforts," and "climate change," were rated on a five-point scale from "1 - Not At All Knowledgeable" to "5 -Very Knowledgeable" (Misra, "Communicating"). When responses are viewed through the lens of when or if they conducted audience research, a pattern emerges (see Fig. 10). A one-way ANOVA test shows that there is a significant difference between respondent's rating of their audience's knowledge about their mission based on when they conducted research with that audience (p = 0.04). This suggests that conducting research on audience perceptions is an effective way for zoos to get to know their audience. Organizations that have recently conducted research with their audience may be in a better position to make informed decisions about institutional changes.





#### A Disparity Between Large and Small Zoos

How much are zoos spending on direct conservation efforts? For the purpose of this study, "direct conservation efforts" were defined as programs like breed and re-release, field work, and monetary donations to conservation organizations. As discussed earlier in this paper, the conservation work that zoos do spans a wide range of efforts. In order to collect more accurate data, the definition was narrowed to direct efforts for this survey. When asked what percentage of their organization's budget goes toward these direct efforts, the average response was 3.17% overall, after removing outliers. Small zoos, with less than 250 thousand visitors per year, reported an average of 2.9%. Midsize zoos, with 250 thousand to 750 thousand visitors per year, reported 3.2%, on average. Large zoos, with over 750 thousand visitors per year, reported spending an average of 3.3% of their annual budget on direct conservation measures. The exact same number of small, medium, and large zoos participated in this survey, with twenty-three of each. While a one-way ANOVA test showed direct conservation spending did not differ

significantly based on the size of the institution (p = 0.72), there does seem to be relationships between an organization's size and other factors.

When asked where the issue of zoo favorability falls on their list of priorities, respondents from nine small zoos, twelve mid-size zoos, and seventeen large zoos reported it as a high priority for their organization. Small zoos have to make their limited resources go further, and may not have the time or staff to dedicate to tackling this issue. Another disparity between small and large zoos is apparent in research on audience perceptions. Respondents from small zoos reported not having conducted this research at the highest percentage, at 56.52%. Respondents from midsize and large zoos reported this at lower percentages, with 47.83% and 43.83%, respectively. In the past year, 34.78% of large zoos have conducted research on topics relating to visitor perceptions, while only 13.04% of small zoos have (see Fig. 11).

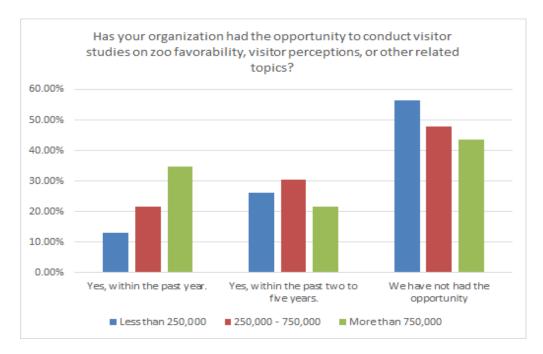
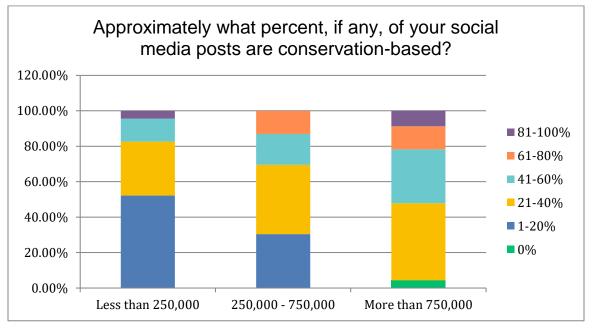
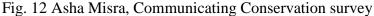


Fig. 11 Asha Misra, Communicating Conservation survey

Are small and large zoos talking about conservation with their audiences at the same rate? According to Figure 12, they are not. When asked what percentage of their social media posts are conservation-centric, small and midsize zoos reported conservation-centric social media posts at much lower percentages. Just one large zoo reported anything less than 20% and two reported 80% or more (Misra, "Communicating"). If they are not telling their audience about their conservation work, small zoos with more limited resources may experience the effects of declining zoo favorability disproportionately.





