

TOWARDS A GLOBALIZATION OF CONSERVATION  
MODELS IN ZOOS: THE AZA AND THE CASE  
OF A MEXICAN ZOOLOGICAL PARK  
IN LEÓN

by

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Presented to the Faculty of the Graduate School of  
The University of Texas at Arlington in Partial Fulfillment  
of the Requirements  
for the Degree of  
MASTER OF ARTS IN ANTHROPOLOGY

THE UNIVERSITY OF TEXAS AT ARLINGTON

MAY 2011

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## ACKNOWLEDGEMENTS

I owe the deepest gratitude to my thesis advisor, Dr. Christian Zolniski, whose support and encouragement led me from the germ of an idea to the realization of a project with ample future potential. I would also like to thank the other members of my thesis committee, Dr. Kat Brown and Dr. Ritu Khanduri, for providing their subject expertise.

I am also indebted to the staff of Parque Zoológico de León, particularly the members of the education staff, which opened their lives to me, providing a professional opportunity that I had never imagined and complete access to the entirety of their craft. It is my hope that in this work I have done their determination justice and have adequately expressed my appreciation of what they do.

Lastly, I offer my regards to my zoo colleagues for their unwavering support, undergraduate advisor Dr. Lawrence Kuznar for his tireless guidance, and my devoted family for never doubting that a cultural anthropologist belongs in the zoo.

April 8, 2011

ABSTRACT

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The recent expansion of the Association of Zoos and Aquariums (AZA) to include culturally-foreign institutions, underscores the ever-increasing globalization of conservation ideas. This paper investigates the structural and cultural barriers faced by recent member, Zooleón, in Guanajuato, Mexico.

Distinct structural differences – that underscore the level of corporatization present in U.S. institutions – and a lack of understanding these differences by the AZA has resulted in Zooleón finding itself unable to meet the demands of a *polished* AZA institution. A significant cultural difference that emerges from the structural differences encountered is paramount importance of family bonding by means of a zoo visit. The zoo also faces cultural barriers encountered amongst its own staff. Class and education distinctions clearly shape interactions with the visiting public and the effectiveness of conservation messaging.

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CHAPTER 1  
INTRODUCTION

No one could make a greater mistake than he who did nothing because he could do only a little.  
Edmund Burke

According to the World Wildlife Fund (WWF), “At the present rates of extinction, as many as 20% of the world's 7-15 million species could be gone in the next 30 years.” This rate of loss is second only to the disappearance of the dinosaurs 65 million years ago. Of this unprecedented decline in biological diversity, 80% is attributable to loss of habitat and human population growth (African Conservancy). In fact, according to the US Census Bureau and the Public Broadcasting Service (PBS), every 20 minutes another plant or animal species becomes extinct – while the human population increases by 3,500 individuals. While these statistics are overwhelming, professionals urge that we not lose hope.

One such professional organization is the Association of Zoos and Aquariums (AZA). The AZA is a non-profit organization, founded in 1924, “dedicated to the advancement of accredited zoos and aquariums in the areas of animal care, wildlife conservation, education and science (AZA).” AZA member zoos are visited by over 175 million people annually – this is more than the spectatorship of professional hockey (NHL), basketball (NBA), baseball (MLB), and football (NFL) combined.

The AZA has experienced great growth in the face of globalization – not only economically, but also politically. According to the AZA Accreditation Standards and Related Policies (ASRP) 2010, conservation efforts are of great priority for its member institutions. These efforts should include interpretive materials and education programs, *in-situ* efforts, and resource support for international conservation programs when appropriate. More explicitly, the member institution must include the word conservation in its mission statement, must have a written conservation plan, and be active in conservation initiatives on a local, regional, national,

and global level (AZA 10). These conservation goals underscore the role the AZA plays in the globalization of conservation, and recent membership by institutions in Mexico and Argentina represent a great change in the organization that has guided United States zoos for nearly a century – they are now exporting their explicit international environmental conservation and education mission to zoological institutions and visiting publics with very diverse cultural expectations.

The AZA, along with other conservation organizations from local grassroots efforts to international NGOs exert much energy to curb the extraordinary decline in biodiversity. In fact from 1970 to 2000 worldwide conservation areas have expanded in area coverage greater than 10 times (Zimmerer et al. 2004). More specifically, the 1980s and 1990s resulted in the globalization of conservation efforts including an array of international conservation agreements, the emergence of prominent global conservation organizations, and the growth of international funding institutions. This movement, as Zimmerer exerts, built upon existing international networks and agencies – most notably the United Nations. Of all regions worldwide, Central America saw the greatest growth in protected areas. In 1985, 2.5% of the total land area was protected. Yet, by 1997, nearly 13% of total land was under protection – an increase of over 10%. The Mesoamerican Biological Corridor is a current project that continues to seek expansion of these protected areas by joining fragmented areas that would stretch across international boundaries from Mexico to Panama (Zimmerer 525). The AZA is one organization that supports such projects.

Such globalization does not come without consequences. Stern et al. (2002: 475) discuss important outcomes of globalization, including greater interdependence of ideas, cultures, people, and places, the integration of these peoples into international marketplaces, the formalizing of local commons, greater tensions between economic integration and political decentralization, and the increased power of international organizations. In short – a blurring of the global and the local.

These are not necessarily positive gains for all the actors involved. Toly (2004: 48) warns that globalization asserts specific ideas of what nature and society should be, regardless of the local systems involved. This means the move of the protection of biodiversity out of confines of bounded protected areas and nations has resulted in cultural and ecological conflicts across areas with no clear borders (Peterson et al. 2008: 1). While species and habitat loss is profound, this globalized view of nature conservation is not necessarily one of common good for local peoples and economies. The rise of this disaccord in the growth of globalization has resulted in substantial anthropological interest in the nature of protected areas, conservation, and the struggle of local vs. global.

Anthropologists have a rich history of investigations in zoological parks, but almost strictly in the field of primatology due to the number of species exhibited in zoological settings. Despite this rich history of academic work in zoos, there is a great lack of cultural anthropology work in zoos and aquariums. These institutions, though, are shown to shape many visitors' vision of nature and conservation.

This research gap can be explained by several factors. The primary reason is that cultural anthropology has traditionally operated under an established methodology that requires long-term research of a cultural group in the field. The zoological setting has traditionally not been seen as an appropriate field site for cultural anthropology, but the recent growth of applied anthropology methods has greatly revolutionized cultural anthropology not only in terms of the concept of what the field is, but also in utilizing short-term techniques.

There is a substantial body of work in national parks and protected areas by cultural anthropology. These open areas represent a more immediate impact on local peoples, whereas the zoo tends to be viewed as an artificial natural space. Again, this reaffirms the traditional notion of the cultural anthropologist pertaining to the field, and excludes the zoo as a valid field site.

Another explanation for the research gap is illuminated by comparing zoological settings to museum settings. Museums are a traditional realm of cultural anthropologists as

these institutions are explicitly related to culture through the artifacts and stories they share with the public. Zoos, on the contrary, are not necessarily viewed as cultural institutions due to the assumption that they are mainly concerned with providing people an opportunity to interact with animals. However, this interaction does not occur in a cultural vacuum, but rather, it is shaped by visitors' cultural expectations, the park's infrastructure and organizational mission, and by staff perceptions towards and interactions with both the animals and the visitors.

Cultural anthropology is especially suited to identify how cultural differences shape the way in which zoos are presented and appreciated in different settings. My study seeks to fill this gap by focusing on *Parque Zoológico de León* (Zooleón), a recent member of the AZA, and in so doing, it challenges the traditional methodologies of cultural anthropology. Great human interactions occur in the zoo amongst a diverse group of visitors, zoo staff, and educational programming. Culture is of great importance at all zoological parks, including Zooleón, and in light of its recent AZA membership, Zooleón represents a unique opportunity for anthropologists to investigate cultural differences with the AZA model found in U.S. institutions. This study is centered on the effect of the globalization of conservation on the staff and visitors of Zooleón through their actions, perceptions, and interactions.

Upon arriving to Zooleón, I entered the field with nearly a decade of professional experience in United States zoological institutions. Since 1999, I have worked and volunteered in many capacities at three AZA institutions. From 1999-2005, I served as a volunteer, docent (hands-on animal demonstrator) and as a primate, small mammal, reptile and avian keeper in the Fort Wayne (Indiana) Children's Zoo. During this time, I also completed an education department internship at the Los Angeles Zoo and Botanical Gardens – a zoo with a culturally and linguistically diverse visiting public. Most recently, I served as a gorilla keeper at the Dallas (Texas) Zoo. Due to the high profile of this species, this position allowed for much public interaction including behind-the-scenes tours, zoo classes, public animal training demonstrations, and interviews and visitor talks in both English and Spanish. These diverse experiences allowed for interaction with zoo professionals and visitors from geographically and

culturally varied backgrounds. In fact, the initial concept to study Zooleón came about due to a visit by Zooleón staff to the Dallas Zoo. Upon contacting the Dallas Zoo mammal curator, he provided the necessary contact information for Zooleón's collection curator. In addition to this professional contact that allowed for the realization of the study, a familiarity of varied zoological institutions is paramount in assessing Zooleón, both in term of the visiting public and the zoo staff and management. The most important benefit my experience in the zoo field has had is that it allowed me to enter the field feeling comfortable in the setting – allowing me to focus quickly on the heart of my work in one of the AZA's newest member institutions.

Despite a wealth of experience in the zoological field, I quickly found myself in a unique position of “resident expert” at Zooleón. My opinion was often solicited in a myriad of topics including animal training, husbandry, education programming, and other aspects relating to zoo operations. This reception that I received amongst the Zooleón educators, was not the only greeting I received, though. Whereas the educators looked at me – a Caucasian male American with a diverse zoo background – as an expert, a large portion of the animal keeper staff sought out little interaction with me, while other employee groups seemed hesitant to divulge information despite the confidentiality I promised them. This uneasiness, it seems, underscores the reality that I truly was “in the field”. Notwithstanding this evident apprehension between staff members and me, Zooleón whole-heartedly opened up their institution and lives to me during my brief stay.

The visiting public that I encountered at Zooleón mirrored the public that I had come to know in the multiple institutions with which I was familiar in the United States. Amongst those visitors that chose to not participate in my study, a portion of them avoided me as soon as I began to approach their group, while others politely declined. Amongst those that chose to participate in my study, some provided basic answers without personal interest, while others engaged in conversation that spilled over the boundaries of purely “fact finding”. On very few occasions did I feel like an outsider “under a microscope”. I contribute this fact – in large part – to my previous educational experiences. An undergraduate semester in San Germán, Puerto

Rico, taught me to quickly acclimate to a distinct culture in which I could easily be classified a foreigner ( “white American”). Amongst Latino friends and professional colleagues it has often been stated that I was born with “the wrong skin color”. This passion for Latin culture, I believe, was as important an asset as my zoological experience in AZA institutions as I entered Zooleón to begin my study.

Zooleón, in the state of Guanajuato, represented a unique opportunity to investigate the cultural expectations of a culturally-foreign AZA zoological park. Specifically, I set out to understand what such a park represents to both its staff and visitors in terms of conservation. The hallmark of AZA membership in the United States is the importance of forming partnerships with fellow member institutions, as well as local, regional, and global groups with similar environmental conservation messages. Zooleón embodied an occasion to investigate the *park culture* for a recent Latin American AZA member, and to experience firsthand whether the Zooleón public has distinct conservation knowledge and desires, as well as how the importation of the AZA paradigm has affected these views.

In seeking to begin to fill the incredible research gap at the zoo by cultural anthropologists, this study focuses on three key realms. First, it addresses the structural differences between Zooleón and U.S. AZA members. Specifically it discusses differences in zoo composition, program design, and funding – and develops how these differences limit conservation education activities. Secondly, it concentrates on the cultural differences of the people that visit Zooleón as compared to other AZA institutions, asking how the Zooleón public's visit motivations shape their experience the park. Are there cultural differences in the use of the zoo grounds? Do these differences shape the level of receptivity to conservation messaging? The third area I address is how class – particularly age and education level – shapes both Zooleón staff perceptions about their role in the zoo and their perceptions about the receptivity of the Zooleón public in receiving and acting upon their conservation messages. Do class and education shape their personal conservation beliefs? Do they limit their expectations of the public? Do they contour the way educators present programs? These three



realms are essential to understanding the nature of the relationship between Zooleón and the AZA.

In order to understand these relationships, I employed specific anthropological fieldwork techniques while living in León, during the summers of 2009 and 2010. I used short-term techniques to assess how visitor's perceive programs and zoo visits – mainly post-program questionnaires – and complemented these with more qualitative-oriented interviews to provide a greater depth and richness of content.

Over approximately six weeks, I observed the unprompted behaviors of visitors and staff throughout the Zooleón grounds, as well as at off-site programs. I also engaged visitors and zoo staff in structured interviews. Additionally, I allowed members of the public to complete the structured interview as a written questionnaire during times of rest at the park, such as when waiting in line at a park attraction. With a great focus on the education department, I followed up the staff and visitor structured interviews with more specific questionnaires amongst the education staff at both the close of my fieldwork in 2009, and again in 2010. Since my time in the field, I have maintained constant contact with Zooleón staff members, collecting data through electronic communication and social networking applications. The data collected was examined, interpreted, and collected in a common database. From this database of material, I used multiple coding techniques to group data into meaningful information from which to base my thesis.

This work is comprised of seven chapters. The following chapter, chapter two, begins with a literature review of anthropological work in the field of conservation and zoos and provides a background of the ever-shifting nature and function of zoos in society. Chapter three contains a detailed description of my methods and the field site. The fourth chapter discusses the structural barriers that Zooleón faces under AZA membership, while the fifth and sixth chapters discuss the cultural barriers that arise out of distinctions in visitor motivation and staff and visitor class and education level. In the conclusion I present a synthesis of the useful

findings and elaborate recommendations for enhancing the partnership between the AZA and foreign institutions like Zooleón.

## CHAPTER 2

### BACKGROUND

#### 2.1 Anthropological Studies in Zoos and Conservation

While the history of anthropological study in zoological institutions is extensive in the areas of primatology and biological anthropology, cultural and applied anthropology have contributed little to studies within zoos and aquariums. This does not mean that anthropology has not addressed many of the issues that are paramount to the zoo field today, but rather, it has done so by means of examining protected areas or nature reserves and the impacts these reserves have on the local peoples that live and work in or around these parks, as well as the practical and ethical dilemmas that the individuals, lawmakers, and NGOs face concerning them. The influence, therefore, has been of a secondary nature.

The history of protected areas including parks and reserves stretches well back into the history of the 20<sup>th</sup> century, but it is not until the sweeping environmental policy legislation of the late 1960s and 1970s that anthropology began “assessing the sociocultural effects of major federal actions on the environment, including effects on relationships between humans and their environment” (Crespi and Greenberg 1986: 27). The International Man and the Biosphere program launched by the United Nations Educational, Scientific and Cultural Organization (UNESCO) in 1971 supported projects to protect representative ecosystems, of which local communities of people were defined an integral part (Crespi and Greenberg 1986). It is this “breakthrough in conceptualizing relationships among biotic communities [in which] human communities are acknowledged as legitimate components of the biosphere” that allowed an anthropological perspective to be applied to issues of conservation (Crespi and Greenberg 1986: 27). While this time period saw a breakthrough in anthropological thought on conservation and issues of humans in the environment, one must also be cognizant of

Steward's (1955) contribution to our understanding of the way cultural patterns enable people to adapt to and modify their environments.

This early cultural work in environmental issues is exemplified by Bennett's (1976) socionatural systems and Vayda's (1983) method of progressive contextualization which incorporated the human voice in ecological research. Work by Nietschmann (1984), Colfer & Brotokusumo (1985) and Scudder (1982) demonstrate studies which indicated the usefulness of enlisting outside development planners and resource managers in conservation decision-making. Theoretical advancements were made in this arena by Crespi and Greenberg (1986) who recommended that these outside actors incorporate the expertise of local inhabitants and that they seek to understand how and why local decisions are made and maintained.

These early works would result in much reflection on the human condition within the environment in the 1990s and into the 2000s. One such example is that of Orlove and Brush (1996: 329) who discuss anthropology's work in documenting local knowledge and practices that "influence selection and maintenance of crop varieties and the conservation of rare and endangered species in protected areas" as well as in clarifying "the different concerns and definitions of biodiversity held by local populations and international conservationists." Orlove and Brush (1996) also expound the work of anthropologists in nongovernmental organizations (NGOs) and international agencies, in which they participate in policy debates and act as advocates and allies of local populations of peoples.

Paige et al. (2006) have examined anthropology's contribution to the social impact of protected areas. They contend that social, economic, scientific, and political changes have all greatly affected not only protected areas, but also the urban centers that control them. Harmon (2003) enumerates 11 intangible values derived from protected areas – including recreational, therapeutic, spiritual, cultural, identity, existence, artistic, aesthetic, educational, peace, and scientific research – all of which are seen by Paige et al. (2006: 265) as social effects. They also admonish the writings of biologists and other natural scientists as simplified "to a few easily conveyable and representable issues or topics" that do not adequately examine the intricacies

of an ecosystem. Paige et al. (2006) also importantly discuss the concept of globalization within the framework of protected areas and conservation. They argue that anthropology must bridge the theoretical gap between a framework “that attends to the political economies of globalization and the subtle but profound local social effects of the creation of nature and environment in places where those categorizations of people’s surroundings did not exist until recently” (265).

Despite anthropology’s unwavering attention to the plight of the human communities in protected areas, much natural science writing by “resurgent protectionists advocate a return to strict nature protection characterized by excluding most people from ecologically fragile areas” (Holt 2005: 199). This had led to a response by anthropologists, reiterating ideas now several decades old, yet still hotly debated – including the idea that local communities and individuals must be actively involved in all processes of conservation and protection (Holt 2005). Holt (2005) defines this as the “Catch-22 of Conservation” – in that conservationists seemingly forget that the habitats and environments they seek to protect do not exist in isolation, but rather impact and have been impacted by human groups.

Most recently, Peterson et al. (2008) have offered a model for examining conservation and biodiversity issues in “Seeing (and Doing) Conservation through Cultural Lenses.” This work is in large part due to the conservation community’s realization that the “protection of biodiversity” cannot and should not be confined within “clear borders” (Peterson et al. 2008). Their work reflects this paradigmatic shift by focusing on enhancing transdisciplinary dialogue and practice through “reflexive questioning, the adoption of disciplinary humility, and the realization that ‘cross-border’ collaboration among conservation scholars and practitioners can strengthen the political will necessary to stem the growing commoditization and ensuing degradation of the earth’s ecosystems” (Peterson et al. 2008). It seems anthropological theory has come full circle on the environment.

While anthropology has been successful in both assessing the strengths and difficulties of conservation in protected areas and national parks and in providing the holistic recommendations on how parks can be successful in conservation and in preserving peoples’

livelihoods, academic publications have largely ignored zoological parks – which have changed dramatically in recent decades as a response to ever-increasing species and habitat loss at a global level.

The globalization of these conservation ideas is illustrated by the recent expansion of the AZA, which has recently widened its net to include zoological parks in Mexico and South America. This global shift of AZA membership mirrors the international approach to conservation that the AZA now advocates. It also mirrors the international nature of all protected-area management in the 21<sup>st</sup> century. Just as protected-area management can only be successful if it does not overlook the importance of meeting the needs of local peoples, so too must AZA conservation messages consider the diversity of conservational cultures across different countries, regions, and local communities. Applied anthropology represents the appropriate opportunity to explore and articulate how culture shapes ideas about conservation, and to facilitate effective partnerships that negotiate these barriers.

Given the striking shift in zoo education and conservation goals, cultural anthropology is now poised to provide a distinct voice in the discussion of the environment and conservation education not only at the zoo, but in their conservation projects that are increasingly becoming more globalized, thus escalating interaction with varied peoples and cultural traditions. Ehrlich (2002: 32) states, “There is now a clear need to recruit many social scientists to collaborate with environmental scientists in seeking solutions to the menacing dilemma of the destruction of humanity’s life-support systems.” Just as cultural anthropology has served as an advocate for local peoples in protected areas and parks, so too can it fill this same role within zoo grounds. This importance is further demonstrated by the a 2007 study of AZA institutions by AZA officials (Falk et al.) that underscores a clear knowledge gap in understanding how AZA institutions contribute to people’s understanding and perceptions of animals, personal and emotional connections to animals, how they interact with animals, and how to increase institutional impact in these categories. Moreover, this study demonstrates a lack of acknowledgment in cultural variations in conceptualizations and attitudes towards nature, zoos, and conservation. Both

zoos and anthropology have much to gain from one another. Undoubtedly, an ever-globalizing world is a certain reality, but this cultural negotiation that anthropology has successfully documented and facilitated in protected areas, is vastly under-represented in zoological settings. My research lays one footprint towards this necessary partnership. Much as an ever-globalizing world brings the field home, so too must anthropology explore the nature of conservation where much of the world experiences it – at the zoo.

## 2.2 History of Zoos

### *2.2.1. Animal Collections before the Nineteenth Century*

The earliest of animal menageries are probably those which are found in the pictographic and hieroglyphic records at the Saqara cemetery, located near Memphis, Egypt (Hoage et al. 1996). Dating to 2500 B.C., these records depict Egyptians keeping a variety of cattle, antelope, and avian species, as well as baboons, cheetahs, hyena, and mongoose. Many species, including the baboon, falcons, and ibis have been found mummified at Saqara.

History's first recorded wild animal-collecting expedition is that of Queen Hatshepsut, daughter of Thutmose I of the Eighteenth Dynasty, in the fifteenth century B.C. (Hoage et al. 1996). This journey down through the Red Sea and presumably to Somalia, resulted in a collection of monkeys, leopards, birds, wild cattle, and a giraffe that were displayed at the palace menagerie.

Royal menageries were a result of expeditions, like that of Hatshepsut, as well as a form of tribute (Hoage et al. 1996). The kings of Ur kept lions in pits and cages. The Asian elephant was domesticated, harnessed, and used for labor by the twenty-fifth century B.C. (Hoage et al. 1996).

While the ancient Greeks reportedly never had the extensive collections as did other royalties in the ancient world, from the seventh century onward, they too, imported monkeys for inquiry, experimented and acclimatized avian species, and introduced domestic cats from Africa (Hoage et al. 1996). Then, in the fifth century B.C., the Greek avian collections grew such fame, that the public from miles around paid for the right to see exotic species, such as

Egyptian geese and Indian peafowl – the earliest recorded instance of an entrance fee for a menagerie or zoo (Hoage et al. 1996). In the fourth century B.C., Aristotle used such animal collections to write the first systematic zoological survey, *The History of Animals*, which describes about three hundred vertebrate species (Hoage et al. 1996).

In the last centuries before the common era, the kingdoms of Egypt, Assyria, and Rome demonstrated their power with impressive – if not awe-inspiring – collections of animals that included such feats as a day-long procession of elephants, lions, leopards, cheetahs, and hundreds of other animals, and the legendary animal versus beast battles by Roman gladiators (Hoage et al. 1996).

During the Middle Ages in Europe, exotic animal collections became closely associated with royalty and the rising class of merchants (Hoage et al. 1996). It is during this time that not only royalty, but affluent citizens and merchants kept exotic collections in their personal gardens, while traveling showmen took menageries from town to town for public entertainment. The animals of interest during this period were those from Africa and the Far East, with New World species being in low demand. (Hoage et al. 1996).

During the thirteenth, fourteenth, and fifteenth centuries, leopards and particularly lions were popular throughout European monarchies. “Rulers of large and small realms all seemed to have a lion collection of some kind at one time or another,” according to Hoage et al. (1996: 14), and “this may be why European royal coats of arms, even today, often depict big cats.”

It is not until the sixteenth century that menageries began to appear in urban centers across Europe and North Africa, including Prague, Karlsburg, Saint-Germain, Siena, Constantinople, and Cairo (Hoage et al. 1996). While no formal zoos would appear in the Americas until the close of the 19th century, there do exist records of early collections across the American continents. Conquistadors and their parties, such as Hernan Cortés and Bernal del Castillo, painted vivid images of Moctezuma’s massive collections in the early sixteenth century Mexico. While much more evidence exists for Moctezuma’s menageries, a century



earlier poet and ruler Nezahualcōyotl (“Coyote who fasts”) possessed precursors to zoological gardens in Texcoco, the Athens of the Western World (Garza Ramos 1998).

Zoos certainly existed in South America, as well. In the 1620s, Francis Bacon, in *The New Atlantis*, mentions Andean “parks and enclosures of beasts and birds which [were used] not only for view or rareness, but likewise for dissections and trials.” Despite their urban locations, these collections were largely for royalty and their entourage. Louis XIV established his menagerie in 1665 at Versailles, creating the first collection of animals and plants within the same exhibits – although they were not scientifically arranged to educate the public about taxonomic relationships (Hoage et al. 1996). It was not until 1794, when the Versailles gardens, renamed as the *Jardin des Plantes*, became part of the *Muséum National d’Histoire Naturelle* in Paris, that a national menagerie was created – the first of its kind in the world. This museum-zoo association would later be echoed in other cities, such as Washington and Berlin (Hoage et al. 1996). While the animal collections prior to the nineteenth century can largely be viewed as “the province of the nobility and the wealthy”, the nineteenth century is appropriately dubbed “The Florescence of Zoos around the World” by Hoage et al. (1996: 15).

### 2.2.2 *The Nineteenth Century*

Several events, in addition to the incorporation of the Versailles menagerie into the Paris natural history museum, demonstrate the great shift that occurred in the 1800s: the founding of the London Zoo in 1828 for “scientific purposes” for society members and guests, and the publication of Charles Darwin’s *Origin of Species* in 1858 (Hoage et al. 1996). These events pointed to a surge of public interest in understanding and ordering the natural world.

The history of today’s modern zoo is found in a handful of theoretical approaches to zoos in the 1800s. In Paris, the national zoo was founded as a scientific research institution, whereas the *Jardin Zoologique d’Acclimatation* was founded in an attempt to acclimatize foreign animals for local game use (Ritvo 1996). In Hamburg, Germany, Carl Hagenbeck’s Tierpark was essentially an animal trading post, yet in the modern sense of the word, it was genuinely a

zoo. These separate functions can be identified across the breadth of zoos established in the nineteenth century.

Although each zoo's history is unique, many similarities can be seen across the entire gamut. The early nineteenth century collections could best be described by serendipity, says Ritvo (1996: 44): a combination of the chances of the marketplace and "the public appetite for the exotica."

This resulted in animals whose natural setting could span tens of miles if not hundreds, often confined in small cages placed along well-marked paths, in highly manicured parks that also contained plants acquired from throughout the world (Ritvo 1996). This artificiality was even more greatly emphasized by the constructed lakes – "a feature of every zoo that was spacious and prosperous enough to build them (Ritvo 1996: 47)." Moreover, even the official guidebooks prescribed a specific order of exhibits to follow throughout the grounds (Ritvo 1996).

Most critics and proponents alike acknowledge that the sight of large carnivores in cages, gave a powerful visual message of the human domination of nature (Ritvo 1996). This paradigm is the not the sole problem: at zoos, such as the London Zoo, the average life span of big cats – tigers, lions, panthers, cheetahs – was two years, with nearly one cat dying each month (Ritvo 1996).

It is also during the 1800s that the phenomenon of "zoo pets" emerges (Ritvo 1996). Zoo pets are animals that become widely known and cherished as individuals, rather than as a species as a whole. For European zoos, zoo pets represented not themselves but their colonies. Ritvo (1996) expounds upon this by demonstrating that all animals that came to be zoo pets, such as Chune the elephant at the London Zoo, were always African or Asian animals, yet they were never from colonies such as Canada and Australia, which had significant European populations. Thus, these zoo pets ultimately represented and became a symbol for colonial power among European zoos (Ritvo 1996).

This idea of domination of nature and peoples is further echoed in Hagenbeck's Tierpark. In 1874, he introduced the idea of anthropological-zoological exhibitions that

consisted of “ethnographic shows with groups ranging in size from three to four hundred, featuring three dozen tribes and ‘races’ (Ritvo 1996: 55-56).” These shows emphasized his new approach to animal exhibits – naturalism – and by the next decade could draw in a hundred thousand spectators a day! In 1877 the Jardin d’Acclimatation in Paris brought in a traveling animal show that included fourteen Nubians, which were owned by a foreign merchant (Flint 1996). This first display of humans was enthusiastically accepted by the mass public.

### *2.2.3 Zoos in the United States in the Nineteenth Century*

The first menageries in the United States were found in major coastal cultural centers including Boston-Salem, New York, and Washington (Kisling 1996). The first elephant in the Americas was imported in 1796, with a second one arriving in 1816 (Flint 1996). These first large animals were followed by rhinoceros and giraffe in the 1830s, and by 1834, the New York Menagerie, owned by James R. and William Howe was touring New England (Flint 1966). The following year, the Howe family would join with the eight other traveling menageries in the United States to form the Zoological Institute. While the Institute was formed “for profit” its founders also believed that “the knowledge of natural history [might] be more generally diffused and promoted, and rational curiosity gratified (Flint 1996: 98).” While the Institute fell apart within two years, their influence was felt across the country. Not only did they expose a large audience to animals that they had never encountered, but they also distributed scientific pamphlets which served to expose their public “a larger cultural world (Flint 1996: 99).”

It was not until the post-Civil War period when it “gradually became socially and financially acceptable for governments to administer or fund scientific activities and cultural facilities (Kisling 1996: 113). It is at this time, that some of the first zoos began to open in the United States’ largest cities – nearly one hundred years after botanical gardens and natural history museums (Kisling 1996). Moreover, few had large mammals. Not only did circuses have far better collections, but they also reached a larger and geographically broader audience. At Washington’s National Zoo, the first elephants, lion, and Sumatran rhinoceros, all came from circuses (Flint 1996).

P.T. Barnum emerged as the king of circuses in the late 1800s, owing much of his success to animal deals with Hamburg's Hagenbeck, as well as to his *Ethnological Congress* – a separate tent that contained a Chinese giant, a Burmese dwarf, a family of American Sioux, five Zulus, eight Sudanese, Asian Indians and Afghans, a troupe of Burmese musicians and priests, and the first white elephant brought to America (Flint 1996). Flint (1996: 107) purports that while such exhibits were “certainly entrepreneurial exploitation that reflected racial and imperialistic attitudes of the nineteenth century,” they may also have represented recognition of the fragility of some human ways of life and “a relationship between humans and animals, the land, and change.”

The first American Zoo, the Philadelphia Zoo opened on July 1, 1874 – the result of 15 years of work of naturalists and civic-minded citizens (Kisling 1996). While the zoo drew over a half million visitors during the U.S. Centennial Exhibition in 1876, it was unable to sustain itself, and the city of Philadelphia finally recognized its value by the first of its financial contributions. The zoo established the first research institution associated with a zoo – the Penrose Research Laboratory – which, along the New York Zoological Park (established in 1899), would “begin a new era in developing the zoological park concept in America (Kisling 1996: 116).” The National Zoological Park was one of the first U.S. zoos to exemplify the recreational and educational value that was being placed in zoos (Kisling 1996).

The goals of scientific understanding, education, and recreation, were finally met, in addition to wildlife conservation, with the creation of the New York Zoological Society in 1895, and the new York Zoological Park in 1899 (Kisling 1996). This park, and the Penrose Research Laboratory, would serve as the model for the zoological institution in the early twentieth century.

Despite the shining future of the National Zoo and the New York Zoological Park, the close of the nineteenth century saw most American zoos exhibiting animals as works of art from foreign lands, housed in architecture that resembled their overseas home. Animals were regularly collected on expeditions to Africa, Asia, and South America. This national self-

glorification, as Kisling (1996) has called it, would spill over into the twentieth century, yet on the fringe a new vision, of conservation and nationalism, was clearly forming.

#### *2.2.4 Transition: The American Zoo from 1900-1960*

By 1900, there existed some 32 zoological parks in the United States, but many “were not much better than the earlier menageries” (Kisling 1996: 123). Fortunately, these zoos and the numerous others that sprang up in the first half of the century had modern models to emulate. Further help to these early zoos was the overwhelming support of President Teddy Roosevelt. A “robust adventurer and naturalist”, Roosevelt helped to make conservation “smart and morally right” (Croke 1997: 154-155).

This does not mean that zoos were making smart and morally right decisions about their animal collecting. For indeed, “many zoo collectors were slashing, burning and shooting their way through the world’s wild places” (Croke 1997: 155). The 1930s ushered in the Works Progress Administration, which gave a needed boost in the renovation of a number of zoos (Kisling 1996). The National Zoo alone received more than \$800,000 for the WPA, which was used for a new elephant house, small mammal house, and the addition of a bird house (Croke 1997). This represented an early national sentiment towards conservation, which would continue to surge.

The 1940s were a period of setback globally for zoos due to World War II. While U.S. zoos only faced miserable budgets, a large portion of European zoos were destroyed. U.S. zoos bounced back the following decade with a sweeping round of new, modern buildings and the employment of many college-educated biologists and zoologists, but it is the 1960s that would usher in yet another extensive transition (Donahue and Trump 2006).

#### *2.2.5 The Modern Zoo: Captive Breeding and the Birth of the AZA*

Wild Kingdom made its television debut in 1963, with new episodes running until 1988. Television programs like this one, according to Vicki Croke in *The Modern Ark* (1997) sparked a grassroots interest in wildlife and conservation, with zoos beginning to realize the importance, both morally and economically, of captive breeding. Moreover, great advances in veterinary

medicine, animal behavior, and field biology, by individuals such as Jane Goodall, led to cutting-edge science in zoos.

Founded in 1924, the American Association of Zoological Parks and Aquariums (AAZPA) was an association of zoo professionals. Much like Rachel Carson, a founder of the U.S. environmental movement, these early environmentalists understood conservation as a means to protect animal populations for human use (Donahue and Trump 2006). Yet, they were one of only three conservation groups that existed that were not hunting groups.

By the 1960s, though, the new era of conservation and environmentalism led many outside of the zoo profession to view zoos harshly. In fact, AAZPA leaders “ended the decade reeling from the realization that their self-image as conservationists was not widely shared by those outside the zoo profession” (Donahue and Trump 2006: 13).

Also during this decade, directors of leading zoos used their power within the AAZPA to promote wildlife conservation inside and outside of their institutions – a logical pursuit given that so many of their animals were still imported from abroad (Donahue and Trump 2006). Thus, in 1963, the AAZPA became an active member of the International Union for Conservation of Nature and Natural Resources (IUCN), one of the early international organizations that would lead to the ultimate globalization of conservation. This membership persuaded the AAZPA to focus attention on the import behavior of their individual members and not only did the board ban importation of animals captured illegally, but by 1966, it had banned some species outright (Donahue and Trump 2006).

In 1967, the AAZPA adopted a formal resolution advocating the collection and placement of collections in zoos that would be capable of propagating – the postage stamp zoo had formally been served its eviction (Donahue and Trump 2006). These postures on importation and management served to distinguish AAZPA member institutions from commercial, “less-conservation-minded importers” (Donahue and Trump 2006: 17), and underscored their shifting goals.

Despite such powerful stances, the AAZPA was still essentially a weak organization in the 1960s, yet they found support through government legislation. The Endangered Species Preservation Act (1966) and the Endangered Species Conservation Act (1969) served to provide limited habitat protection, authorized the creation of wildlife refuges, and expanded the Lacey Act's (1900) limitations on importation and interstate trade of endangered species (Donahue and Trump 2006).

In 1972, frustrated with a lack of political representation and a changing mission, the AAZPA parted ways with the National Recreation and Park Association (Donahue and Trump 2006). Central to the new AAZPA was its conservation mission – a mission that was reiterated seven times in the articles of incorporation. The new AAZPA clarified membership requirements, making fees based proportionally on annual budgets – thus providing an incentive for larger zoos to involve themselves with the interests of the AAZPA and providing smaller institutions an opportunity that would not be seen as a great burden (Donahue and Trump 2006). Moreover, they also conferred voting rights to nonprofit institutions. This move sought to distinguish AAZPA member institutions from roadside zoos that attracted – rightfully in their eyes – negative attention from animal protection organizations. Given this, the AAZPA in those days had no choice financially but to accept membership from any institution that could afford the annual dues (Donahue and Trump 2006).

Just one year after the AAZPA became incorporated, on December 28, 1973, President Richard M. Nixon signed the Endangered Species Act (ESA). The ESA has been called “the most far-reaching wildlife statute ever adopted by any nation (Reffalt 1991: 78), and “one of the most exciting measures ever to be passed by the U.S. Congress, perhaps to be passed by any nation” (Rolston 1991: 43). The purposes of the act are to provide a means to protect the ecosystems upon which endangered and threatened species depend, to provide a program of conservation of species, and to take steps to achieve the purposes of international treaties and conventions that were set forth to protect migratory birds, fisheries, and endangered plant and animal species. The ultimate regulatory power is wielded by the

secretary of the Interior and the secretary of commerce through the Fish and Wildlife Service and the National Marine Fisheries Service, respectively.

Key developments in the late 1970s included a solidification of the AAZPA's conservation image by supporting reauthorizations of the ESA, a demonstration of zoos' desire for stronger animal welfare regulations by supporting regulations on animal transit, and evolution of a more astute, and well-connected, working relationship with federal agencies that regulated animal exhibitors (Donahue and Trump 2006). The impact of the animals' rights movement cannot be understated as well (Hanson 2002).

At this time, though, the AAZPA still faced great challenges. By 1975, it had only accredited a handful of institutions (Donahue and Trump 2006). Therefore, there was essentially no policing of individual institutions' animal care. Secondly, few members were ready or willing to take on politics at a national level. Ultimately, the impact of then director Robert Wagner moved the AAZPA in a forward direction. His perspective was always long-term and he provided a public face with which zoo directors, government officials, and animal welfare leaders could interact (Donahue and Trump 2006). His leadership, in conjunction with the member code of ethics, which was adopted in 1976, transformed the AAZPA into a professional organization, trusted by members and policy makers.

The growing vision for the creation of self-maintaining populations of endangered animals within AAZPA institutions was initially hindered by ESA legislation (Donahue and Trump 2006). Through successful lobbying and a grassroots campaign, though, the AAZPA was able to change legislation between 1979 and 1981 to allow the free movement of captive-born endangered animals between member institutions. In 1979, the AAZPA announced its plan for what are now known as Species Survival Plans (SSPs).

#### *2.2.6 A Stronger Zoo Community: The Close of the 20<sup>th</sup> Century*

The 1980s was the era of the Species Survival Plan – the evolution of the International Species Inventory System (ISIS) founded 1973. ISIS began as a census of all mammals held in North American zoological institutions to investigate whether self-sustaining populations of



endangered species existed in zoos (Hanson 2002). This represented a “shift toward long-term genetic and demographic planning for the animals in American zoos” (Hanson 2002: 170). SSPs then debuted in 1981 to help disappearing wild animals by formally creating a centralized management of selected endangered zoo and aquarium species (Donahue and Trump 2006). This concept emphasized that management and breeding decisions would be made considering the entirety of a species represented in AAZPA institutions. Furthermore, these recommendations would be considered binding (Donahue and Trump 2006). This management at an organization level, according to the Association, would “maintain a healthy and self-sustaining population that is both genetically diverse and demographically stable” (Species Survival Plan Programs 2010). The criteria for an SSP animal are that it must be endangered or threatened in the wild and it must “have the interest of qualified professionals with time to dedicate toward their conservation”. Moreover, these species are typically “flagship species” – meaning species that are well-known which captivate public support.

By 1988, forty-six species were involved in SSPs. Today, 115 SSPs covering nearly 200 individual species are administered by the AZA (Species Survival Plan Programs 2010). SSPs, in addition to their specific goals, also served to alleviate the problem many zoos faced – the obtainment of permits for traffic in species which were not yet self-sustaining in zoos (Donahue and Trump 2006). Also, it gave zoos a “noble purpose” – they would serve as a collective ark for the preservation of endangered species. This “ark” image persists today.

SSPs, in conjunction with better veterinary care, resulted in surplus animals at zoos. Two cases exemplify this problem. The first being the question of what to do with animals that were not adequately represented in captivity for maintenance of the species via SSPs – such as killer whales (Donahue and Trump 2006). Should these animals be allowed to “die off” in zoos or should wild animals be captured to replace them? The second problem was what zoos should do about animals that might actually disappear in the wild despite SSP efforts.

The first issue – as exemplified by Sea World seeking permits to capture killer whales for temporary research and/or display – surfaced a dialogue that is essential to understanding

the AAZPA's underlying premise of the educational merit of a zoological institution. A 1983 court case thrust Sea World into a national battle, both with zoological professionals and popular media. William Braker, director of the Shedd Aquarium, in support of Sea World's petition, directly addressed the argument that nature documentaries could effectively educate, argued that "the scent of a ferret, the exploratory probing of a baby elephant's trunk, the constrictions of a boa and the inundating splash of a killer whale cannot be experienced through the lens of a camera" (Donahue and Trump 2006: 128).

The second problem – illustrated by the Toledo Zoo's attempt to show giant pandas in 1988 – also brought much media attention. The short-term loan of these pandas became an issue because the AAZPA had adopted mandatory standards to stop short-term loans of giant pandas from China due to fears that the animals were being loaned for monetary gain – by both China and the host institutions – without regard to a survival plan for the highly endangered species (Donahue and Trump 2006). While the AAZPA ultimately thwarted Toledo's plan to display the pandas with a lawsuit, successfully demonstrating it to be a money-making venture, much criticism arose from AAZPA member institutions. Toledo resented the decision, particularly in light of the fact that larger zoos with greater clout were displaying pandas.

Both of these issues, underline another key component of AAZPA institutions in the 1980s – a struggle to balance their conservation goals with the desire to showcase attractive, crowd-pleasing and revenue-building animals, such as pandas or killer whales (Donahue and Trump 2006). Ultimately, the AAZPA's backing of Sea World and disapproval of Toledo Zoo's pandas demonstrated a need of the organization to protect its members' financial interests but not at the expense of their conservation image.

The 1990s saw further growth of the SSP program throughout AAZPA institutions, as well as growth within genetic analysis of species and subspecies, and in reproductive advancements – including embryo transplants, in vitro fertilization, and frozen banks of sperm, embryos, and animal tissue (Hanson 2002). Cryogenic freezers are maintained in San Diego, Cincinnati, and Washington, with several smaller banks recently opening. Proponents of the

“frozen zoo” purport it to be a cost- and space-effective “insurance plan for the future and a crucial and almost bottomless reservoir of genetic diversity” (Croke 1997: 165). The earliest embryo transplant of a rare gaur calf to a Holstein cow named Flossie made headlines in 1981. While several other successful feats of genetic engineering have occurred since this early triumph the uncertainty of the science and the ebb and flow of funding have limited its’ impact.