Small zoos spend, on average, about the same percentage of their budgets on direct conservation as large zoos. However, their ability to communicate their conservation efforts and to conduct audience research is hampered by a lack of resources. As Carr and Cohen said, it is essential that zoos are working together on these issues. Solutions cannot be adopted by large, big-city zoos alone. Appendix D is a generic sample survey that any zoo could customize and use to survey their audience. If a lack of resources is affecting small zoos' ability to conduct research and invest in improving their communication, the AZA should focus on finding ways to support small zoos in conducting surveys like this sample.

#### Conclusions

The zoos of today face an uphill battle. They should reinvent the way they talk about everything they do. They need to convey the fact that they exist for one reason: to save species. Steve Burns, Chair of the AZA Board, sums up the importance of communicating conservation:

Your conservation program should help your zoo or aquarium. It should mean that more people like your institution. It should mean that you have more visitors and receive more donations. Therefore, it is important to tell your community what you are doing. It is important to let visitors know how their support is making a difference in the conservation of wildlife. It is important to turn the act of visiting the zoo or aquarium into a conservation action. ("Proceedings" 8)

While it is essential for zoos to work together to convey a unified message, how each zoo accomplishes that may be different (Carr and Cohen). No two audiences are going to be exactly alike, so zoos should start by learning from their own. If zoos understand their audiences' perceptions about issues relating to conservation, they can more effectively communicate with them about those issues (Rischbieth).

Zoos large and small should find a way to make it a priority to address declining zoo favorability. According to Denver Zoo's ROADMAP program, creating a meaningful experience for visitors requires meeting them where they are. To know "where they are," zoos need to ask. Zoos should dedicate resources toward conducting audience research before making sweeping organizational changes (see Appendix D).

Communicating conservation messages is not easy, but when it is done successfully, it can have profound effects. Zoos are, and have been, wonderful places for families to gather and learn in a fun and wholesome environment. They are, and have been, powerful forces for global

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conservation. They just need to get better at conveying this to the world. Zoos need to tell their stories. However, they must do it in a way that makes sense to the people who are listening.

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### Appendix A

Buttonwood Park Zoo Visitor Survey

Why did you come to the Zoo today?

# Please rank the following choices, based on what you think best describes the Zoo's role in the Community. <u>Draw a line connecting each role with its level of importance.</u>

Most Important	Family attraction
Very Important	Educational resource
Somewhat Important	Animal care
Less Important	Entertainment venue
Least Important	Conservation and environmental advocacy

### What does "conservation" mean to you? Select one.

- Protection of areas in nature
- Using less energy
- Using less water
- Protection of endangered species
- Something else. Please Explain:

### Are you a Buttonwood Park Zoo member? Circle one.

Yes

If yes, why did you become a member? Select up to two:

No

- Li's a great value
- □ I want to support the Zoo's initiatives
- L enjoy the benefits entitled to members
- I want to be a part of the BPZ community

### Do you agree or disagree with the following statements? Circle one.

Buttonwood Park Zoo engages in conservation efforts around the world 1 2 3 4 5						
Strongly disagree	_ Disagree	Not sure	Agree	Strongly agree		
<u> </u>			9			
By visiting the Zoo, I	-	-				
1 Strongly disagree	2 Disagree	3 Not sure	4 Agree	5 Strongly agree		
Strongly disagree	Disagree	NOL SUIE	Agree	Strongly agree		
I learn new things wh	en I visit Buttor	wood Park Zoo				
1	2	3	4	5		
Strongly disagree	Disagree	Not sure	Agree	Strongly agree		
l feel a close connec	tion to animals	and naturo whon	Lvicit Buttonwo	nd Park Zoo		
1	2	3	4	5 5		
Strongly disagree	Disagree	Not sure	Agree	Strongly agree		
			, igi e e			
Zoos help care for er	-	-		_		
1 Olasa shu disa sasa s	2	3	4	5		
Strongly disagree	Disagree	Not sure	Agree	Strongly agree		
My actions have an e	effect on the env	vironment locally	/			
1	2	3	4	5		
Strongly disagree	Disagree	Not sure	Agree	Strongly agree		
My actions have an effect on the environment globally						
1	2	3	4	5		
Strongly disagree	Disagree	Not sure	Agree	Strongly agree		
	0		0	37-3-5-		