The physical and institutional renovation of zoos toward an ecological focus, while evident among parks as early as the 1940s, and certainly among parks like San Diego’s Wild Animal Park (1972) – that would “exhibit wild animals to the greatest degree possible as they occur in nature” on a 180-acre site, would accelerate greatly in the 1980s and 1990s. This was due in part to the scientific advances, but more so to a “good economy [that] made funds available for new exhibits” and a growing community of educated zoo professionals including veterinarian staff, animal care staff, architects, and landscape designers (Hanson 2002: 177).

The 1990s also witnessed the growth of environmental enrichment programs that are aimed at the physiological and psychological well-being of the animals. Ideally, animals with appropriate enrichment – something that takes on a different form not only for different species but for different individuals of the same species – would behave more closely to their wild counterparts and would show fewer signs of stress (Hanson 2002). Personal experience demonstrates that personal accountability on the part of the animal care staff, or keepers, is maintained through written or electronic records of environmental enrichment – underscoring the great importance that the zoo community has placed on animal welfare. By the close of the century, the AAZPA would form an Animal Welfare Committee to ensure appropriate concern with enrichment of zoo specimens.

Amidst such accelerated change in the 1980 and 1990s emerged a principal component: an adjustment on the order of institutional goals. Whereas entertainment had once led the list of zoo goals, the mission of the modern zoo became one of conservation, education, science, and recreation – with “conservation of the world’s wildlife and their habitats as [the]

highest priority” (Hanson 2002: 178). Moreover, this conservation continued to take on an increasingly global focus.

Ultimately, the AZA (the new name of the AAZPA) found itself in a paradox by the close of the century. On one hand, SSPs had become their hallmark of conservation efforts and had gained much support. On the other hand, SSPs had exacerbated issues of overpopulation and inequity in the opportunities of institutions to display endangered animals. Says Terry Maple, then director of Zoo Atlanta, “Any zoo that sits around and tells you the strength of zoos is the SSP is blowing smoke. We’re going to save animals by being great educators and awareness-builders and great fund-raisers and building essentially an ethic or an attitude about animals in the people who visit us and participate in zoos that will eventually allow us to save the wild. We just flat out aren’t going to save these animals in zoos, and I think everyone’s finally coming around to understanding that” (Croke 1997: 171). Croke concurs (1997: 185-186), stating, “It is unreasonable to think we can preserve the spectacular array of the world’s animals inside the walls of our zoos.”

SSPs and conservation of species within the zoological context is seen largely by the zoo community as a means of maintaining diversity within the parks themselves. Of 145 reintroduction schemes of 126 different species since 1900, only 16 have been successful (Croke 1997: 193). Given this, the accomplishment of successful reintroductions can provide a powerful force to the merit of zoos on a global level. Reduced to a known three wild animals that were brought into captivity in 1964, today, the Arabian Oryx has reached a self-sustaining population back in the wild – and over 1800 in captivity (Croke 1997: 194). Other species, including the California condor, Bali mynah, Puerto Rican crested toad, red wolf, thick-billed parrot, and the golden lion tamarin should all be successful reintroductions over the coming decade. These types of efforts are certainly not possible or probable for many zoo species, but they do provide a stimulus for the AZA’s conservation message, and they underscore the international partnerships that AZA institutions are undertaking.

### 2.2.7 *The Modern AZA Meets the Modern Zoo: A Global Approach to Conservation*

The challenge of the modern zoo is “to allow living, breathing animals to inspire wonder and awe of the natural world; to teach us that animal’s place in the cosmos and to illuminate the tangled and fragile web of life that sustains it; to open the door to conservation for the millions of people who want to help save this planet and the incredible creatures it contains. To enrich, enlighten and empower the people who care, so that through huge numbers and sheer willpower we save the beetle and the snail and the alligator along with the panda and the rhino and the condor [Croke 1997: 252].” Certainly, this is no easy task to undertake.

The AZA currently has 216 member institutions and 19 certified related institutions, such as the Great Ape Trust, Gorilla Haven, and the Kangaroo Conservation Center. Recently, the AZA has granted certification to zoos outside of the United States and Canada, including Africam Safari Park and Parque Zoológico de León in Mexico, and *Fundación Temaikén* in Argentina. Hong Kong, Bermuda, and the Bahamas are all also homes to member aquariums. This growth outside of U.S. borders represents great opportunities for deeper cooperation and integration on a regional scale, similar to that of the European Association of Zoos and Aquariums (EAZA), but it also creates new problems with a large non-Western population for which little visitor study data exists.

Today AZA institutions are still passionately involved in conservation projects within their walls, including SSPs, as well as Taxonomic Advisory Groups (TAGs). Established in 1990, TAGs examine the needs of an entire taxa, or groups of related species. These include felids, antelope, and marine fish, among more than 40 others. Experts in their field, TAG committees “assist in the selection of appropriate species for AZA conservation programs and provide a forum for discussing husbandry, veterinary, ethical and other issues that apply to entire taxa” (AZA).

Population Management Plans (PMPs), established in 1994, exist for those species that are not as gravely endangered as SSP animals. Unlike the mandatory nature of SSP

recommendations, PMP breeding or trade recommendations are entirely voluntary to member institutions. To date, there are 312 PMPs (AZA).

Conservation efforts are increasingly undertaken outside of the zoo itself. Scientific Advisory Groups (SAGs) were founded in 1991 to “help facilitate, support, network and coordinate the relevant research activities of ... member institutions” (AZA). These groups include zoo or public veterinarians, zoo and aquarium-based curators and researchers, as well as outside university or public sector individuals with a particular interest or expertise.

Conservation Action Partnerships (CAPs) are special committees, also founded in 1991, which serve as liaisons and coordinators for conservation and scientific activities of zoological institutions in particular geographic regions through the world.

Together, AZA member institutions currently manage 520 species or sub-species of animals and participate in over 1700 conservation, education, or research projects in nearly 100 countries or regions (AZA). In 2005, AZA members spent more than \$70 million on conservation or education projects.

The AZA recommends appropriate conservation messages for their member institutions. Among these messages are that all life on Earth exists within an ecosystem with human beings being an integral part of all ecosystems. This underscores a vastly different zoo than the first half of the 1900s. Further, AZA conservation messages state that ecosystems provide many essential benefits and services to humans, yet it is humans who are vastly responsible for such dramatic changes in ecosystems. Moreover, it is our responsibility to care for our Earth and its ecosystems, and through informed decisions we can positively impact environments. The recommendations also include the idea that the human experience requires a connection to nature and that responsible zoos and aquariums seek to provide such an experience and to promote conservation. The primary way that zoos fulfill this goal is through animal demonstrations and outreach programs, both of which also must meet high AZA standards. The conservation message recommendations also underscore the globalized nature of conservation and the AZA.

AZA accreditation also contains specific requirements about maintaining education staff and directives. This integration of conservation and education is certainly the greatest strength of the AZA. The zoo community is uniquely qualified to tackle the massive loss of biodiversity – nutritionists, biologists, wildlife veterinarians, population specialists, geneticists, behaviorists, marketing strategists, and education specialists are all on staff. William Conway, the president and general director of the New York Zoological Society and Wildlife Conservation Society, calls them “your full-service conservation organization” (Croke 1997: 241).

In 2007, results of a three-year study by Falk et al. further reinforced the importance of education in AZA institutions. Not only did the researchers show a connection to learning and the zoo visit, but they also determined that specific visitor groups (formed by their primary visit motivation) learned differently. This led to the creation of a toolkit for addressing the needs of each visitor group, and the AZA intends for all member institutions to incorporate this research into their institutions. This research, though, is based solely on visitors to United States institutions, and it has yet to be seen whether it will translate to a culturally distinct audience like those found in the recent Mexican and Argentine members.

Despite this overwhelming weight on the shoulders of zoos, the reality is that many zoos face constant economic pressures and most zoos don’t stack up when it comes to the conservation and education efforts of the NYZS and WCS. This doesn’t mean all AZA institutions cannot make great gains in this conservation education. The last decade has seen zoos seeking to cater to deep-pocketed donors through after-hours events and special privileges including behind-the-scenes tours. AZA institutions are more widely making use of their keeper staff – individuals that can provide intimate details of daily zoo life and serve as an intermediary between animals and the public (Croke 1997). Also, whereas zoos once shunned the notion of sharing animal “house names” with the public, the Fort Wayne Children’s Zoo Tengku, the Orangutan, or the Dallas Zoo’s Patrick, the lowland gorilla, provide an instant connection between zoo visitors and the plights these animals face in the wild and what you can do to help them. Says Michael Hutchins, the director of conservation and science for the AZA,

“You could have a VISA machine right there, where you could plunk the card in and make a donation” (Croke 1997: 248). This concept, though, may not be an economic reality at all member institutions.

Today’s modern zoo finds itself in a constant struggle. On one hand it must draw in and entertain a crowd – in a country that is now “clutter[ed]” with theme parks, waterslides, campgrounds, heritage parks, and museums (Wilson 1998: 249). At the same time they must engage their visitors in a conservation dialogue that is focused on creating proactive individuals in the face of a world facing record loss of biodiversity. Moreover, the AZA has extended beyond its historic national borders, and now addresses a wider and more culturally diverse audience than it ever has before.

### 2.3 Zoos in the Mexican Context

#### *2.3.1 Moctezuma’s Menagerie*

Despite actions that would lead to the fall of the Aztec empire to the Spanish crown, in his second letter to Emperor Charles V of Spain in 1522, Hernan Cortés paints a stunningly intricate view of royal Aztec culture (Cortés 1960). Within these descriptions, Cortés details Moctezuma’s royal gardens, studded in marble and jasper, and menageries, located just behind north side of the *Templo Mayor* (Garza Ramos 1998: 31). These collections included a house containing ten ponds, or, pools with all of the known aquatic birds in the region. They also included man-made saltwater lagoons. Each bird’s diet was in accordance with their natural diet and a group of over 300 men that “understood nothing but birds” were in their care (55). Another team was in charge of curing ailing birds. Moctezuma was able to observe and enjoy recreation from finely constructed platforms over each pond. Cortés also asserts that in this house, there also existed a room in which albino men, women, and children were kept. Andrés de Tapia, a soldier under Cortés would further develop this assertion claiming a collection of dwarves and physically-handicapped individuals as well (<http://www.chapultepec.df.gob.mx>).

A second house contained finely crafted wooden cages filled with a collection of birds of prey of which the Spanish had never seen. These birds were fed an entire chicken each every



day. In this same house, were both large and small rooms, containing heavily constructed wooden cages. These cages housed “lions, tigers, wolves, foxes and cats of diverse manners and all in quantity, to which they fed as many chickens as they could eat (Cortés)”.

Bernal Díaz del Castillo, a swordsman under Cortés, in his *Historia verdadera de la conquista de Nueva España* described the snake house:

“They also had in that cursed house many poisonous vipers and snakes, that had a rattle in their tale; these are the worst snakes of all, and they had them in cribs, large earthen jars, and pitchers, and in them many feathers in which they laid their eggs and raised their young vipers; and they fed them the bodies of the Indians that they sacrificed and other meat from the dogs that they usually raised.”

Fray Bernardino de Sahagún, in his *Códice Florentino* or *Historia general de las cosas de Nueva España* (General History of the Things of New Spain), while not giving as much specific details of the royal menageries, detailed, among a multitude of themes, the known wildlife in the Aztec region. In many respects Sahagún is seen as the first ethnographer due to his “consistent use of native language in research”, his manner of preparing a questionnaire prior to interviews, his “adaptation to the native method transmitting knowledge with, via dialogues and speeches with the elderly consultants, and ultimately preserving cultural knowledge and making it accessible to a wider audience (León-Portilla: 259-261).

### 2.3.2 *Rebirth of the Mexican Zoo*

Despite the destruction of Moctezuma’s menageries by Cortés and his men, Juan Ramos Garza (1998: 32), former director of the Zoológico de Chapultepec in Mexico City, affirms that “the zoo was one more of the contributions of ancient Mexico to universal culture.” Despite this impressive contribution, it would be 400 hundred years after the destruction of Tenochtitlan until a zoological institution would emerge again in Mexico.

Due to the *Sociedad Mexicana de Historia Natural* (Mexican Society of Natural History) formed in 1868, focused on the study of zoology, botany, geology, paleontology, and

mineralogy, at the beginning of the 20<sup>th</sup> century, there was in a Mexico “a consolidated community of naturalists (Cardona et al. 2006: 974).” From this society arose Alfonso L. Herrera to head a new Department of Biology for the Mexican government (1976). Herrera believed that museums “should display to the public important philosophical questions concerning the facts of life and not just classify organisms in classes, families, tribes, genres, species, subspecies, varieties, subvarieties, races or subraces (1976).” Holding this philosophy, Herrera pushed for the establishment of a zoological garden like that of Moctezuma (<http://www.chapultepec.df.gob.mx>). In May of 1923, Herrera succeeded in obtaining land for the institution in Chapultepec. Within a year’s time, and multiple visits to the United States, as well as India, France, Peru, and Brazil, Herrera had amassed a zoological collection of 243 animals and 17 exhibits (Cardona et al.: 995, <http://www.chapultepec.df.gob.mx>). Of greatest accolade was an aquarium with a large marine animal tank, an aquatic bird tank, a waterfall, and a walrus monument (Cardona et al.: 995-996). Says renowned Mexican journalist and novelist David Martín del Campo (Garza Ramos: 37): “[The zoo] represented a pioneer work, exemplary, that very quickly brought in other Latin American countries and other cities in the interior of the country. It signified a change in the political attitude towards nature, a gesture that gave the sword to the predatory raptor and that opened a path to the conscience, to the education, and to the respectful coexistence with nature.”

While continuing to run the zoo, Herrera also maintained his post in the *Escuela de Altas Estudios* (School of Advanced Studies), stating, “A group of young naturalists is forming that will later be biologists (999).” This position underscores Herrera’s focus on education.

During the first years of the zoo, Herrera paid for the animal collections food out of his own pocket, and it is not until 1929 that the zoo would begin receiving government subsidies (<http://www.chapultepec.df.gob.mx>). Despite the fact that Herrera successfully achieved the realization of a zoological park “he was excluded from the final process of institutionalization” due to personal differences (Cardona et al: 1010). Two years after his death, in 1945, his acclaim was re-established as the zoo was renamed in honor of its creator and founder.

In 1975, the zoo received a pair of Giant Pandas as a gift from the People's Republic of China (<http://www.chapultepec.df.gob.mx>). It would become the first institution outside of China have a successful captive reproduction program, having eight births to date.

In 1993 the zoo was re-inaugurated amid a three year complete remodeling, by an interdisciplinary group including engineers, designers, biologists, and veterinarians (<http://www.chapultepec.df.gob.mx>). The redesign was meant to respond to the needs of visitors, administration, and veterinarians, as well as increase interaction between the animals and their habitat. According to Dr. Roger D. Sherman (Garza Ramos: 38), one of the close collaborators: "The geology, topography, vegetation (dead and alive), and the hydrology are planned to provide diverse spaces within the exhibits [...] The location of plants are not in response to purely decorative motives: they try to recreate the natural habitat ..."

The Zoológico de Chapultepec is considered one of the most visited zoos in the entire world, with an annual total of approximately 5.5 million visitors (<http://www.chapultepec.df.gob.mx>). It still maintains and supports populations of native Mexican species in the manner in which Herrera had envisioned. An active participant in national and international partnership, the zoo is considered by many to be the National Zoo, and it is certainly seen in admiration by zoo professionals throughout the country, including by those at the Zoológico de León.

### *2.3.3 Situating this Study*

This thesis is an attempt to show how culture shapes ideas of nature and conservation at the zoo – particularly in light of the globalization of conservation ideas. If the AZA is to accept membership of foreign institutions like it should seek to aid in minimizing structural barriers and find compromise in their own cultural expectations.

While structural differences are important, it is perhaps the cultural components that are most telling. These cultural factors are based upon perceptions – both of the visiting public and the zoo personnel. In terms of understanding the public's perceptions, investigating the importance of entertainment, education, and conservation during a zoo visit is paramount.

Much of these perceptions are based upon how the public interacts with zoo animals and personnel and how zoo exhibits and programs are shaped by the public. Equally important in understanding the cultural composition of Zooleón is investigating how zoo personnel view their visiting public, including their perceptions on visit motivation, background knowledge, education level, engagement, and empowerment.

Ultimately, this research is useful in aiding Zooleón to assess the effectiveness of their AZA membership, the impact this change has had on staff and visitors alike, and how they can effectively engage their staff and public with the overwhelming task of endorsing species and habitat conservation in a culturally specific and sensitive way. This research could also have implications for AZA institutions within the United States, as well, as many serve culturally diverse audiences with conservation programs and messages that are often quite generalized and culturally non-specific.

## CHAPTER 3

### RESEARCH METHODS AND THE FIELD SITE

This thesis is an ethnographic case study that evaluates the relationship of the Parque Zoológico de León, and the professional organization they recently joined, the Association of Zoos and Aquariums. The study was realized over 40 days of fieldwork during June, July, and August of 2009, with an additional 10 days of fieldwork during July and August of 2010. During this time, I lived with Zooleón staff members. In addition, I have been in constant contact via email and social media applications with Zooleón staff since my first visit to the field. I utilized participant observation, structured and unstructured interviews to collect data. These methods were used to obtain quantitative and qualitative information about Zooleón visitor, staff, and management perspectives on the conservation paradigm of their institution, AZA accreditation and costs/benefits, and overall park culture.

#### 3.1 Methods

##### *3.1.1 Participant Observation*

Participant observation was of utmost importance in my research, and first impressions are essential in analyzing park culture – particularly in my case due to extensive zoo experience. This was accomplished by observing staff, visitor, and animal interactions as a member of the Zooleón public. Broad experience with U.S. institutions allows for considerable ability to compare and contrast Zooleón with AZA institutions in the United States. Importantly, I spent the first two days in the field essentially as a visitor, having only met with the curator and staff veterinarians. In this sense, most of the zoo staff were unaware of my project and viewed me as an average park visitor. Following these initial days, I met with the education staff, sharing the goals of my research, and I began to participate in school programs and daily education department routines. While critically important, all of these observations occurred

within the context of zoo staff knowing the purpose of my presence, and treating me as a member of the “education team”.

During my time at Zooleón, I worked with the education department six days a week. I was on zoo grounds approximately ten hours a day, with only two to three hours spent interviewing visitors, during peak hours of the day. This means the remainder of the time was spent with education department staff. It is during this time that we would engage in a variety of conversations. I used these opportunities to complete unstructured interviews as the occasions arose. As with the structured interviews, our conversations focused on the nature of education programming, visitor perceptions, and departmental and personal goals.

Many days, the education staff would go to offsite programs or events, and the transit to these events afforded ample opportunities for in-depth discussions about many topics, both related and unrelated to my fieldwork.

The focus of my participant observation was to understand the education staff and zoo audience interactions at programs within the park and off zoo grounds. It was equally important to understand how the zoo education staff perceived the motivations and engagement of their audience, the information and messaging education staff presented, and the general education “culture” at Zooleón. I observed how visitors reacted to the programs and how they interacted with zoo staff.

While I did not take an active role participating in formal education programs, Zooleón staff always introduced me as a staff member, and I often answered general visitor questions before and after programs. The most active role that I undertook was as an education department consultant. Amongst the education staff I often felt that they regarded me as an expert due to my zoo experience, and would actively participate in daily animal training and enrichment, or I would field questions about various aspects of education animal husbandry and care. At the conclusion of the first summer, I was asked to present preliminary findings and suggestions for improvement. At times, I felt uncomfortable being placed in this *expert* role – I

have worked with many individuals with considerably more experience in the field than I, but this complexity underscores the mutual nature of the relationships I built while in the field.

### *3.1.2 Structured Interviews*

Personal interviews were also utilized in my research. Structured interviews with zoo management and staff focused on perceptions about conservation attitudes of coworkers and visitors, perceptions about AZA membership and the costs/benefits since Zooleón began the certification process, and ideas about park culture. Interviews were conducted with members of management, education staff, animal care staff, veterinary staff, and labor staff – as all have different levels of daily interaction with the public. Each group offered a unique view of conservation and education. In total, I conducted 37 structured interviews with staff members and 24 with volunteers completing their social service, for a total of 61 (See Appendices A and C).

These structured interviews were obtained in several manners. When possible, I completed the interviews in person, recording the discussions for later review. While these interviews were ideal because they allowed for follow-up, or unstructured, questioning, they were not always possible due to time or schedule constraints. Some individuals chose, rather, to complete a printed version of the structured interview at their leisure, later submitting a hand written response sheet or sending an electronic copy. While these were not ideal, such interactions did provide insights that I would have otherwise been unable to obtain.

In addition to the initial structured interviews that I completed with all of these individuals, 7 members of the education staff completed a second, smaller interview of four follow-up questions (See Appendix E). In 2010, the entire education staff completed a third interview, specifically focused on their precise job responsibilities and contribution to Zooleón (See Appendix F). Again, due to time and schedule constraints several of these interviews were completed using online chat, printed versions of the interviews questions, or emailed questions and responses.

I also conducted structured interviews of zoo visitors that included general questions about demographics, frequency of visit, principal reasons for a zoo visit, awareness of AZA membership and goals, and general ideas about the respondent's personal conservation paradigm. In total, I conducted 52 structured interviews of zoo visitors (See Appendices B and D).

I attempted to obtain responses from as diverse an interview pool as possible. Important features of a diverse interview pool include families, individual visitors, male and female visitors, young and old visitors, and program participants and non-participants. While I initially believed the ideal location for interviewing visitors would be near the zoo exit – as they would have had the opportunity to participate in everything the zoo has to offer – I learned that most visitors were unwilling to be interviewed at this location because they had already been at the zoo for quite some time and were eager to leave. Therefore, I opportunistically completed interviews throughout the park, and at all times throughout the day.

I also learned that interviews immediately upon entering or exiting the park were quite ineffective. The visitor's primary motivation was family interaction and enjoyment, and my attempts to interview either inhibited this (upon entering the park) or were met by an exhausted family (upon exiting). I hastily learned that the most effective interview with the public was acquired when I could approach a family stopped to view a favorite exhibit or enjoying a quick snack in a shady area.

In order to ensure that no particular group would be over- or under-represented (e.g. mother's with young babies on weekdays, large church or civic groups), I limited the total number of interviews collected on a single day to 5 visitors or families. While conducting the interviews, I offered the children a candy treat so that parents would feel less rushed. In most cases this allowed for interviews to be completed in their entirety, but on occasion the interviewee would cut the session short, and, when possible, I have used the information that they had provided prior to terminating the interview.



In addition to oral structured interviews, I allowed visitors to complete a printed version of the interview questionnaire. Some chose this option instead of being recorded, yet this was also used so that I could complete multiple interviews at one time. For example, while visitors waited to enter Uncle Buffalo's Cabin, I introduced myself to visitors and asked them to complete the structured interview in a printed format to be completed and submitted to the staff members working at that attraction, while I interviewed in-person nearby.

#### *3.1.4 Staff and Public Reaction*

For my initial stay in León, during the summer of 2009, I lived with a recent member of the education department, who is an animal trainer and veterinarian. As with interactions at the zoo, I took advantage of opportunities when they arose to discuss visitors, the zoo industry, conservation, education, and park culture. Additionally, these discussions would take on a social nature as the education department members frequently accompanied one another to social events outside of the work environment. Within a very brief time I was an accepted member of the group, with my roommate calling me his "cousin" – this allowed for great opportunity for unstructured interviews and candid conversations. Many of these conversations were not recorded or transcribed, but rather I feel they helped to shape the direction and scope of my research project during my stay in León and during the writing process.

During the second summer, I stayed in the home of the Zoo Director, but spent the vast majority of the ten days with the Education Director travelling to zoo events at local fairs and the Mexican Bicentennial Expo. Again, this interaction resulted in a personal friendship and varied discussions on a range of topics, both related and unrelated to my research – as our daily driving approached up to six hours on these days.

Outside of the education department, the Zooleón staff response to my presence was varied, although I always felt quite welcome and free to ask questions. The greatest limit to building a strong relationship with the education department is that I spent a significantly smaller amount of time with animal care, zoo leadership, and non-animal staff. Zoo leadership, while always open to conversation, led a life very similar to zoo leadership in the United States: full of

meetings, conferences, and events. The education staff, equally, is focused on their role of animal health care. There also existed a significant generational and class difference amongst the vast majority of animal keepers and non-animal staff, such as housekeeping and maintenance, and myself. While not intentional, this difference prohibited significant interaction with these individuals outside of the structured interviews that I conducted.

Amongst visitors, there were two basic reactions. On one hand, many visitors were quite interested that I had chosen to realize my study in León and were willing to participate, but as with any study where soliciting interviews is required, many chose to decline an interview or altogether ignored my request. Others began interviews, only to cut them short due to crying children or an impatient family member. Of those that chose to participate, there was never an apparent sense of uneasiness, and, as a rule, the León public was quite hospitable and accepting of my presence at their institution. I learned to speed up interviews on the weekends – cutting some questions that weren't as crucial in the sake of acquiring some information before children would pull their parents toward the pony rides or an open bench or picnic table would beckon lunch.

### 3.2 Parque Zoológico de León: The Field Site

León is located in the state of Guanajuato, approximately 200 miles northeast of Mexico City (Figures 3.1 and 3.2). With Preclassic and Classic archaeological finds of Chupícuaro, Toltec and Teotihuacan influence, the city of León was founded in 1576, following orders given by Viceroy Martín Enríquez de Almanza. In 1910, it became the capital city for the state of Guanajuato.

Today, the metropolitan area is home to over 1.6 million persons and is the fifth most populous city in the entire country of Mexico (INEGI 2005). Leather is the principal industry in León, with 60 percent of shoes produced in Mexico made in León, along with belts, boots, jackets, purses, and other leather crafts. In addition to traditional leathers, such as cow and goat, exotic leathers such as manta ray, caiman, and even elephant are available for purchase

in the central leather zone, *Zona de Piel*. The city is also known for its division professional soccer and annual World Rally Car races.



Figure 3.1: State of Guanajuato, Mexico.

### 3.2.1 *Parque Zoológico de León*

Parque Zoológico de León was founded in 1979, in a low part of the mountainous region of León known as “Sierra de Lobos” (Wolf Mountains) that had been donated to the state government several decades earlier (Arce 2009). The project had been assumed under the Department of Public Works of the State of Guanajuato.

The first decade of existence for the zoo consisted of a series of basic metal cages with regional bird species, white-tailed deer, and ponies. Over time more herbivore species were added to the zoo, and the staff necessary to maintain the zoo consisted of 11 individuals,

including one veterinarian. The park also acquired a pair of carriages and a small train, which, along with Mexican food vendors, allowed them to grow as a family recreation center.

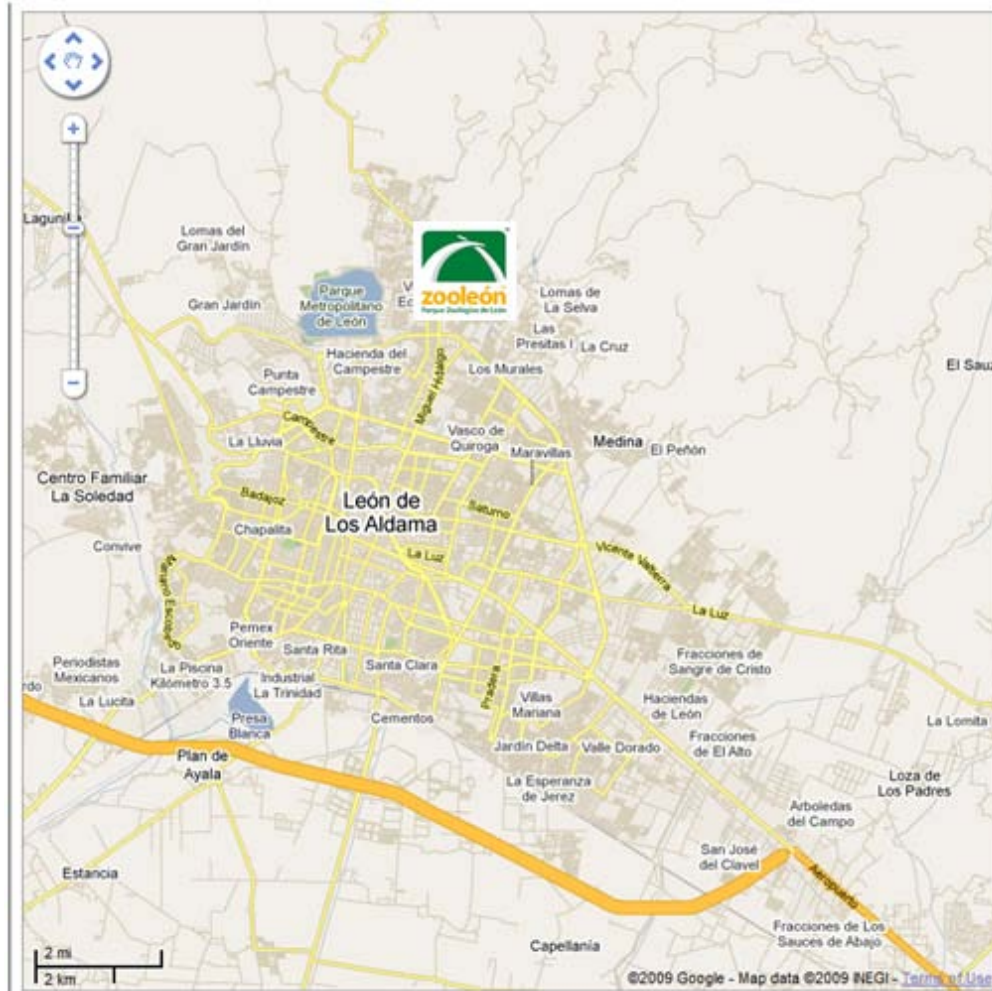


Figure 3.2 Close-up of León, Guanajuato, Mexico metropolitan area with Zooleón location

In 1989, the zoo left its state dependency, in favor of municipal leadership, in the form of an independent and autonomous board of trustees. Within several years the board was able to fund development projects within the zoo, as well as form partnerships with local, regional, and global zoo organizations. Due to these memberships, the zoo began to change how it displayed animals to exhibits with designs that replicated natural habitats. Among these new habitats include an artificial lake with a spider monkey exhibit on a small island. Over time,

more impressive exhibits for animals such as gorillas, chimpanzees, and orangutans emerged as a collaboration of zoo staff and professional engineers and architects. These exhibits represent a quality of recreating the natural ecosystems of the species that parallel the most renowned exhibits in the United States and Europe. Moreover, Zooleón became the home to animal species that could not be seen anywhere else in Mexico, including the Amur Leopard and collared lemurs.

By the close of the century, the zoo also increased their efforts to protect and propagate native Mexican species in response to the wild status of species such as the Mexican wolf, the Horned Guan (a native turkey-like game bird named one of the 50 rarest animals in the world), and the American flamingo. The zoo also created a unique hexagonally-shaped free flight cage for raptor species.

These changes in the animal collection were also accompanied by changes in animal care, including an animal hospital, and the forming of an education department that holds special events and provides conservation education programs both within and outside of the zoo. This change is evidenced in the zoo's mission: "To foster education for the conservation of plants and animals [and] to be conducive to family integration through relaxation and healthy fun."

Beginning in 2002, the zoo also began to offer a bird show and night safaris to their weekend events, as well as clowns, circuses, and popular music performances. An increased focus on the health of the total environment is evidenced by the inauguration of an irrigation system for the green areas in the park in 2003.

The Zooleón of today includes digitally-created information signs, several small gift shops, over 140 employees, and an annual operating cost of just over 27 million pesos (2.1 Million USD). Many animal care and education employees come from various zoos throughout Mexico and outside of the country for work in León. Entrance to the zoo is very low, costing \$33.00 pesos for adults (approximately \$2.70 USD), \$22.00 pesos for children under 11 (\$1.80 USD), and \$72.00/\$52.00 pesos for both the zoo and the Safari (\$5.90/\$4.25 USD). Despite

these small fees, when asked what changes outside of new animals the park could make, a large proportion of individuals interviewed complained of high entrance costs.

In 2006, Zooleón further evidenced their increased commitment to education and conservation by joining the Association of Zoos and Aquariums (AZA). This membership, while undertaken for increased opportunities in conservation and environmental education through AZA resources, also realized a long term dream held by zoo curator, Richard Sheffield, who had maintained a friendship with many AZA leaders over his years at the zoo. It is currently one of only two zoological parks in Mexico, and a small handful outside of the United States, to join the AZA. In addition to its AZA membership, León is also a member of AZCARM (Association of Mexican Zoos, Nurseries and Aquariums) and WAZA (World Association of Zoos and Aquariums).

While there is great variability amongst United States institutions, Zooleón certainly stands in stark contrast with institutions like Dallas and Los Angeles. These parks host a variety of daily and special events for visitors, regularly open multi-million dollar exhibits with formal galas, and are covered in corporate sponsorship. Their public image is the combined work of marketing teams, scientists, and animal care and horticultural staffs. All of this is funded through private donations, extraordinary fundraisers, visitor experience “add-ons” such as behind-the-scenes events and paid photography opportunities, and through gate attendance fees of ten to twenty dollars on average – with some parks in the United States charging well over 50 dollars per person.

### 3.2.2 Park Attractions

Visitors enter the park through a central entry gate greeted by a worn cement lion statue (Figure 3.3). From this central location, three pathways radiate outward – *Sierra San Pedro Mártir*, *Cañón del sumidero*, and *Gogorrón*. To the right, along Gogorrón are all of the zoo’s public offices, zoo leadership offices, first aid, the commissary, and at the far end of the pathway, the education complex. With no animal exhibits on the right side of this pathway, it is used as transit to arrive to the main crossroads that intersect the park.



Figure 3.3 Zooleón entry plaza

The left and center pathways leading out from the entry, Sierra and Cañón, direct visitors to an expansive picnic and playground area that is covered in massive pines and eucalyptus trees. Most visitors venture into this area upon entering the park to enjoy their morning meal with family – which they typically bring with them. There is a constant buzz of straw brooms scratching across the paths that dissect this area – the cleaning staff is omnipresent.

The front half of Zooleón not only features the picnic and playground areas, but also a well-manicured pond that is home to a small island that houses a monkey troupe. It is also the home to the new multi-storied walk-through bird of prey aviary that spirals up over the treetops, the children's zoo, the most popular food stands, the seasonally-operated animal encounters theatre, and Uncle Buffalo's Cabin – an animal-themed house of tricks. This portion of the zoo is always busy with activity when the park is full. Families spend the largest portion of their time



here when they are not actively visiting animal exhibits, and it houses the most benches, tables, and shaded-grassy areas.



Figure 3.4 Visitor map located at the entrance

From the three main pathways leading into the park, Sierra leads directly to the back half of the zoo and the most salient species: elephants, giraffes, rhinos, and hippos. The other main paths do not directly lead to the back half of the zoo, rather visitors turn onto *El Vizcaíno*, *Chamela-Cuixmala*, *Sierra de Órganos*, and *Calakmul*. These pathways lead visitors to attractions including polar bears, orangutans, chimpanzees, tigers, lions, and other large cats, as well as a myriad of other representative zoo species. This zone of the zoo is largely devoid of tree cover, grassy areas, and picnic areas. There are several snack and souvenir stands, but amongst visitors it is not seen as a zone meant for more than animal viewing. Running through the center of this back half of the zoo is a substantial area dedicated to hooved animals, such as deer and wild livestock. The pathways surrounding this zone are at times muddy and dirty, perhaps a sign of the underuse and under appreciation of this area. Few visitors even venture



through this area, choosing, rather, to circle around it when traveling between the two distinct zones that house (1) large cats, bears, and primates and (2) large African animals.

The far corner of the zoo is home to a recent walkthrough aviary that features an interesting variety of bird species, small streams and waterfalls, and a beautifully-paved pathway. Behind this area are the zoo's veterinary hospital and offices, which are not accessible to the public.

Amongst the playground areas, there is access to the separate African Safari area by means of Sierra San Pedro Martír. This entry and exit is used by individuals that have purchased a pass to visit both parks.



Figure 3.5 New aviary featuring manicured gardens and paved pathways

The Safari attraction is only accessible by guided tour in an open air safari truck, and contains a variety of animals that are both free ranging – and in enclosures. All of the species found on the Safari are also encountered in the main zoo. For this reason and for the lack of areas for family enjoyment and relaxation – outside of canoe rentals – most visitors remain in the main zoo. The Safari is largely seen as a special events destination, such as during Night Safari events. In comparison with its United States counterparts, Zooleón is quite similar in many respects. The physical layout of the park – with multiple pathways crossing through the park – ensures that visitors will decide their own path through the park. This encourages a sense of exploration and wonder for zoo visitors, yet ample maps direct visitors seeking an express route to their favorite attractions.

While it does mirror other AZA institutions in some respects, Zooleón is also quite distinct. The number of family areas – including picnic and park areas – is substantial. Furthermore, while some are on the edges of the park, many are located in the heart of the park. In U.S. institutions, family play areas are limited to the children’s zoo area or an outlying area of the park. Family picnic areas, if available, are also relegated to areas outside of the park or a separate section within the park. Zooleón’s layout, it seems, recognizes the importance of family time at the zoo – and it underscores a visible difference with many U.S. institutions.

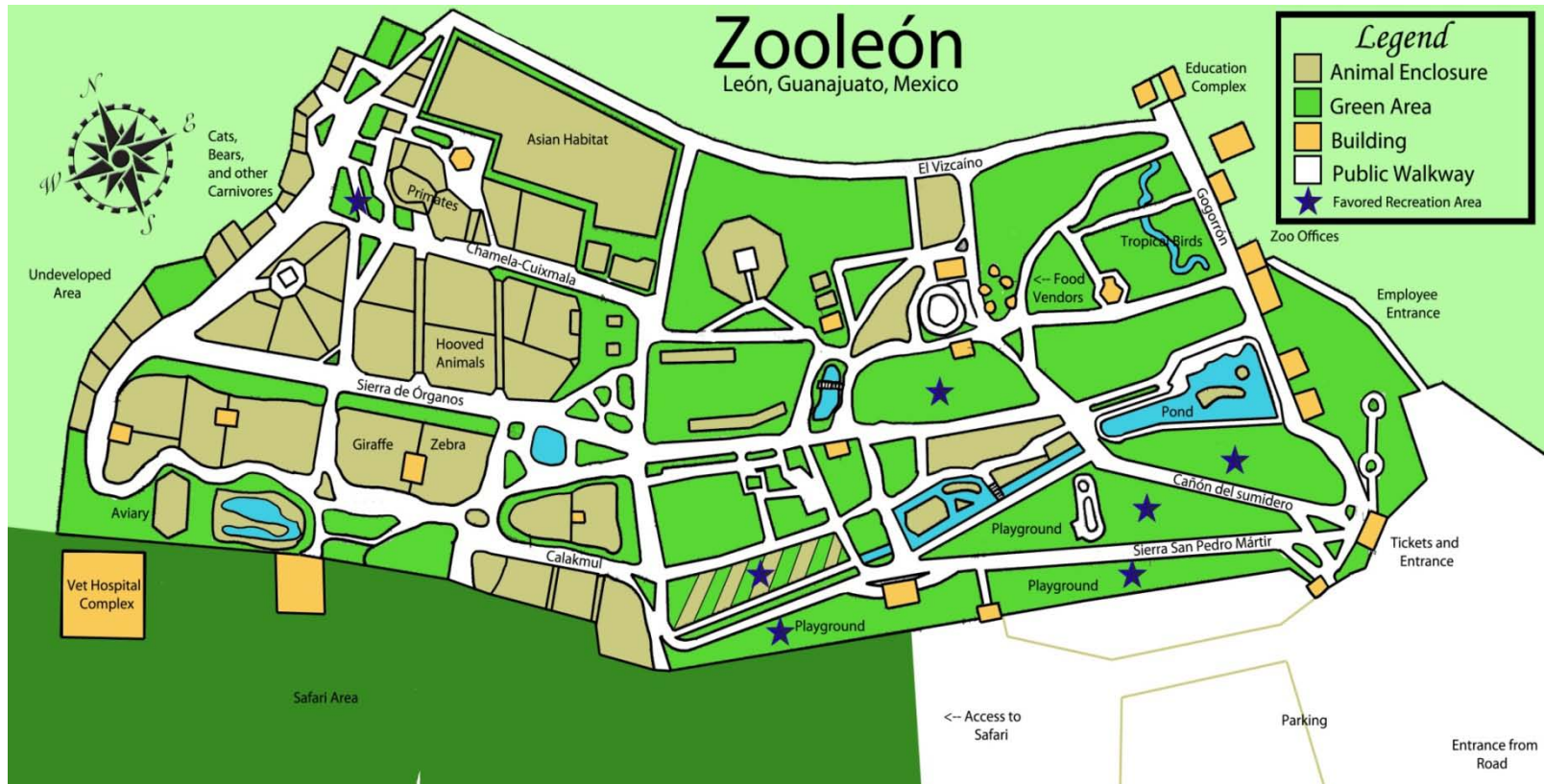


Figure 3.6 Zooleón map with featured recreation areas

### 3.3 Park Culture

Zooleón park culture is dominated by family and the importance of family-building. This is evidenced in visitor data, as well as participant observation of visitors, the activities they participate in, and the interactions they engage in with zoo staff and other visitors. This section addresses this importance of family through a description of visitor groups, their interactions with animals, park facilities, and education opportunities.

#### *3.3.1. Visitors*

2009 was an unusual year for Zooleón due to the highly-publicized world outbreak of Swine Flu. Even though the zoo was closed to visitors for only seven days, the effects of a small-scale panic in the face of the flu had large-scale effects on many institutions. Zooleón witnessed a 15% drop in annual attendance in 2009, down to 441, 437 for January to November. The same period a year prior produced over 500,000 visitors (Parque Zoológico de León 2010). With children being most affected by the flu outbreak, the education department saw the greatest loss in attendance, with a 60% annual decrease in paid education program attendance.

While the zoo calculates the percentage of adult and child visitors, these numbers can be deceiving because, according to park tallies, an adult is anyone over the age of 11. For January to November of 2009, 69% of visitors were adults and 31% were children.

On weekdays, during my initial fieldwork, the relatively sparse visitorship was evident. In fact, near the end of July, I began to abandon Mondays as viable days for obtaining visitor interviews due to the minimum numbers. During these “off-peak” times, I would observe and participate in education programs. On a typical day, the staff would host approximately five school groups, and, later, during summer vacation, these hours were dominated by summer camp. In addition to groups that purchased a formal program with the education department, there were also many school and summer camp groups that led their own tour through the zoo. Depending on the leadership and age of the group, these groups either toured in small adult-led

groups or were given freedom to explore the park without adult supervision. In 2010, the busy education schedule was further compounded by the implementation of the *Ranchito*, or barnyard, at local fairs.