### Please write your 5-digit ZIP code:

What is your age?

What is your gender?

# Appendix B

1. In your own words, how would you describe the mission of Roger Williams Park Zoo?         2. Please rank the following choices, based on what you think best describes the zoo's role in the community.         2. Please rank the following choices, based on what you think best describes the zoo's role in the community.         ( <i>t represents the most important role and 5 represents the least important role</i> ).         Family attraction         Educational resource for families, individuals, and school groups         Animal care         Entertainment venue         Conservation and environmental advocacy         3. Why do you visit Roger Williams Park Zoo? (Please choose one).         Admission and/or membership is a great value.         I like to support the zoo and its initiatives.         I enjoy viewing the animal exhibits.         Zoo visits carry an important educational component.         Its a fun daytime outing.	What does the	zoo mean to our community?
2. Please rank the following choices, based on what you think best describes the zoo's role in the community. (1 represents the most important role and 5 represents the least important role).  Family attraction  Family attraction  Animal care  Conservation and environmental advocacy  Animission and/or membership is a great value.  Admission and/or membership is a great value.  I like to support the zoo and its initiatives. I enjoy viewing the animal exhibits. Zoo visits carry an important educational component. It's a fun daytime outing.		
community. (1 represents the most important role and 5 represents the least important role).  Family attraction  Educational resource for families, individuals, and school groups  Animal care  Entertainment venue  Conservation and environmental advocacy  Admission and/or membership is a great value.  I like to support the zoo and its initiatives. I lenjoy viewing the animal exhibits. Zoo visits carry an important educational component. It's a fun daytime outing.	* 1. In your owr	words, how would you describe the mission of Roger Williams Park Zoo?
community. (1 represents the most important role and 5 represents the least important role).  Family attraction Educational resource for families, individuals, and school groups Animal care Entertainment venue Conservation and environmental advocacy  Admission and/or membership is a great value. I like to support the zoo and its initiatives. I lenjoy viewing the animal exhibits. Zoo visits carry an important educational component. It's a fun daytime outing.		
Family attraction Educational resource for families, individuals, and school groups Animal care Entertainment venue Conservation and environmental advocacy 3. Why do you visit Roger Williams Park Zoo? (Please choose one). Admission and/or membership is a great value. I like to support the zoo and its initiatives. I enjoy viewing the animal exhibits. Zoo visits carry an important educational component. It's a fun daytime outing.		the following choices, based on what you think best describes the zoo's role in the
Educational resource for families, individuals, and school groups   Animal care   Entertainment venue   Conservation and environmental advocacy     3. Why do you visit Roger Williams Park Zoo? (Please choose one).   Admission and/or membership is a great value.   I like to support the zoo and its initiatives.   I enjoy viewing the animal exhibits.   Zoo visits carry an important educational component.   It's a fun daytime outing.	(1 represents the	e most important role and 5 represents the least important role).
Animal care Entertainment venue Conservation and environmental advocacy * 3. Why do you visit Roger Williams Park Zoo? (Please choose one). Admission and/or membership is a great value. I like to support the zoo and its initiatives. I enjoy viewing the animal exhibits. Zoo visits carry an important educational component. It's a fun daytime outing.		Family attraction
Entertainment venue Conservation and environmental advocacy * 3. Why do you visit Roger Williams Park Zoo? (Please choose one). Admission and/or membership is a great value. I like to support the zoo and its initiatives. I like to support the zoo and its initiatives. I enjoy viewing the animal exhibits. Zoo visits carry an important educational component. It's a fun daytime outing.		Educational resource for families, individuals, and school groups
<ul> <li>Conservation and environmental advocacy</li> <li>* 3. Why do you visit Roger Williams Park Zoo? (Please choose one).</li> <li>Admission and/or membership is a great value.</li> <li>I like to support the zoo and its initiatives.</li> <li>I enjoy viewing the animal exhibits.</li> <li>Zoo visits carry an important educational component.</li> <li>It's a fun daytime outing.</li> </ul>		Animal care
<ul> <li>* 3. Why do you visit Roger Williams Park Zoo? (Please choose one).</li> <li>Admission and/or membership is a great value.</li> <li>I like to support the zoo and its initiatives.</li> <li>I enjoy viewing the animal exhibits.</li> <li>Zoo visits carry an important educational component.</li> <li>It's a fun daytime outing.</li> </ul>		Entertainment venue
<ul> <li>Admission and/or membership is a great value.</li> <li>I like to support the zoo and its initiatives.</li> <li>I enjoy viewing the animal exhibits.</li> <li>Zoo visits carry an important educational component.</li> <li>It's a fun daytime outing.</li> </ul>		Conservation and environmental advocacy
<ul> <li>Admission and/or membership is a great value.</li> <li>I like to support the zoo and its initiatives.</li> <li>I enjoy viewing the animal exhibits.</li> <li>Zoo visits carry an important educational component.</li> <li>It's a fun daytime outing.</li> </ul>	* 3. Why do you	ı visit Roger Williams Park Zoo? (Please choose one).
<ul> <li>I enjoy viewing the animal exhibits.</li> <li>Zoo visits carry an important educational component.</li> <li>It's a fun daytime outing.</li> </ul>		
<ul> <li>I enjoy viewing the animal exhibits.</li> <li>Zoo visits carry an important educational component.</li> <li>It's a fun daytime outing.</li> </ul>	<b>F</b> 3	
It's a fun daytime outing.		ving the animal exhibits.
	Zoo visits c	arry an important educational component.
Lide net visit Deger Williams Dark Zoo	🔲 It's a fun da	ytime outing.
I do hol visit Roger Williams Park 200.	I do not visi	t Roger Williams Park Zoo.