Outside of education program groups, which consisted of approximately one adult per 5-8 students, most visitors comprised a nuclear or extended family unit, especially on the weekends (Figures 3.7 and 3.8). A family visit to Zooleón followed a consistent pattern for the day. Upon entering between 10 and 11 a.m., the family would proceed to a park or green area to eat a morning meal. Following this meal was the prime time to visit and explore the park. By 2 or 3 p.m., the families would return again to the park or green areas for lunch, followed by relaxation. It was quite common, in the late afternoon, to see people strewn across benches, tables, and grassy areas taking an afternoon nap.

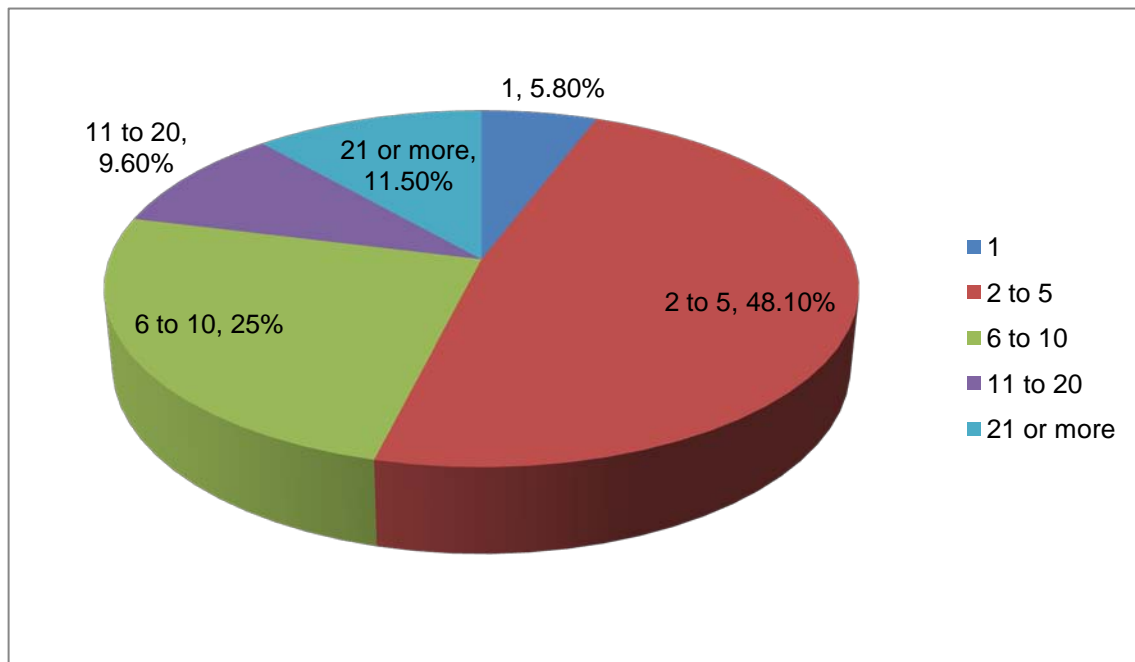


Figure 3.7 Zooleón visitor group size ranges (as number of individuals per group)

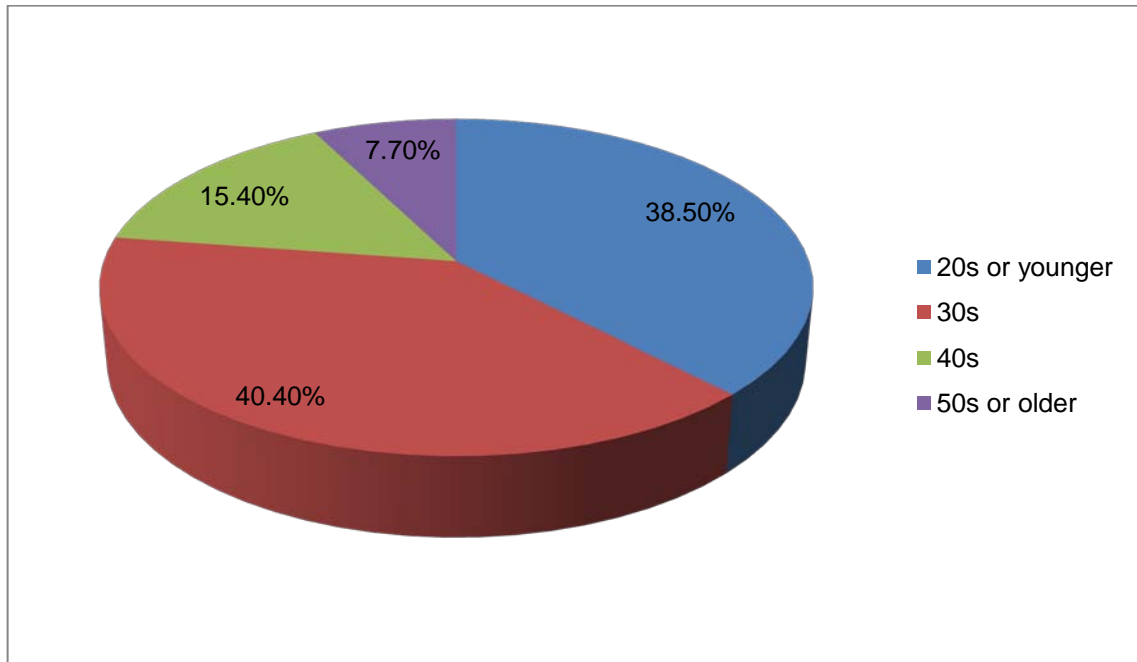


Figure 3.8 Zooleón adult visitor age ranges

Another weekend difference was found in the Children’s Zoo. While access to petting some of the animals always existed, on the weekends, student volunteers would work that portion of the zoo, allowing guests to enter and pet a variety of farm animals, many of which were not accessible during the weekdays. Zoo restaurants were open every day, but experienced greater business on the weekends.

One of the greatest differences that affect the “average visitor” to United States zoological institutions is membership. Soliciting and maintaining zoo members is a major business in U.S. zoos, and it has resulted in great perceived benefits to the visiting public – and differentiated use of the park. A visitor can come to the zoo solely to see a favorite exhibit or area of the park, a mother can bring her stroller-bound toddler to get in a morning walk, or a family can participate in on-site education opportunities without ever visiting the public areas of the park – without the necessity of spending an entire day in the park. Certainly, you still find the nuclear and extended families that are omnipresent at Zooleón in the United States, but membership structure has greatly changed and diversified the way the zoo is experienced in the United States – and Zooleón stands in stark difference to the diversity of experiences in the

modern AZA model. The average Zooleón visitor comes to the park with their family for an all-day family experience.

### *3.3.2 Animal Interactions*

Many exhibits at Zooleón are highly accessible to visitors. In my experience, accessibility and proximity are critical to visitor enjoyment at the zoo. Large carnivore exhibits, such as the polar bear, brown bear, and most of the large cats, gave visitors unobstructed and up-close views. There is a price the zoo pays for having such high accessibility: There were very few exhibits where a member of the public would not be able to throw food or trash into the exhibit – and discarded refuse could be seen in many exhibits. In some cases, visitors could easily have touched the animals, including the large cats. Newer exhibits, like those of the great apes and white tiger, strike a balance between visitor viewing and animal protection, but, ultimately, if a visitor wishes to throw food in to the animals, there is little they can do to exhibit design to prevent it. The staff frustration with visitor actions in terms of harassing and/or feeding zoo animals was evident. The zoo has posted signs throughout the park to dissuade visitors from throwing trash, but it would be difficult for staff to confront guests caught littering in exhibits or feeding animals.

Larger budgets have allowed for many U.S. institutions to seek and implement unique ways to separate the public and animals without increasing the physical distance through plastic tunnels and colossal viewing windows, but U.S. zoos also employ monorails and gondolas to increase accessibility to animals without compromising their safety. Additionally, animal keepers in the United States are more greatly involved with the visiting public, creating a constant presence in public areas that limits inappropriate behavior around animals and their enclosures.

Respect for animals – defined as not yelling, harassing, or otherwise adding stress to the animals' lives – varied greatly amongst Zooleón visitors. While it was commonplace to find teenagers yelling at the chimpanzees, it was also equally common to find families enjoying their

visit by discussing and observing the animals. This is consistent with all United States institutions that I have visited.

### *3.3.3 Park Interactions*

Within minutes of touring the park on my first day, I was astounded how much trash is discarded on the ground, near animal exhibits or anywhere else that it does not belong. Yet, the park was immaculately clean. It may seem counterintuitive to state this coexistence, but a clear explanation is present. There is an overall attitude among a large segment of the visitor population, mostly teenagers and young adults, that cleaning up after themselves is not their responsibility. There is an equally evident attitude amongst the housekeeping and horticultural staff to maintain a spotlessly clean park. The two, therefore, seem to go hand-in-hand, if not reinforce one another. There is a constant hum of raking and sweeping in the park.

A major affirmation of my interviews with visitors is the importance of recreation and family relaxation at the park. In fact, green areas and the children's playground often attracted as many, if not more, visitors than the animal exhibits themselves.

### *3.3.4 Education Interactions*

As I anticipated prior to my arrival, Zooleón offers scheduled opportunities for staff and visitor interaction, commonly known as keeper talks. These public talks are free of charge to all Zooleón visitors. During these talks, keepers and education staff may demonstrate animal training, environmental enrichment activities, or simply offer a question and answer period for the public. These talks are generally spaced to allow visitors the opportunity to attend a talk for every animal for which such an interaction is offered. During my time at the zoo I attended and recorded these interactions.

At Zooleón, keeper talks occurred every Sunday. In the case of some animals, such as the elephant and leopards, these talks were narrated by an education staff member while keepers trained with the animals. Other talks, including lynx and several bear species, the same education staff member demonstrated environmental enrichment techniques, along with



descriptions of the species and their conservation status, without the animal keeper present. These interactions are also essential to understanding park culture in terms of conservation values of staff and visitors alike. I would record observations during these talks into a digital recorder, and also used the post-talk period to interview zoo guests.

In addition to participant observation of regular visits, education programs, and keeper talks, I also participated in the other more specialized programs. The *Cabaña del Tío Búfalo* (Uncle Buffalo's Cabin) was a fun house with a morbid-themed story that informed visitors of the perilous death the fictitious Uncle Buffalo met due to his pastime of hunting wild animals. This attraction seemed to be quite popular amongst visitors of all ages – the result of an interesting mix of visual tricks and unique animal mounts on the walls.

The education department also offered *Paquetes escolares* (School Packages) during my fieldwork. Schools were offered four options: *Contacto Cercano* (Close Contact), in which the group saw a hands-on animal demonstration and then received a short guided tour of the park that culminated in hand-feeding the giraffes a carrot, *Explorando Tú Zoológico* (Exploring Your Zoo), in which students received a guided tour followed by a discussion of animal artifacts, known as biofacts, including horns, hooves, beaks, and even elephant feet, *Investigadores de la Fauna* (Animal Investigators), in which groups would initiate and complete a customized research project with the help of education staff during a single zoo visit, and *Visita Animal* (Animal Visit), which could be a combination of live animals and biofacts presented in an offsite program. The zoo also offered, although I never observed, programs that did not have the hands-on element, but solely consisted of guided zoo tours. On occasion, the education staff had special events, including birthday parties, which were essentially identical to the education programs offered to school groups. Despite offering this variety of programs, the majority of schools chose the Close Contact program. Even when not the selected package, the education staff usually gave the school groups this program or an equivalent of it without any complaint from the groups.

In the last month of summer, prior to students' return to school, the education staff also offered summer camp. This camp was a combination of recreational activities, such as soccer, daily talks by a staff veterinarian or other invited speakers about issues such as adaptations and behavior, and animal-related crafts. This activity included children from early teens down to children of 4 or 5 years of age. Parents could pay by the day or the week, with many children participating throughout the duration of the month.

As of the summer of 2010 (my second stay in León) the education department added different programming outside of the zoo. They now offer a small ranch at local fairs and festivals including the León, Silao, and San Miguel de Allende fairs and the Mexican Bicentennial Expo in Silao. This alteration has led to great changes in daily and weekly schedules and priorities. The education department director is the sole individual in the department with his own vehicle, and spends each day transporting his staff and keepers to the various fair locations – many times spending at least four hours on the road in transit each day. For the fair at San Miguel de Allende, staff members will stay in the city for the entire week, further reducing staff on-site at the zoo. In addition to his responsibilities to transport his staff, the director must maintain the smooth running of summer school programs, special events, and the managerial duties of paperwork and communication.

The ranch itself consists of a freshly-printed vinyl barn, in the same style of new graphics within the zoo. The structure is then created by stretching the vinyl “walls” over metal frameworks that allow for customization of size and shape for the varying fair locations. “Inside” the barn – which opens up to a traditional stall area – the visitor has the opportunity to see farm animals, such as cows, sheep, chickens, and rabbits, but also exotic species such as guanaco and Asian cattle. Visitors can also pay to enter the stalls in order to pet, brush, and feed the animals up close. Just as in the Dallas-Fort Worth metroplex, despite proximity to farming industry, many children are quite unaccustomed to farms and how they run. When asked where milk comes from, one child responded, “The Oxxo” – the local convenience store.

All of the education staff – despite the lost sleep and lost opportunities for on-site work such as animal training and the defunct educational animal show – understands the importance of bringing the zoo to the people and making such an impactful connection.

On zoo grounds– outside of keeper talks – the average visitor’s free education activities are limited to reading the dated informational signs. The zoo offers informational handouts at the office, some distance inside the park, but few visitors seek this information.

The education complex is located at the far end of the main visitor path. The occasional visitor ventures up the small path to see what the building contains, but during my visit, no visitors sought out educational information, unless they were specifically visiting to inquire about school programs or summer camp, or making a payment towards those programs.

The zoo’s adequate education animal collection is strictly used for paid education programs. A docent, or hands-on animal demonstration, program does not exist for the zoo public – a very common feature of many AZA institutions.



Figure 3.9 Example of animal exhibit signage

### 3.3.5 Analysis of Zooleón Park Culture

As a result of the interviewing process, a striking reality emerged at Zooleón – the most effective exhibits, public areas, attractions, and education programs are those that do two things: entertain and encourage family interaction and bonding. The notion is seemingly simple – no zoo professional would underestimate the importance of a family experience at all zoological parks – but at Zooleón this importance of family integration and communal enjoyment of a beautiful and unique public space is paramount. In fact, education activities that do not explicitly incorporate the entire family unit often fail to make a meaningful impact on the public. The importance of family is evidenced in the success of weekend keeper talks that integrate the entire family within the space of the park – instead of an isolated education building. It is also evidenced in the excitement found in the recent *Ranchito* that tours local fairs. The strength of Zooleón is in its connection to the family and the opportunities that it affords families to choose their own manner of strength-building through activities both within and outside of the park.

## CHAPTER 4

### STRUCTURAL BARRIERS: A TENSION BETWEEN U.S. EXPORT EXPECTATIONS AND LOCAL RESOURCES

The recent expansion of the Association of Zoos and Aquariums into foreign parks underscores the ever-globalizing nature of conservation. If foreign members are to be equal members in the AZA, the organization must seek to address possible disparities and any overwhelming cultural differences. Without addressing such inequalities, the AZA cannot expect its member institutions and their visiting publics to feel equally represented. This chapter addresses the structural barriers faced by Zooleón in regards to the industry standards found amongst other AZA member institutions. This chapter also discusses how institutional structures and cultural differences affect implementation of AZA programs and ideals. It is necessary to understand institutional structures and the culture within which they operate. I first provide a description of how AZA membership is gained and the costs and sources of funding – including volunteers, membership, and corporate sponsorship. I then discuss the importance of institutional structures in professional development and park infrastructure.

#### 4.1 Gaining AZA Membership

To achieve membership in the AZA, a zoo or aquarium must first seek accreditation. This process involves the completion of a lengthy institutional questionnaire that includes detailed information about the animal collection, veterinary care, conservation practices, education and interpretation, research, governing authority, staff, support organization, finances, physical facilities, security and safety, guest services, and other facets of the park. This process alone is often months of work and the compilation of a massive amount of research.

Following the submission of this application, a twelve member panel – the Accreditation Commission – studies and evaluates the application for an additional six month period.

Following this review, an inspection team visits the applicant institution, spending several days visiting every area of the zoo or aquarium, interviewing staff, checking records, and inspecting the grounds. This team, much like the Commission, includes an outstanding group of zoo professionals, including at least one zoo veterinarian.

The Accreditation Commission then meets (twice a year) to review the application and supporting documents, the inspection report, and any information or comments that may be received by outside organization or individuals. At this time, the top officials for the applicant institution are also present to answer any questions before the Commission. If they meet all of these criteria they can then be offered accreditation. This entire process is repeated every five years to maintain accreditation, regardless of the institution or how long they have been an AZA member.

Why join the Association of Zoos and Aquariums with such a lengthy accreditation process? The AZA purports many benefits to membership: Public trust, institutional benefits, and access to “critical” AZA programs and services. The AZA website provides three descriptors of public trust. Firstly, membership demonstrates that an institution meets or exceeds the current professional standards of a zoo or aquarium. Secondly, it provides a “publicly recognized badge” that shows excellence and a commitment to not only animal care, but conservation and education. Lastly, AZA membership delineates member institutions from roadside zoos. The institutional benefits to AZA membership are numerous: it increases eligibility for grants, reduces government red tape in acquiring and displaying exotic animals, and it promotes professional recognition and provides impartial professional evaluation. It also encourages institutional self-evaluation, gives greater opportunities for partnerships between institutions, fosters community pride, and assists in attracting and maintaining a high quality staff. In terms of access to AZA programs and service, membership allows for institutions to exchange or loan animals for display or breeding, provides opportunities for greater collaboration, allows participation in Species Survival Plans, and it provides free or discounted

admission to fellow member institutions for information-sharing. In short, it facilitates many of the essential functions to all zoos and aquariums. Certainly all of these benefits are appealing to institutions seeking membership, but the reality is that the level at which the institutions are able to participate certainly varies by location, animal collection, and budget. These barriers – namely membership and volunteer infrastructures – have profound effects on Zooleón, not only in terms of revenue, but also in the opportunities that such programs create.

#### 4.2 Budget Constraints

As with most professional organizations, AZA-accredited institutions must pay an annual membership fee. This fee is based on annual operating budget, according to Membership and Database Services Coordinator Barbara Skewes. Annual operating budget is defined by the AZA as “all in-kind services and financial support received from the governing authority/support organization but excluding capital improvements and concession/gift shop operations” (personal communication to author, February 1, 2010). For zoos and aquariums with an operating budget between \$401,000 and \$4,999,999, this fee is .25% (one-quarter of one percent). International members, though, are assessed a flat-rate of \$6,250, regardless of annual operating budget. Were the AZA to use the same scaled membership fee for international institutions, Zooleón’s fee would be approximately \$1500 dollars less, or \$4,750.

This fee is not the only difference found amongst Zooleón and other AZA members. Zooleón faces supporting a larger staff and visiting public with a smaller budget and substantially smaller volunteer numbers. In order to assess these differences, I compiled statistical data on all AZA members from the Member Directory 2010, a publication made available to AZA members. In choosing the limits for comparison, I grouped institutions that would place Zooleón in the middle of several data sets: budget, population, and annual visitors. The limits for budget were from 1.5 to 2.5 million dollars (US). The limits for metro population were from 1 to 2 million individuals. The limits for annual visitors were from 429,000 to 629,000 individuals. In addition to excluding zoos that fell outside of these three criteria, I also excluded

AZA members that were strictly aquariums, due to their unique and very different budgets and sizes – the life support systems of aquariums alone cost millions more dollars annually.

Appendix G shows the results of institutions ranked according to annual budget. At 190 individuals, Zooleón supports a staff that is minimally three times larger than any other institution with a similar annual budget. Additionally, Zooleón does not rely on the support of volunteers like many of these institutions.

There are only two zoos that have fewer than Zooleón – and observation in the field revealed that all of the volunteers in León are secondary and university students completing a short-term period necessary for graduation. While this at times can mean students of excellent abilities and capabilities, it also means a constant process of training new volunteers – and no long term volunteers. This is contrasted by the volunteer body that the typical AZA institution comprises. While these zoos and aquariums also have school-aged volunteers completing social work time, some can rely quite heavily on adult and retired individuals. Moreover, these volunteers fill many roles, including that of educator, animal keeper, guest services, and maintenance (among many others). In many cases, these volunteers collectively account for free employees. From available data, Zooleón is one of only 4 zoos that have less than 100 volunteers in a metropolitan area of similar size, many with several hundred more than that. Of those three other zoos, Virginia Zoological Park is the closest in terms of annual attendance, but it still falls nearly 150,000 visitors short compared to León. Happy Hollow Zoo and Palm Beach Zoo service even fewer – well less than half of those that visit León. Therefore, it is clear that while institutions with a similar metro population can vary drastically in visitorship, an even greater discord is seen in the number of volunteers. Zooleón services a large public with limited, and often short-term, volunteer hours.

This absence of volunteerism is not an institutionally-based shortcoming – it is a nationwide phenomenon. One must be careful to not take for granted the well-developed



history of volunteerism in the United States. In fact, for much of the world, this U.S. tradition is an exception, not the norm.

In Mexico, volunteerism takes on a much different shape. It is mainly seen in three realms – grassroots organizations at the local level, in association with culturally prestigious (and economically important) institutions, and amongst a class of youth completing advanced education.

The first area – grassroots organizations – is a result of a powerful and centralized government in comparison with the United States. Whereas a weak national government in the United States has resulted in stronger civil society, in Mexico, when the government is unable or refuses to help local peoples, grassroots or self-help organizations have traditionally emerged to meet local communities or people's needs. One such example is in rural *colonias* which, as a result of the government trickle-down effect, often are left out in terms of resources.