Strongly Agree		Agree	Neutral Disagr	ee Strongly Disagree
The diversity of the animal world is important.				
I feel interested in learning more about animals.				
I feel interested in protecting animals.				
I understand how my own actions can help protect the environment and its inhabitants.				
I recognize that the zoo is an important community resource.				
I do not know the best way for me to help save the planet.				
I feel more connected to animals, environments, and the natural world.				
Zoo visits are a fun day.				
The problems facing conservation and climate change do not affect me.				
Animals are important, but I do not believe that zoos help them.				
I feel zoos play an important role in protecting the environment.				
I don't learn new information when I visit the zoo; I knew most already.				
I learn new information or facts that I did not know before my visit.				

Tell us about yourself.
9. Are you a current zoo member (or have you been in the past 6 months)? Yes No
<ul> <li>* 10. What is your age?</li> <li>18 or younger</li> <li>19 - 25</li> <li>26 - 35</li> <li>36 - 49</li> <li>50 - 64</li> <li>65 or older</li> </ul>
<ul> <li>* 11. In what ZIP code do you currently reside? (Enter 5-digit ZIP code; ex: 02907)</li> <li>12. Please share any additional thoughts you may have about zoos and/or the impressions of a zoo visit.</li> <li>13. We want to hear more! If you'd like to continue participating in this project, please share your email here:</li> </ul>

### Appendix C

## **Communicating Conservation**

\* 1. Has your organization discussed the recent decline in zoo and aquarium favorability?