The second area – in prestigious institutions – underscores the economic significance of cultural history. In the country's most renowned museums and cultural locations – such as archaeological sites – there exists a degree of volunteerism. These volunteers, though, have a clear goal in their actions – acquiring prestige. This prestige is based, in a large extent, to the amount of foreign – mainly American – capital that such institutions bring in through tourism.

The volunteers found at Zooleón do not pertain to either of these classifications, but rather, are serving a required term for educational credit – the third area of volunteerism found in the country. These individuals are high school and college-aged students that are completing a required number of community service hours within their selected field of study. These individuals, particularly the university students, represent a higher social class of individuals from families that can afford the costs – in both capital and labor – that completing advanced education requires. Not only can they afford to pay for the education, but they can survive without the labor of their children during their educational years.

Zoo director, Sofia, also attributes the limited volunteerism at the zoo to the lack of a firmly established middle class – from which the United States gains most of its large sector of volunteers. In the U.S., middle class individuals retire from working and live off of savings and pensions, and it is these individuals are often the fodder of zoo and aquarium volunteer programs. Throughout Mexico, and certainly in León, the ability to retire and live off of savings is simply not an option. Even with free “perks” offered to volunteers, it is unlikely that Zooleón could build a volunteer force that so many institutions enjoy in the United States. Zoo director, Sofia, further explains this situation:

In all of Mexico we would have to cultivate a culture of volunteerism. The economic conditions of our country do not permit people to donate their time freely because people typically have a fulltime job, or moreover, they have two or more just to survive. In terms of older people [that would be retired in the United States], their pension is small, and, sadly, they are required to continue working to cover their living expenses. [In order to institute a volunteer program] we would have to think first in personnel to coordinate “privileges” for the volunteers that wouldn’t represent a huge cost for Zooleón.

The current Education Director indicated during my fieldwork that in 2011 they hoped to institute a volunteer program that would advance the work of the Social Service interns into a more permanent term of volunteering, but given the difficulties just discussed – Zooleón not pertaining to grassroots organizations or prestige-building and the absence of middle class individuals to freely donate their time – the realization of this project seems an unlikely endeavor. In accepting foreign members, it seems the AZA has become shortsighted – it is simply irresponsible to expect an institution’s infrastructure to mirror that of United States institutions. Zooleón operates in a distinct cultural environment, and we must be clear to understand this distinction – one must be careful to not take institutional membership – or the

entire lack thereof – for granted. Although it appears that the AZA might be doing precisely that.

A lack of volunteer culture is not the only significant obstacle that contributes to budget constraints for Zooleón. In comparing zoos with similar annual budgets, what is also apparent, is that in terms of annual visitors, Zooleón is amongst the institutions with the highest number. This means they must service a larger number of visitors on a more limited budget. Additionally, Zooleón does not have a membership structure or the income that is associated with them – which I will discuss later at length.

Zooleón has an annual attendance of nearly 530,000 individuals. Appendix H shows the results of institutions ranked according to their annual attendance. The data demonstrates that Zooleón has the third lowest annual budget among the group – with Salisbury Zoological Park and ZooAmerica North American Wildlife Park coming in approximately \$600,000 lower. These parks, though, both have staffs one-fifth the size of that of Zooleón. Nearly every park also boasts a larger volunteer force. In fact, from the available data, those parks that do have more volunteers, in many cases, have substantial numbers – Nashville, Sacramento, and Fresno all count on the efforts of over 1,000 individuals. Another feature that the vast majority of these institutions share is a large body of contributors in the form of memberships. Again, this data demonstrates how much Zooleón must achieve with a limited budget, and the limited support – in terms of volunteers and memberships – that they can count on to reach their goals.

One of the hallmarks of many AZA zoos and aquariums is strong institutional support by its members. Membership means different things at different institutions, but most parks offer some version of individual membership, family membership, and “grandparent” or “care provider” membership. Membership often includes unlimited free admission, special events, newsletters or publications, early entrance or late exit to the park, and even behind-the-scenes tours or animal contact opportunities. Additionally, membership to an institution allows for discounted or even free entrance to other AZA zoos and aquariums. Often a family can make up the cost of membership within several visits in a calendar year. Zooleón does not offer

memberships – it is an area of great cultural distinction compared to the United States.

The average total of these paid memberships for all zoos in my comparison is over 19,000 members, ranging from nearly 1000 to over 250,000. These members represent an average of nearly 60,000 individuals – meaning children, extended family, or “plus ones” that are covered under the membership owner.

These figures take on greater importance when you examine the price of an individual adult membership: \$49. Despite the overhead of membership staff and free perks, zoo memberships certainly represent great revenue opportunities for AZA parks. This revenue is included in annual budget totals used to assess the AZA annual dues, but that is not the entire picture. These memberships represent guaranteed return visits for many, which correspond to more opportunities for revenue at gift shops and restaurants, greater exposure to paid attractions such as traveling exhibits, and increased awareness and use of paid zoo or aquarium classes. Much of this revenue is not reported in annual budget totals. Moreover, these repeat or regular visits correspond to a greater sense of ownership or pride in the institution by its visitors, which equate to invaluable social capital.

Of the 22 AZA institutions reporting annual memberships with budgets similar to Zooleón, 13 maintain annual memberships of over 10,000 individuals, with an additional 5 zoos boasting more than 7,000. What does this mean for Zooleón? If the zoo enjoyed the same average number of memberships per annual visiting public, they would have one per every 50 annual visitors, or at least 11,000 members. This represents a substantial revenue opportunity that is not part of Zooleón’s infrastructure.

#### 4.3 Sponsorships

A significant source of income at many AZA parks is the use of paid sponsorships. The Dallas Zoo has the Kimberly-Clark Chimpanzee Forest (and a chimpanzee named KC). The Miami Metro Zoo has Mercantil Commercebank Children’s Zoo. Omaha’s Henry Doorly Zoo has an IMAX theater. The Virginia Zoo, and most likely a handful of others, has Pepsi symbols

covering its visitor map, conveniently guiding visitors to the nearest refreshment stand. Corporate sponsorships are commonplace across AZA institutions in the United States. Disney's Animal Kingdom is filled with its own characters and legacy.

Sponsorships are not found solely through corporations, though. The Los Angeles Zoo has the Winnick Family Children's Zoo, and The Reid Park Zoo has the Lee H. Brown Conservation Learning Center, among countless other examples of personal donors whose name, by their choice or the institution's, grace an exhibit or even an entire region of the zoo. It does not stop at these multi-million dollar gifts, even the average zoo member or supporter can purchase a brick, a wall tile, or a brass leaf on a tree of giving. They can even "adopt" an animal for a year, with their name placed on the outside of the exhibit. Of course this honor increases in price with the attractiveness of the animal or species.

While AZA institutions are free to seek out their own partnerships and corporate sponsors, the Association also began a program for national sponsorship, Proud Partners. The first two companies to be such partners are Geico and Animal Planet. According to the AZA website, Geico is sponsoring a traveling gecko exhibit that is accompanied by their ubiquitous gecko mascot, while Animal Planet is installing kiosks in AZA institutions that feature *Zootube* videos of animals and their habitats. In total just over a dozen zoos and aquariums are participating in these new programs. The AZA also facilitates short term sponsorships for special events or programs. These include Macy's Elephant Day at the Pittsburgh Zoo and Radio Disney events at various institutions.

In addition to naming events, exhibits, and animals, sponsorships are quite evident in print and digital media. Many AZA zoos and aquariums receive substantial media coverage for their special events and animal news. In addition, many host a weekly local television program or radio show. Of course the largest and most prestigious zoos and aquariums are invited to visit national morning and late night shows with their animal ambassadors. The face of Jack Hanna is certainly a staple of the AZA.

Corporate and individual sponsorships are omnipresent in AZA institutions throughout the United States as a result of a long history of partnerships, and a deep culture of philanthropy. Corporate culture in the United States seems to penetrate all aspects of life. The development of corporate partnerships is still in its infancy at Zooleón. A tour of the park reveals very little corporate sponsorship. With the exception of ice cream vending trailers wrapped in Nestle logos (Figure 4.1), one would not be aware of any sponsorship. Moreover, there is no evidence of sponsorship outside of food and beverage vending, and no conservation message, explicit or implicit, by outside corporations. The importance of this finding is that infrastructure and capital improvement are largely dependent upon zoo ticket gate revenue – which, for the reasons mentioned above, is not the case in many United States institutions. Given this, all signage and exhibits are free of corporate logos and signage. Therefore, the information sign in front of the badger exhibit only dons the Zooleón logo and information about the animal. There is something to be said for the absence of corporate branding – something that we have grown accustomed to seeing across all aspects of public life in the United States. It gives the zoo a more exotic feeling, a feeling of escape from the everyday. This fact is not purely a romantic observation, but serves to explain, in part, the desires and motivations of the visiting public, that will be discussed later.

While not prominently distributed, Zooleón offers various printed literature for special programs, schools classes, and a zoo map. All of these are equally sparse in terms of evidence of corporate sponsorship. In fact, other than the tourism board of the city of León and the state of Guanajuato, the only other advertisement on the documents is for a convenience store/gas station located in the location map on several flyers.



Figure 4.1 Nestle sponsorship of ice cream vending station

Outside of print media, the zoo does participate in local television shows upon occasion. During my time at the zoo, the education staff participated in two such programs – one a variety show, the other a music video show – both aimed at children. Both provided free advertisement for the zoo during students’ summer vacation. Yet these opportunities, while beneficial, only provided free advertisement, and did not provide an influx of capital.

The lack of individual sponsorships is not attributable to the same causes as the lack of corporate partnerships, but rather, to a greater cultural distinction. The concept of personal philanthropy – the giving of one’s time and money for a cause – is not a cultural tradition found in Mexico. Again, the lack of a stable and clearly defined middle class throughout the country is the primary factor for this lack. Therefore, “adopt-an-animal” or “name the exhibit” type fundraising would fail to gain support. Again, the AZA, it seems, does not recognize the importance of this cultural feature.

#### 4.4 Professional Development

Many AZA institutions, as a result of their successful volunteer, membership, and sponsorship programs have developed multi-faceted staff development programs – although there is much variation across AZA members in the United States in terms of professional training provided and offered. I began my zoo career at the Fort Wayne Children’s Zoo with no zoo education or animal experience. I was accepted to the docent class during the first year of my undergraduate education. A docent is an educator that handles and uses live animals in public demonstrations. In this series of classes that met every two weeks, I was instructed how to handle and present education animals to the public by the most experienced docents at the zoo and the volunteer staff. These presentations were made with little or no zoo staff supervision upon successful completion of the training program. Eventually, I also became an experienced docent that led these trainings.

After several years as a docent and as a seasonal education department employee, I was offered employment as an animal keeper, but my previous experience is not the norm at the Fort Wayne Children’s Zoo. Many new animal keepers begin with no formal animal care experience. Additionally, although many are college students or graduates, this is a not a prerequisite for employment as a keeper. At the Fort Wayne Children’s Zoo all of the knowledge and training I received was as a result of working with more experienced individuals. Professional trainings and meetings were attended solely by the most senior staff members such as director, curator, and veterinarian.

The experience at the Dallas Zoo was quite different. While there was still not a formal requirement for a college education, only applicants with a degree or substantial experience were hired as keepers during my time there. This requirement, it seems, is a result of the opportunities that Dallas Zoo affords its employees. Entry-level animal keeper positions required up to 2 years of experience with animals, preferably in a zoo or aquarium.



Upon employment, all keepers were required to complete a six-month series of self-taught animal husbandry and management courses in order to maintain employment. Moreover, keepers were more directly involved in AZA conferences and professional training events. In 2006, the Dallas Zoo hosted an international Okapi Workshop and the Antelope and Giraffe TAG annual meeting – with much of the planning and implementation completed by keepers. Additionally, the Dallas Zoo also hosts an active group of the American Association of Zoo Keepers (AAZK), a national organization that focuses on the fostering of education amongst zoo and aquarium animal keepers. Recently, the zoo also created and implemented a program for the training of animals via operant conditioning by zookeepers. The aim of the program is to ensure that all animal keepers are not only training their animals uniformly, but also effectively. Additionally, all employees are continually required to attend annual or semi-annual trainings on a variety of topics including hazardous materials training, horticulture, and guest services, among others. The research department at the Dallas Zoo is also quite active, both with projects on grounds and in the field. They also encourage keepers to propose and undertake research with their approval.

With the exception of AAZK meetings, which occur during break times or off the clock, the myriad of trainings at the Dallas Zoo take place during work hours. Outside of labor expenses for those attending the trainings, the zoo must also pay for the training materials and the labor of the presenters (if they are not zoo employees). The zoo also offers scholarships or registration assistance for the attendance of regional or national conferences, like the AZA Annual Conference or training courses.

In terms of these two models of professional training and education, Zooleón certainly falls more in line with the Fort Wayne Children's Zoo. Some new employees at Zooleón boast a wealth of experience at parks throughout Mexico and beyond, but many are locals with little or no experience, formal or informal. All training becomes the responsibility of more senior employees. During my visit, two experienced animal trainers had been hired to train a

collection of animals for an animal experience show. One of the trainers, a veterinarian, was also charged with the training of education staff members as animal trainers. Since my departure from Zooleón both of these individuals became the victims of the zoo's budget cuts, with the training to be carried on by the young animal trainers that had been under their supervision. This, too, ultimately fell victim to a staff limited in numbers and work hours. The recent entry of the *Ranchito* into local fairs has meant there is no time for animal training – in fact, an employee that had previously done housekeeping duties for the education department now is in charge of all the daily education animal husbandry – including feeding and cleaning.

While Zooleón has recently been awarded AZA funds to attend conferences and workshops and to have access to animal studbooks and care manuals, this is primarily for curatorial and veterinary staff. Unlike Dallas, there is no formal coursework for new keepers or an animal training program for new keepers. One education staff member, who is the sole individual to give keeper and enrichment talks on the weekends, told me that his entire talks were written and created personally by him. In his absence, they would not exist. While keepers could potentially attend AZA and AAZK conferences, the cost makes this highly unlikely in most cases, and there is little money to be directed towards such endeavors.

#### 4.5 Infrastructure

Each animal exhibit at Zooleón provides a wealth of information in uniform green, yellow, and white signs with color photos of the animal, all enclosed in a wooden frame. This information includes Latin name, class, order, family, diet, habitat, weight, longevity, geographic distribution, population status, gestation, number of young, and measurements. Below this is a graphic comparing size of the animal to the size of an adult human. All of this is fairly standard information across most zoos – AZA-credited or not. These signs are the same for all species – from the most common white-tailed deer to critically endangered species such as the tiger. This highlights a major barrier in terms of infrastructure. To put it quite simply, the signs are largely passed over by many visitors because they are boring. At the very least, they don't call

much attention to themselves. Even the population status is in the same lettering as the rest of the sign. This stands in stark difference to signage at AZA institutions in the United States.

In United States institutions, zoos and aquariums offer a wide variety of signage, with some maintaining simple signs like those found in León – although most highlight the fact that a species is in danger of extinction or highly threatened. Many institutions create highly interactive signage through a number of ways. One way is through highly emotional images that portray the reasons for species population loss including: images of primates being sold as bush meat in African markets, photos of zoo conservation efforts in the field, and graphics with charts showing species' population trends. Another way is through signs that explain how to get involved in conservation or how the zoo is involved. León does offer one such example of a sign such as this. In front of their central pond, which features the island home of a monkey troop, is a sign that asks a common visitor question upon arriving to the pond: Why is the water green? It continues to explain that the green color in the water is plankton, a food to many animal species. Several employees thought signs like the pond sign made a visit to the zoo unique and informational. A third common trend is signage that can be manipulated – a truly interactive feature. These types of signs also take many forms: a replica pile of antelope feces for a photo opportunity, moveable doors, pushable buttons, and even interactive touch screens are all examples. This signage is funded in many ways, but institutional structures of volunteerism, institutional membership, and individual and corporate funding, all represent significant reasons why zoos are able to invest in large capital improvement projects. These types of interactive signs do not exist at Zooleón – primarily due to the extreme cost that these installations represent within the organizational structure that Mexican zoos like León operate.

Outside of the lackluster exhibit signage, Zooleón does offer a clearly defined image in terms of their newest signage: banners that announce the geographical home to the animals in each section of the zoo. The images employed on these banners are also found in much of their newer printed materials. They feature cartoon animals and children in a colorful Asian

pop-art style. In looking at the animal exhibit signs and the newest banners there is no correlation beyond the Zooleón logo and colors.

While signs and displays can provide a sizeable quantity of information about conservation, perhaps the area that has the most impact on zoo visitors is the actual exhibit structure itself. Zooleón does feature several beautiful exhibits – among them two new aviaries and the homes of the white tiger and orangutans. All of these enclosures feature lush plants and waterfalls or streams. The aviaries are well-groomed and put the visitor into the animal's living space, albeit in a secure tower for the birds of prey. The orangutan and white tiger (formerly gorilla) exhibits are spacious for the animals and provide them ample places to explore and hide, all the while maintaining the audience within a very close proximity for viewing, amidst a verdant background. All four seem to draw a constant crowd of visitors.

Other exhibits also draw a crowd despite their less than natural appearance – including the chimpanzees, giraffes, bears, and big cats. In the case of the primates, bears, and cats, the exhibits feature a striking lack of plant life and naturalistic habitat re-creations. For the giraffes, a feeding station at giraffe eye level ensures a constant crowd, even when the zoo is not offering giraffe feedings. As in all zoos that exhibit them, the elephants always host a swarm of people. What is not heard at most exhibits in León is that an animal is not in view - they almost always are. While many U.S. institutions have considerable visitor buy-in on the concept that “what is the best for the animal isn't always the best for the human visitor trying to view them” doesn't seem to hold true in León. The public demands and expects that all animals be in public view at all times.

Another interest-drawing exhibit at León is the exhibit of Scooter, the tapir that became a “movie star” in the recent *Apocalypto*, a Mel Gibson film depicting the life of the Maya people just prior to European contact. Set amidst a Maya temple, the tapir shares his home with a small rodent and a small deer species. Although not as prevalent in León, such mixed species exhibits are growing quite popular among U.S. institutions. Despite a sign in front of the exhibit

displaying a portrait of the animal on the movie set, it seems the location of the exhibit limits prolonged viewing. There is also a lack of description about how the different species would interact in the wild.

While several exhibits were under modification during my stay, the list of exhibits that both the zoo staff and zoo visitor's believed should be renovated was lengthy. The staff biologist felt this reflected negatively on the public's perception of Zooleón in terms of conservation – a dated zoo, he contended, caused the public to think about the animals' state of personal welfare rather than appreciating them.

One of the greatest complaints in terms of infrastructure is the quality of the roads and pedestrian walkways in the zoo. Quite simply, the vast majority are in poor condition. Despite the excellent daily cleaning of debris, the actual quality of the cement and asphalt, or lack thereof on some paths, necessitate all pedestrians pay close attention to where they are walking – taking attention away from the animals and their exhibits. The physical state of these facilities has a noticeable effect on Zooleón's visitors which is discussed in more detail in the following chapter. Again, Zooleón does not have as many viable methods for acquiring funds to invest in capital improvement projects as are seen in U.S. institutions.

#### 4.6 Analysis of Structural Barriers

The paramount importance of conservation and education in AZA institutions cannot be understated. The newest standards set forth in the 2010 Accreditation Standards and Related Policies have underscored conservation efforts as a priority for AZA-accredited institutions, including the use of interpretive materials and programs, in-situ efforts, and resource support for cooperative conservation programs. Participation in these conservation programs must be undertaken by all members. Collectively, education and interpretation include: programming on-site and offsite for school groups, teachers and families, as well as the use of graphics, exhibits, program animal use, and docent/keeper talks. Institutions may differ organizationally in how they accomplish these tasks (e.g., some institutions may have an Exhibits Department,

or graphics may be coordinated by the Art Department), but the role of the education staff in the accomplishment of these tasks is paramount. Institutions are also encouraged to share educational and interpretive programming, materials, and evaluation techniques with other AZA institutions. What these policies articulate is a very clear: considerable effort and capital must be placed in conservation, education, and interpretation across all AZA institutions. Moreover, the role of the zoo educator is fundamental.

In terms of these ambitious policies, León faces a number of structural challenges. Zooleón pays a flat rate annual membership fee that is actually higher than institutions under the same operating budget in the United States, and they also lack two programs which are fundamental in many U.S. institutions that compound this membership fee differential: long-term volunteers and institutional memberships. This is not due to a lack of interest in such programs, but rather overwhelming differences in U.S. and Mexican culture. The lack of a strong and stable Mexican middle class has prevented the growth of a culture of volunteerism and institutional memberships in cultural institutions such as zoos and museums. The lack of volunteerism results in a heavier workload on paid laborers and educators, and the lack of memberships limits repeat visits, which ultimately results in reduced concessions and gift shop income as compared with U.S. institutions. Furthermore, the system of corporate and individual sponsorship does not enjoy nearly the same depth as in the United States – making all zoo improvements a costly endeavor. In addition to these challenges, and perhaps due to them, there is an overall lack of cooperative professional training opportunities for most of Zooleón's staff. There is also a noted deficit in the overall quality of the zoo's infrastructure including informative, but minimally interactive signage, exhibits that don't always send a positive conservation message due to their visual state, and visitor pathways that need intensive maintenance.

Zooleón recognizes the many structural barriers they face, yet they also demonstrate their belief in the mission and policies of the AZA by continuing their membership. AZA

membership, though, does not necessarily equate to success in the face of such great challenges. Even since the time of my fieldwork, the zoo experienced a 10 percent decrease in annual budget, which eventually resulted in the loss of two professionals that were hired to promote conservation and enhance education through an interactive animal encounter show. Moreover, seasonal involvement in local fairs by the education department greatly limits their presence in the park on most days.

All these structural challenges alone demonstrate the daunting task of globalized conservation in the twenty-first century. Currently, it seems unlikely that Zooleón can meet the goals of AZA conservation and education due to these large structural gaps. Whose is to blame for these shortcomings? Ultimately the AZA must recognize that their organizational model is based on assumptions of what works best in United States institutions, but Mexico represents a culturally and structurally unique zoo experience. On one hand, the AZA must ensure that all of its member institutions can meet their institutional and Association missions – or seek the resources to help members approach them. It is irresponsible to accept members that do not have the means to do so without providing the necessary assistance. On the other hand, the AZA must also seek to more thoroughly understand the Mexican zoo within its own context. AZA structure is based on a U.S. reality making the model problematic in developing countries like Mexico. The AZA paradigm – in terms of budget, volunteer and membership culture, corporate and individual sponsorships, and professional development – is a uniquely U.S. experience. Additionally, Zooleón’s public and staff have a very different set of cultural expectations that cannot and should not be ignored if the AZA expansion is to be a successful endeavor. The AZA must be sensitive to structural inequalities and make room for developing ways to help zoos like Zooleón within their institutional means and within their own cultural realities and perspectives if they are to be truly integrated into the AZA framework.

## CHAPTER 5

### THEY WANT TO BE INVOLVED IN THEIR OWN WAYS: HOW CULTURE SHAPES VISITORS' EXPECTATIONS ABOUT ZOOS

This chapter demonstrates that just as structural barriers are important to understanding the Zooleón visitor experience, so too are cultural expectations. It describes recent AZA research, the results of which are being implemented across all AZA institutions, and whether Zooleón could benefit from the implementation of this research. It develops a case for the importance of considering family integration as a specific and overwhelming motivation for a large sector of visitors to Zooleón – underscoring a significant limitation of the AZA research. An effective AZA education program – as the AZA researchers claim – must address the specific needs of its audience, and the toolkit currently being implemented by AZA institutions does not seem the most consistent fit for Zooleón.

This chapter is both about visitor motivations and their ideas about conservation – both of which are equally important to understanding how the public interacts with the zoo. I first describe AZA member education expectations and then discuss the research undertaken by the AZA to understand visitor motivations and how it is being implemented at AZA institutions. From that point, I discuss key differences discovered at Zooleón and provide an alternative set of Zooleón visitor motivations, taking into account their ideas about conservation and the greater implications of recategorizing Zooleón visitor motivations in comparison with those in the current research being implemented at U.S. institutions.

This inconsistent fit of the AZA model demonstrates, just as structural barriers in the previous chapter did, that significant cultural differences exist between Zooleón and the AZA, and undifferentiated importation of AZA ideals and practices into foreign institutions, particularly developing countries like Mexico, greatly inhibit a successful partnership. Rather, one must



recognize that as conservation ideas continue to globalize, we must seek to find education and conservation programs that effectively engage and empower local communities and peoples, like the citizens of León.

### 5.1 AZA Education Expectations

AZA education expectations are outlined in the Accreditation Standards and Related Policies (2010: 12-13), requiring adherence to three areas of education standards: mission, education program, and evaluation/interpretation.

Every AZA institution must include education, either explicitly or implicitly, in their mission statement. The second requirement, an education program, includes three components: a written education plan, the department must be under the direction of a paid staff member, and the organization should develop and maintain cooperative programs. The third requirement, detailed in the accreditation document, specifies the essentials of program evaluation and interpretation. AZA institutions must regularly assess the effectiveness, content, and visitor satisfaction of their education programming. The institution should also understand the needs of their audience. Furthermore, education programs should include local/global conservation issues and topics and develop the role of the AZA and its members in conservation. Equally important for the education program is that should strive to seek personal action or empowerment by the institution's visitors.

While these three requirements are open to the interpretation and implementation of each specific institution, the AZA has also provided direction in terms of the specific conservation messaging that should be employed by each member institution (Falk et al. 2007: 23-24). These messages range from the global to the local, focusing on the connectedness of life within ecosystems, the human cause of habitat and ecosystem destruction, and the human (and AZA) responsibility to affect positive change to protect the natural world. The final message states that responsible zoos and aquariums should share knowledge and projects that empower people "to take conservation action", be active partners in conservation, "engender a

sense of wonder”, share information to their public, model caring, and, perhaps most importantly, “commit to serving diverse segments of human society and provide a forum for exploring and communicating different perspectives concerning the natural world (23-24).

## 5.2 AZA Visitor Motivations

A landmark study, *Why Zoos & Aquariums Matter* (Falk et al. 2007), illuminates a fact that anyone involved in AZA institutions for more than a brief time already knows: despite ample “visitor research [demonstrating] how people relate to the natural world”, there exists an “incomplete picture about the impact zoos and aquariums have on conservation-related knowledge, attitudes and behavior (5).” More specifically, zoos and aquariums have had no systematic method of analyzing visitor knowledge, attitudes, and behavior. The study also addresses whether and how much zoo education activities change and shape visitors ‘attitudes towards conservation.

A task force, led by AZA leaders and the Institute for Learning Innovation, took on a three-year study at 12 AZA institutions from across the United States to “better understand and predict ... member institutions’ contributions to public understanding of animals and conservation” (Falk et al. 2007: 3). One key component of the study determined an interesting, if not slightly-disheartening, fact: visitors to the institutions brought a “higher-than-expected knowledge about basic ecological concepts” and “there was no statistically significant change in overall knowledge (9)” – termed a “knowledge growth gap.” What, then, is the value of the thousands of dollars spent each AZA institution spends on education each year? In conservation education programs are not effectively promoting personal empowerment and environmental action by visitors to AZA zoos and aquariums, it ultimately is a gross misuse of limited funds.

The investigators found that zoo visitors arrive to the zoo with personal knowledge, expectations, and motivations that shape how they make use of the zoo and what they gain from the experience (9). This information, in turn, was used to create an AZA visitor typology:

(1) explorers who are driven by curiosity, (2) facilitators who enable others to experience the zoo, (3) professionals/hobbyists that have a close tie to the institution or its content, (4) experience seekers that derive satisfaction by visiting the institution and (5) spiritual pilgrims that are seeking a contemplative or restorative place (7). These categories, Falk et al. postulated, “were multi-dimensional and effectively encapsulated many previously identified important entering-visitor variables such as prior knowledge, prior interest, visitor agenda, social group and prior experience (7).”

After creating the typology, the investigators put the study into place at 6 AZA institutions. Visitors were randomly sampled, and asked to read 20 statements – representing 4 from each category – that described reasons for their visit (8). From these choices, they were asked to choose the five most important and rank them in order of importance using a 7-point Likert-type scale. The researchers found that approximately half of all visitors began their zoo or aquarium visit with one dominant identity-related motivation from the typology (Chart 5.1). The two most-dominant groups were Explorers and Facilitators, each carrying 16% of the total. Professional/Hobbyists ranked third with 10% of the total, followed by Experience Seekers at 7.8%, and Spiritual Pilgrims at 4%. The study does not articulate how the mixed-motivation groups were identified – meaning the data for mixed-motivation groups is unusable for analysis. Due to this fact, Chart 5.2 recalculates the percentage for each group using the sub-set created without the Mixed Motivations category. Thus, it shows only those individuals that could clearly be defined by one category from the typology.

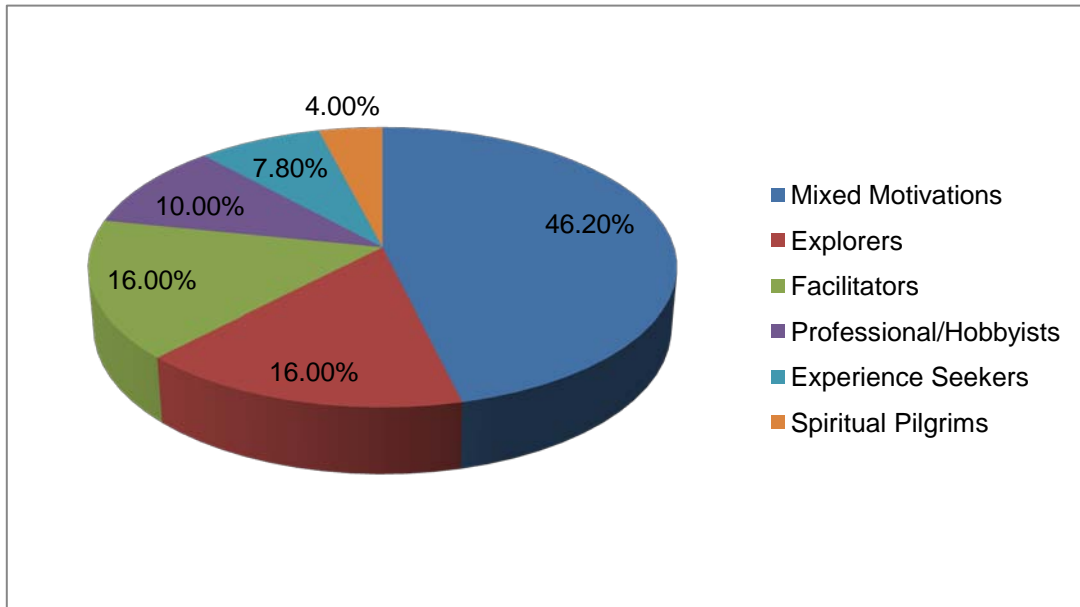


Figure 5.1 Motivation typology data from Falk et al 2007

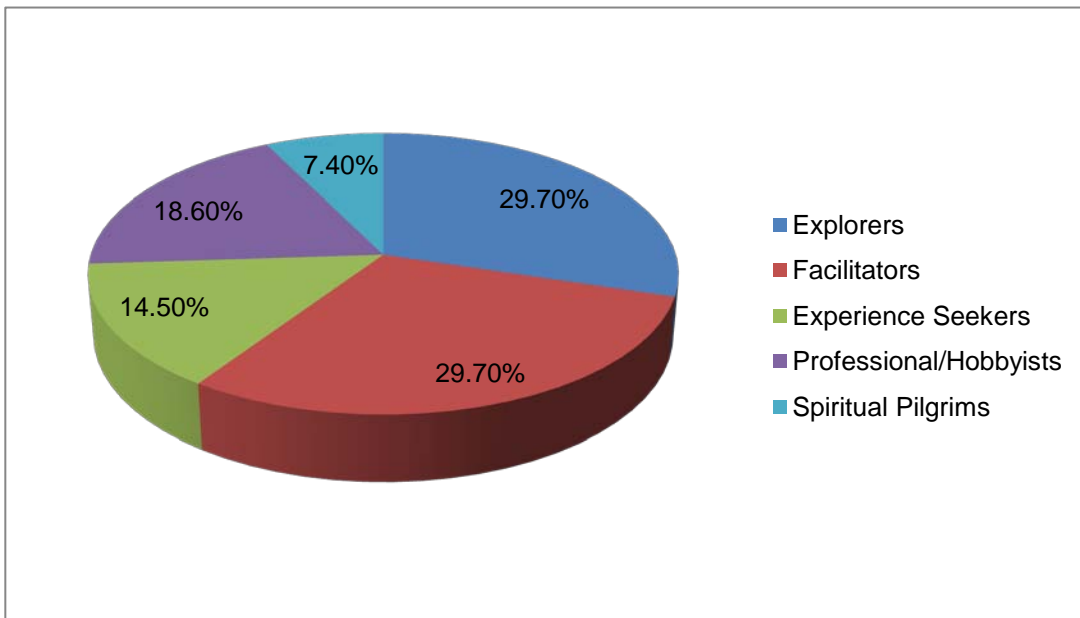


Figure 5.2 Calculations for single motivation type percentages

These findings demonstrate that for the institutions involved in Falk's study, Explorers and Facilitators accounted for the majority of those individuals who pertained to a single motivation type, followed by Professional/Hobbyists and Experience Seekers whom together

account for approximately half as many individuals as the first two groups combined. A distant fifth is dedicated to Spiritual Pilgrims.

The authors also discuss why there is such a need to categorize zoo and aquarium visitors. Zoo and Aquarium visitors not only experience a stronger connection as a result of their visit, but their visit also prompts them “to reconsider their role in environmental problems and conservation action”, but their specific visit motivations “directly impact how they conduct their visit and what meaning they derive from the experience”(Falk et al. 2007: 3). This indicates that if AZA zoos and aquariums expect environmental stewardship out of their visitors, they must in turn provide educational opportunities that accommodate each visitor’s unique motivations – something that public educators would term as “differentiated instruction”. A second, but equally key, component of the study, analyzes changes in conservation attitude following a visit to an AZA institution. This data demonstrates that Facilitators, Professional/Hobbyists, and Experience Seekers were most likely to show a positive change in their attitudes towards conservation. Again, the importance of this finding is paramount: these groups represent a target audience from which zoo and aquariums educators should expect the greatest return in terms of conservation action. Also, it demonstrates the necessity to uncover unique ways of engaging visitors that do not pertain to those categories – whether in terms of education or simply in terms of engaging the public to spend more at the zoo. Both serve to sustain the zoo albeit in different manners.

All of the study participants were interviewed one year after their initial zoo visit to assess what visitors had taken away from their visit. Slightly less than half (42%) mentioned an animal highlight from their visit, one-fifth mentioned the physical layout or aesthetics of the park or aquarium, and nearly two-thirds (61%) discussed what they had learned or what knowledge had been reinforced by their visit (11). The researchers also found that the majority of participants recognized the important role that zoos and aquariums play in conservation, as well as their personal responsibility in helping the institution to meet its goals.

There are limitations to the outcomes of the study, though. Firstly, these individuals, although randomly selected, had to volunteer to participate in the study and agree to be contacted in one year's time. This would likely cause the visitor to undergo greater self-examination than the normal zoo or aquarium visitor, and probably reinforce the experience in their mind, leading to greater recall ability. Secondly, there is no discussion as to the frequency of their visits to the facility. Again, for individuals that visit on a regular or semi-regular basis, such as members, recall of their visit would likely visit from an individual that does not visit with any frequency. Lastly, nearly half of the participants are unaccounted for in the Falk et al. data – the composition of the Mixed Motivations group is unknown and could have profound effects on the typology. Is there a particular mix of motivations that encompasses more individuals than any single motivation? This makes it difficult to interpret the data that particular groups are more likely to retain conservation knowledge.

Despite its limitations, the merit in the Falk et al. study is in the implications it brings forward: the most effective zoo and aquarium conservation messages should address the specific needs and desires of their visitors based upon the motivation(s) of their visit – and each institution must know what these motivations are for their public. From this knowledge, not only can zoos target the groups that Falk et al. have demonstrated represent the most potential for educational retention and conservation action, but they can seek unique experiences to engage other motivation groups. This data is shown in Table 5.2.

Marketing and advertising have known for years that you must target different groups quite differently. This landmark study by Falk et al. demonstrates that this principle can easily be transferred to informal education institutions like zoos and aquariums. One way that zoos have already incorporated this approach is with the Professional/Hobbyist group by creating evening red carpet-style events such as donor auctions, private fundraisers, and VIP events.

Table 5.2: Visitor Implications based on Falk et al. (2007) Study

Typology Group	Implications for Zoos and Aquariums
Facilitators	<ul style="list-style-type: none"> <li>• Desire social experience</li> <li>• Need social interaction at exhibits and in programs</li> </ul>
Explorers	<ul style="list-style-type: none"> <li>• Satisfaction tied to experience quality</li> <li>• Need new, challenging, and surprising experiences</li> </ul>
Experience Seekers	<ul style="list-style-type: none"> <li>• Desire unique programs or offerings</li> <li>• Possess least prior knowledge and lowest expectations, but demonstrate high positive impact in education</li> </ul>
Professional/Hobbyist	<ul style="list-style-type: none"> <li>• Interested in premium programs</li> <li>• Source of volunteers, members, and donors</li> </ul>
Spiritual Pilgrim	<ul style="list-style-type: none"> <li>• Need areas for reflection, Could benefit from programming during quieter / less busy times</li> <li>• Source of volunteers, members, and donors</li> </ul>

Falk's study also reinforces research in traditional education settings by Dr. Robert Marzano. In *What Works in Classroom Instruction* (2000: 4), Marzano demonstrates that nine strategies have the highest impact on student achievement. The impact of this research has

been profound in public education – no longer is the philosophy of one education for all children the norm. Students' individual needs, cultural differences, and variations in preferred learning style are all considered, and the education experience of children within the same classroom may at times seem very different to even the casual observer. In short, Marzano's strategies have become the standard by which public schools write and individual educators implement curriculum. In many ways, it is also how public educators are reviewed and assessed. It has not only changed public school curriculum, but university education practices and bilingual education in the United States. The research demonstrates that differentiated education allows for the educator to meet the specific needs of each child.

Falk's research has posed a similar theoretical shift for zoo and aquarium education techniques. The study demonstrates that zoo and aquarium visitors exhibit varied motivations that could be compared to the varied learning styles seen and accommodated in the formal education setting. Just as Marzano has offered the most effective strategies for meeting a diverse audience in education public, so, too has Falk through an assessment toolbox, articulated in the study. The toolbox allows institutions to complete the study at their site in order to assess their public's specific needs. A decade of experience at AZA institutions demonstrates there is certainly not a lack of ideas for how to reach a goal, and Falk's typology and toolkit approach seems a practical route to make gains in education at AZA institutions through adequately assessing and meeting the expectations of the visitor, but the typology must accurately reflect the audience for which it is being utilized.

### 5.3 Visitor Motivation Groups at Zooleón

Zooleón is no different than other AZA institutions when it comes to a diverse public with diverse needs and wants, but a great difference is found in visitor motivations, and Zooleón appears to have all of the necessary features for a successful education program according to the AZA standards – in fact, as stated before, they were commended for their education program when undergoing AZA membership, although most would agree that they do not have



the staff, the budget, or the time to do as much as they would like to. Yet, an underlying problem is the philosophy that “what works best at one AZA institution is what will work best at Zooleón”. In order to fully appreciate this, one must understand the motivations of Zooleón’s distinct visitor groups and their conceptions and perceptions of conservation at Zooleón.

During my fieldwork, one observation was very clear from the beginning: the zoo experience is family-centered in León. Through further analysis of visitor responses during personal interviews, this was validated as the single most important motivation for the visitor. In addition, to this primary motivation, Zooleón visitors also sought out a unique experience.

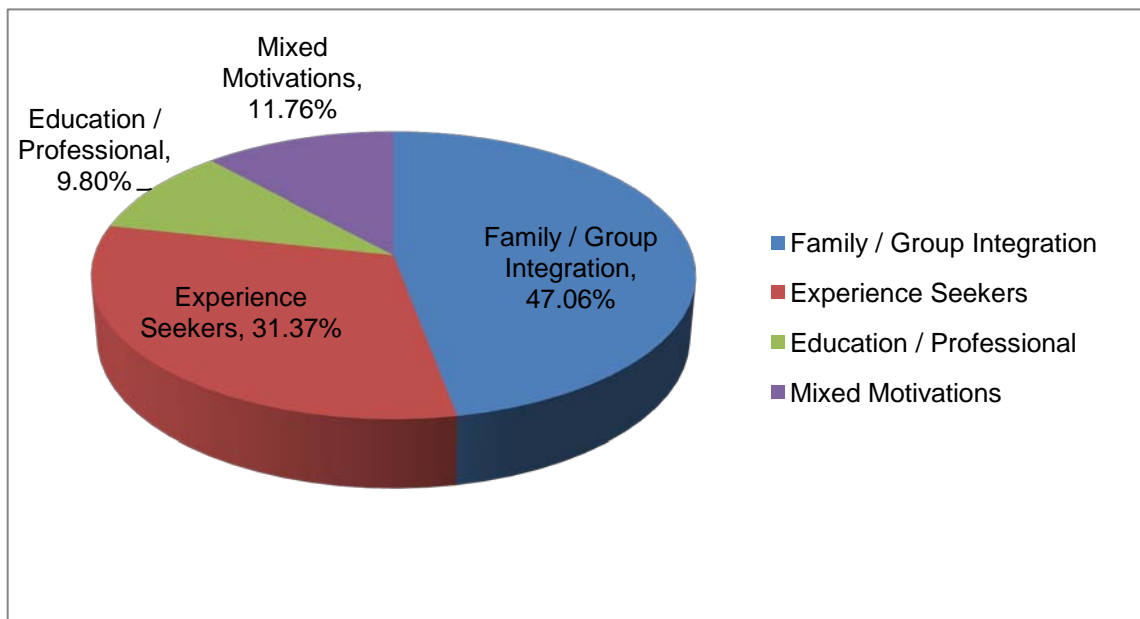


Figure 5.3 Zooleón visitor typology

These two motivations account for the majority of visitors, although some did specifically seek an educational experience. Although not discussed at length, it is important to recognize that based on the information collected certain individuals are unable to be classified precisely within one group, and therefore, remain within a category of Mixed Motivation. Due to fundamental differences with the Falk et al. typology toolkit, this chapter proposes an alternate

typology to adequately articulate visit motivation groups at Zooleón. These groups are presented in Figure 5.3.