- 🔘 It has been widely discussed
- Some staff members have discussed it
- 🔘 We haven't discussed it in any official capacity
- Other (please specify)

*	<sup>4</sup> 2. With the knowledge that zoos and aquariums are facing challenges from many
	different directions, is addressing the favorability issue a priority for your
	organization? 🔽

It's not a priority	It's low on the list	Not sure	It's high on our list	It's our #1 priority
$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$

\* 3. What strategies, if any, has your organization employed or discussed employing to address the issue of zoo and aquarium favorability?

# \* 4. Has your organization had the opportunity to conduct visitor studies on zoo favorability, visitor perceptions, or other related topics?

- Yes, within the past year.
- Yes, within the past two to five years.
- Yes, more than five years ago.
- $\bigcirc$  We have not had the opportunity

# ★ 5. How knowledgeable are your visitors about the following subjects? (If you did not study this topic, please make your best guess).

	Not at all	Slightly	Somewhat	Moderately	Very	Unsure
Your animal care practices	•	•	0	0	•	ullet
Your mission	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	0
Climate change	0	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	0
Your institution's conservation efforts	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$

# \* 6. Do you believe that a majority of visitors understand your organization's role in global conservation?

- Yes, a majority see us as a conservation organization.
- No, a majority do not see us as a conservation organization.
- Other (please specify)

\$

### 7. In what state is your organization located? 🔽

\* 8. Approximately what percent, if any, of your social media posts are conservationbased?

0%	0 41-60%
1-20%	0 61-80%
21-40%	0 81-100%

\* 9. Which type of stories elicit the highest level of engagement from your audience on social media?

O News updates about your organization

O Cute or funny pictures and videos of your animals

Ads for special events or programs

O Conservation initiatives/environmental advocacy

Other (please specify)

\* 10. What is your organization's approximate annual visitation?

O Less than 250,000

250,000 - 750,000

O More than 750,000

 \* 11. Approximately what percent of your organization's annual budget is spent on direct conservation initiatives (breed and re-release, field work, monetary donations to conservation organizations, etc)?

### Appendix D

### Sample Survey on Zoo Audience Perceptions

### In your own words, please describe the mission of [zoo]:

### What does "conservation" mean to you? Select one.

- Protection of areas in nature
- □ Using less energy
- □ Using less water
- Protection of endangered species
- □ Something else. Please Explain:

### Do you agree or disagree with the following statements? Circle one.

[Zoo] engages in conservation efforts around the world							
1	2	3	4	5			
Strongly disagree	Disagree	Not sure	Agree	Strongly agree			
By visiting the Zoo,	I am contrib	uting to local and	global cons	ervation efforts			
1	2	3	4	5			
Strongly disagree	Disagree	Not sure	Agree	Strongly agree			
I learn new things when I visit [zoo]							
Strongly disagree	Disagree	Not sure	Agree	Strongly agree			
Zoos help care for e	entire species,	not just individu	al animals				
1	2	3	4	5			
Strongly disagree	Disagree	Not sure	Agree	Strongly agree			
My actions have an effect on the environment <i>locally</i>							
1	2	3	4	5			
Strongly disagree	Disagree	Not sure	Agree	Strongly agree			

### My actions have an effect on the environment globally

1	2	3	4	5
Strongly disagree	Disagree	Not sure	Agree	Strongly agree

[Zoo] is a conservation organization						
1	2	3	4	5		
Strongly disagree	Disagree	Not sure	Agree	Strongly agree		

### Of all the roles that [zoo] plays in the community, which is the most important to you?

- □ Fun place to spend time with family
- □ Educational resource
- □ Conservation organization
- □ Animal Care

### Of all the roles that [zoo] plays in the community, which is the most important to the zoo?

- □ Fun place to spend time with family
- **General Educational resource**
- □ Conservation organization
- □ Animal Care

### When you visit the zoo, what is most important to you?

- □ You/your family have fun
- □ You get a good value for your money
- □ You feel you have contributed to conservation efforts
- □ You/your family learn something new