### *5.3.1 Family/Group Integration*

Family/Group Integration represents the most important motivation for Zooleón visitors, accounting for forty seven percent of those individuals that I interviewed. One such visitor, Miguel, age 20, visits every few months for a “reencounter with his daughter”. While it is clear the trip is about making an experience for her, Miguel is actively involved in the visit through catching her at the bottom of the slides, holding her up to see down into the polar bear water, and through simple physical interactions of holding hands, touching her on the shoulder to direct her attention, and an active dialogue between them. Another visitor, María, age 40, brought her family and her visiting brother and his family for an outing at the zoo. This illustrates the importance of a visit to Zooleón as a moment for family bonding – with many options to choose from, María chose to interact with her brother and sister-in-law (as well as the cousins amongst themselves) at the zoo. Grandparents are also frequent family visitors. Martina, age 60, brought a group of eight people, including her children and grandchildren. Most Family/Group Integration visitors could be classified as regular visitors, coming once every three or four months. Others, like Minerva, age 34 visit more frequently, especially when “my daughter is on school break”. What is clear, it seems, is the important physical and emotional space Zooleón affords to families looking to enjoy time together in which parents, children, and even extended family interact.

In Falk, though, it appears the notion of the zoo visit being “family time” or a “family bonding activity” is assumed and marginalized to the greater ideas of the typological groups – Explorers, Facilitators, Professional/Hobbyists, Experience Seekers, and Spiritual Pilgrims. In particular, it seems that Facilitators would be the parents that bring children. Whereas in the Falk data these individuals are merely providing the experience for their children and/or

someone else, at Zooleón it would be inappropriate to ignore the importance of family integration – for adults and children – during a zoo visit.

Although all members of this group at Zooleón describe their mood during a zoo visit as “happy”, “relaxed”, or “content”, many were able to offer suggestions for improving their visit. Together, this group of 24 individuals offered a total of 38 suggestions that can be grouped into four categories: costs/facilities (i.e. infrastructure), education/interpretation/information, additions or changes to the animal collection, and, finally, no change. This data is presented in Figure 5.4.

Of suggestions for change, nearly 55% were comments based on improvements to zoo infrastructure, underscoring the importance of experience for this group. Besides lowering costs, visitors complained about the poor state of several pathways. One visitor, Paula, age 38, visits the zoo every three months, but her son must use a wheelchair seasonally. The deteriorated pedestrian walkways make it difficult for her to manage her son’s wheelchair, and they must often avoid seeing some of the exhibits. This is an important finding when considered in conjunction with the previously discussed frequency of visits annually by Family/Group Integration members. Greater satisfaction with the infrastructure – roads, exhibits, restroom facilities, and park areas to name a few – would most likely result in a greater frequency of visit.

Visitors in the Family/Group Integration category also seek more interactivity for their children in terms of mechanical rides or playground equipment. Again, this underscores the importance of family enjoyment, rather than a formal education opportunity among this group. José, who brings his wife and four children, acknowledges that there are designated family areas such as picnic and playground areas, but he would like to see more as these zones often become quite crowded on busy days. In these areas, he continues, they could have “some free-ranging animals” to interact with the families as well.

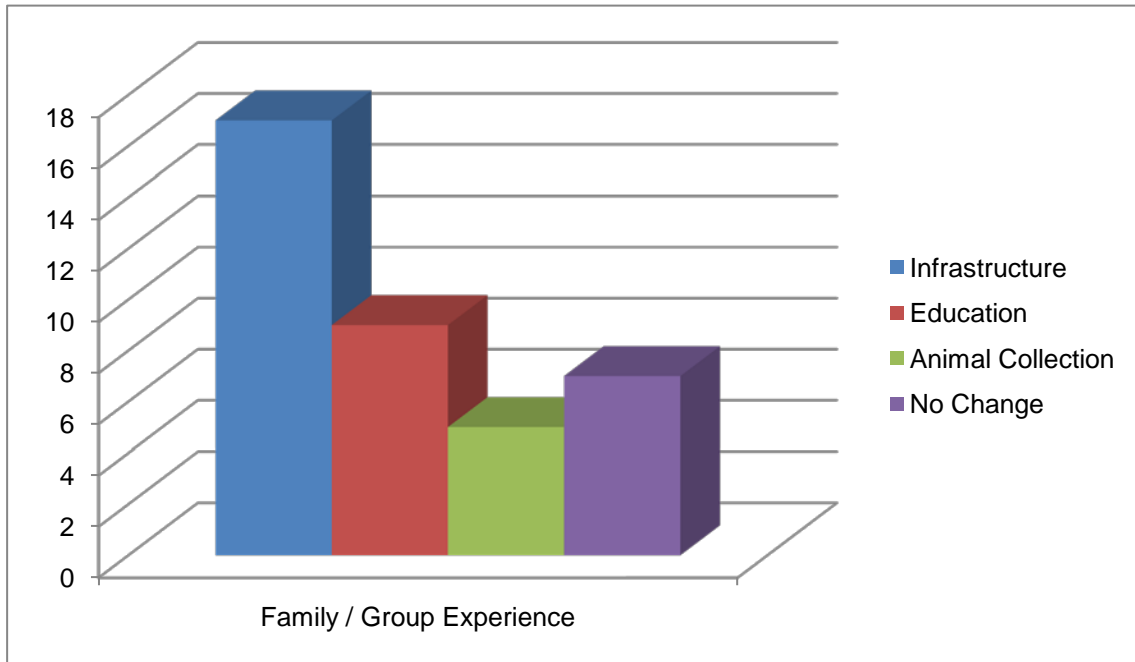


Figure 5.4 Visitor improvement suggestions: Family/Group Integration category

Family groups are not the only groups that visit the zoo seeking greater group integration. On several occasions during my work, church groups also visited the zoo offering group meals, workshops, or even Sunday services. These visitors, like Maribel, age 29, often come to the zoo just once a year with their church family. Interestingly, of all the individuals involved in my fieldwork, 70% of those that were aware of Zooleón’s AZA membership pertained to the Family/Group Integration category, and they did not specifically discuss education or learning as their primary motivation.

Overall, the Family/Group Integration category can be identified by family or religious groups that enjoy the park as an opportunity for relaxation and family-building and group-bonding. Although they may offer isolated specific suggestions about improvements to education activities or the animal collection, they largely seek improvements that will allow for greater family enjoyment of the zoo facilities.

### 5.3.2 Experience Seekers

Experience Seekers are the second most populous group at Zooleón. Of those that I interviewed, over thirty one percent are members of this group. They are individuals like Fernando, age 34. Although he brought his family, the importance of the visit is that he had never visited the zoo before. These individuals are often in León on vacations from other areas in the state or the country, but occasionally, like in the case of Fernando, they are local individuals that had just never visited the zoo. Another visitor, Ana, age 27, and her family, illustrate another example of visitors that correspond to this group. They are also León natives and had visited before. After an absence in attendance for years, they decided to see what the experience was like now. Some of these individuals are attracted to visit the zoo based on advertising or press releases.

Most of the individuals in the Experience Seekers category do still visit the zoo in family units, but there are also individuals such as Chantal, age 59, who wanted to see what the zoo had to offer – in particular the recent Safari exhibit – and she came to the zoo alone.

While the Family/Group Integration category members visit the zoo on a regular basis – at least four times a year – the members of the Experience Seekers visit the zoo only one or two times a year at most, many less than this. Chantal, had not seen Zooleón in at least 15 years. Others, like Fernando, age 34, visited because they had “never seen it before.” For these individuals, the uniqueness of the experience explains the infrequency of their visit – they want to see what new things the park has to offer, and this requires a time of absence between visits.

Much like Family/Group Integration visitors, those visitors that are defined as Experience Seekers are generally content with their visit – these 16 individuals actually offered far less suggestions for improvement (an average of one per person) than Family/Group Integration members. Figure 5.5 (following page) demonstrates a distinction from the previous category – while Experience Seekers still seek improvements to infrastructure, they equally

seek education and information opportunities. In fact these two categories represent over 80% of their suggested improvements, with minimal improvement suggestions for the animal collection. For these individuals, not only must the facility be to their liking, but the content of what they are seeing must be as well. They are seeking an all-encompassing visit.

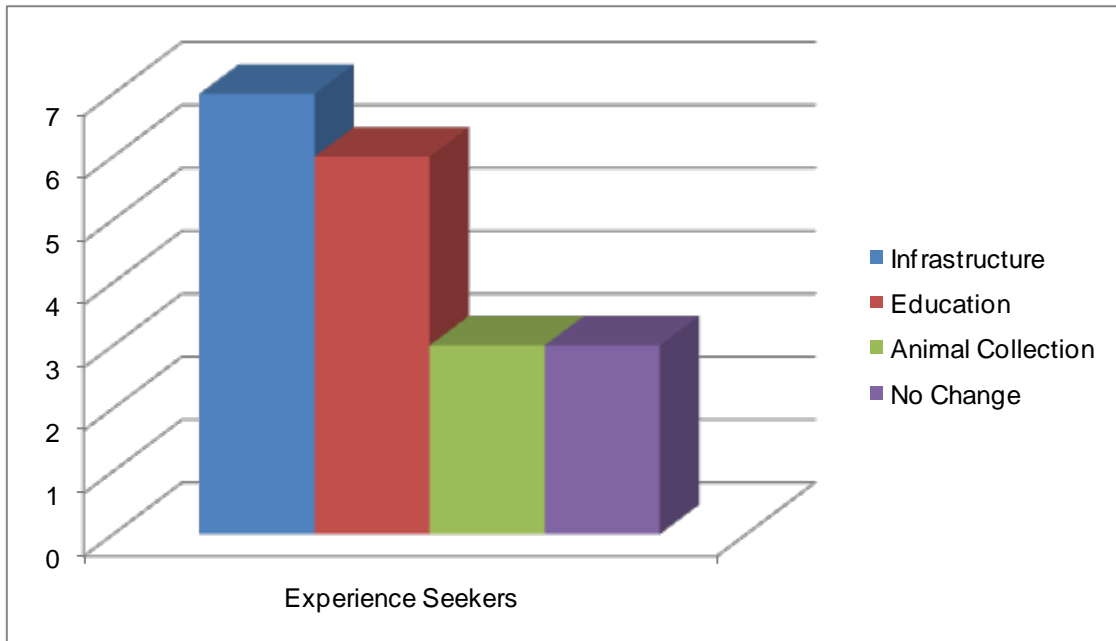


Figure 5.5 Visitor improvement suggestions: Experience Seekers category

### 5.3.3 Education/Professionals

A third distinguishable category of visitor at Zooleón is Education/Professional. They represent nearly ten percent of all visitors, and these patrons feature one primary commonality – they all explicitly stated their principal motivation for visiting as education-based. This includes learning more about animals or habitats, the exhibits at the zoo, and how the animals are cared for. One visitor, Karl, age 37, brought his daughters so that they could “get to know the zoo and the animals while enjoying themselves”. This is distinct from other categories in that the explicit goal is education. Nearly two-thirds of individuals in this category visit the zoo on a regular basis, as often as monthly. According to visitor Elena, age 20, “We come just to

see what new [animals] there are.” More than what she says, Elena demonstrates a difference in behavior. While her young daughter and son spent time at the zoo’s parks and green areas, the interaction and conversation was clearly focused on the animals and their habitats.

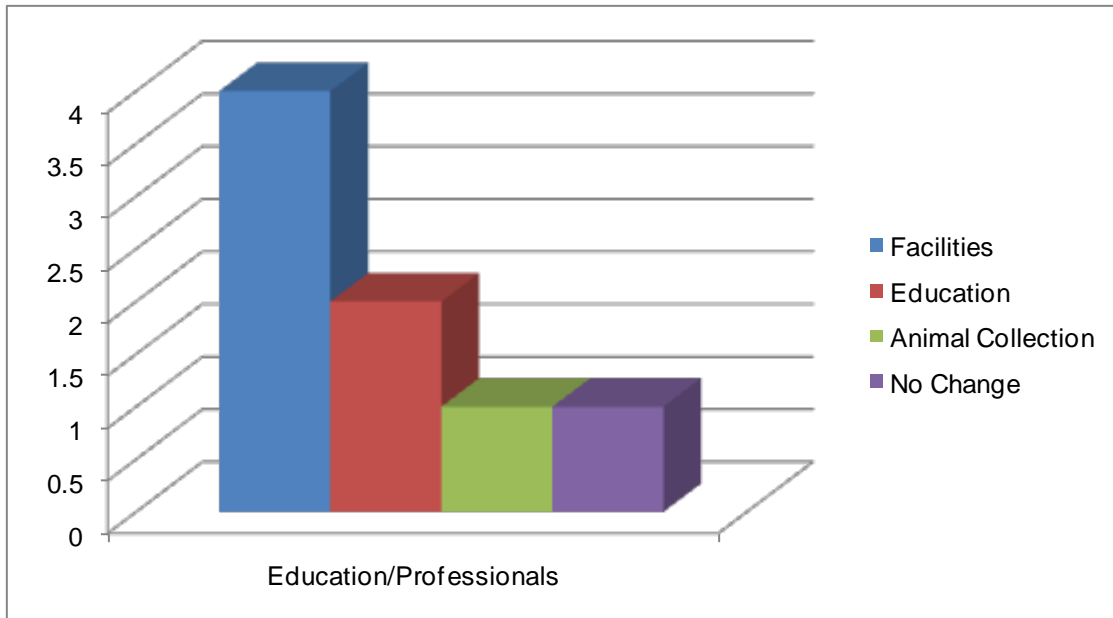


Figure 5.6 Visitor improvement suggestions: Education/Professional category

Visitors pertaining to the Education/Professionals category overwhelmingly seek improvements to education and information. Veronica, age 32, would like to see guided tours where visitors can learn the specifics of animal species and their habitats. Karl suggests that the zoo could educate about more than just the animals by including information on trees, bushes, and other plants on the zoo grounds. Of the suggestions that do not pertain directly to education (43%), two allude to it. Karl and Adriana, age 38, advocate providing the animals with larger exhibits – as a means of demonstrating a better understanding about their habitat and needs. Thus, all but 14% of recommended improvements amongst Education/Professionals relate to the education experience within the park. Figure 5.6 displays the results of visitor improvements suggestions for Education/Professionals.

Members of this group that have not been included in my statistics include professional visitors – such as zoological staff from different institutions. They also include students from secondary schools and universities participating in Social Service or Professional Practice. These volunteers, ranging from 13 to 19 in age, uniformly discussed the importance of education in a zoo visit. While I found it pertinent to mention these groups as visitors, their contributions to the park will be addressed later.

In summation, members of the Education/Professional category are visitors that above all seek to gain knowledge about animals, their habitats, or the nature of zoos, from their visit. They may or may not bring their families, and they seek education improvements to make a more enjoyable visit.

#### *5.3.4 Analysis*

The ethnographic data I collected demonstrates – just as amongst the visitors to U.S. zoos and aquariums – that all visitors come to the zoo with different motivations that shape their visit. Overwhelmingly, this motivation is family or group integration at Zooleón. This connection is fostered through interactive play, observation of animals, and time spent together. These families are some of the most frequent visitors to Zooleón, as many see it as a safe and interesting place to enjoy their limited free time. After this group, the next most populous are seeking a unique experience. Due to this fact, these individuals often visit the zoo infrequently or are first-time visitors. The third easily distinguishable group is individuals that explicitly state they are seeking to learn about animals and their habitats. This is the smallest group of the three.

My study also confirms a general trend of AZA institutions enumerated in Falk and Fraser and Sickler's data: in terms of conceptions or ideas about conservation, most visitors have a working knowledge of ideas and vocabulary. For example, each interviewee, amongst all groups, provided a personal definition which, although varied, involved a verb focused on action – protect, care for, guard, maintain, conserve, respect, observe, grow, preserve, clean,



and live. Some visitors also provided a negative example: not mistreat or destroy. Another visitor, Karl, from the Education/Professional category, took a political view stating, “[it means] to do something that politicians and the majority of people don’t do.” Some visitors took a holistic view responding, [it is] to care for, protect, and live with all forms of life.” On the contrary, some chose to respond specifically concerning the park itself: “clean houses and cages with well-fed animals.” In addition to these verbs centered on action, visitors employed key terms, such as nature, environment, extinction, flora, and fauna.

The most detailed response came from a grandmother who had brought her young grandson “to see animals we have only seen on the T.V.” This was her first visit in years. She explained her vision on conservation:

“Well, most of all, it is taking care of the planet, caring for the animals that right now we see a lot of but many of which are in danger of extinction. It is to care for the environment – it is very important to care for the environment so that the grandchildren of our grandchildren can see all of this. I can tell you that it has been years since I’ve been to the zoo and now there are fewer animals than before ...”

My study stands in contrast with Falk’s study in visitor motivation categories. A visitor motivation based upon the desire to build family integration is not present in Falk et al.’s study – in fact, the study does not even mention family. This underscores the fact that the researchers and the AZA seem to be undervaluing the importance of family-building during a zoo or aquarium visit. More significantly, this underscores an important cultural difference between a zoo visit at Zooleón and at other AZA institutions, as well as a cultural difference in how the AZA views its visitors and the manner in which my study and applied cultural anthropology assesses visit motivations.

The visitor’s motivation also shapes their interaction with the park, including their suggestions for improvement. Individuals seeking family or group integration, as well those

seeking a unique experience, most often seek for improvement in infrastructure, while those that visit the park for education interests seek changes in facilities, including animal enclosures. Interestingly, the second most requested improvement amongst all park visitor groups is in education programs and information.

The second largest category of visitors in my typology is that of Experience Seekers. Just as in Falk, these individuals visit on a less frequent basis and look for an overall pleasing experience – in terms of what the park has to offer in facilities, animals, and education. The smallest group is that of Education/Professional. These individuals explicitly seek to learn about the zoo, its animals, and their plights. Their suggestions for improvement center on zoo facilities, educational activities, and informational signage within the park. As with previous visitor studies, there were a group of individuals, slightly more than 10%, that could not accurately be placed within a single group, and are therefore termed Mixed Motivation. Further questioning could have allowed for a more complete view of their motivations.

There are several implications that should be taken from these findings. First, the visitor motivation typology and resulting institutional toolkit offered by Falk and Fraser and Sickler, which has essentially been “packaged and distributed” by the AZA as an all-inclusive manner to effectively reach and engage the visiting public is seriously flawed when tested on the Zooleón public. It does not match the cultural context of León in terms of primary visit motivation. Specifically it neglects the importance of family bonding and integration that is present at León. This, again, reflects a serious cultural gap between Zooleón and United States AZA member institutions – educational programming and visitor service recommendations cannot simply be transferred “part and parcel” across cultural borders. Secondly, if Zooleón’s staff is to effectively meet the needs of their visiting public, a toolkit that more accurately reflects the cultural values placed around the zoo visit is necessary. This study offers suggested motivation groups that more accurately categorize primary motivations, upon which educational signage, programs, and opportunities could be more effectively centered.

The findings of this chapter, and the proposed visitor motivation typology for Zooleón, also underscore different values in terms of conservation. In the United States, zoos are largely viewed as environmental and conservation leaders, whose function is to provide visitors a unique glimpse into the lives of animals and their habitats in order to inspire environmental stewardship. This is accomplished through education classrooms and interactive programming. This perspective, while not necessarily wrong in the eyes of the León public, perhaps oversteps the public's ambition for a visit to the park. The León visitor is not opposed to learning about these global issues and how they are situated in them, but actually visits the zoo for a far more important and intimate goal – to strengthen their family through an exciting and relaxing experience in a unique and exotic locale.

## CHAPTER 6

### “THE PUBLIC HAS A VERY POOR CULTURE”: THE ROLE OF CLASS AND EDUCATION ON INTERACTIONS WITH ZOO VISITORS

Education is at the heart of the modern AZA. Member institutions are expected to engage and empower their audiences with varied conservation messages that range from local to global in their focus. This growth has been coupled with another recent trend for many AZA zoos and aquariums: a more highly educated and experienced professional zookeeper and educator class is quickly overtaking an older class of experienced, but not necessarily, formally-educated group of employees. In short, AZA institutions seek an ever-increasing level of professionalization.

Another change that has emerged with this rising class of educated zoo professionals is the expansion of education and interpretation departments through on-site and off-site programming, social media, and other outlets. All of these changes are consistent with changes in public university education programs, which over the past decades have sought for greater student engagement in self-led discovery, integration of subject matters, and hands-on application of learning. In the case of AZA zoos and aquariums, the new class of educators brings this philosophy with them to the zoo classroom, shaping zoo education practices.

In addition to these classroom “best practices” which have made their way into zoo and aquariums, another great force is shaping zoo education: the globalization of conservation. Zoo visitors learn about the great impact of humans on local and global environments and about the importance of conservation on a local, regional, and global level in the preservation of habitat systems. This has led zoos to an intense focus on empowering the public to make a positive environmental change.

At Zooleón, as seen in the previous chapter, the public overwhelmingly seeks a family experience at the zoo that is primarily focused on greater group integration. Despite this motivation, the majority of visitors come to the zoo with a working knowledge of conservation terminology open to educational experiences, so long as they did not detract from the family experience.

In this chapter, I seek to address two central themes. First, I discuss how the roles played by zoo staff in León shape their opportunities to interact with the public and influence their conservational impact amongst the visiting public. Two essential elements in this discussion are how zoo organizational structure shapes public interaction and how a limited education staff effects conservation messaging and public interaction. Then, I develop how individual background and attitudes shape interactions with the public amongst the education staff. Critical components to this discussion are how social and educational background shape these personal attitudes and public interaction.

## 6.1 Staff Connection to Conservation

A zoo's mission statement is meant to provide the institution, faculty, visiting public, and community an organizational focus. Despite this goal, each of these participants is likely to feel a distinct level of personal connection to the mission. Amongst U.S. institutions, zoo leaders often seek to build team morale around the zoo's conservation mission. The following section discusses the degree to which a personal connection to the zoo's conservation mission is embodied by distinct zoo faculties.

### *6.1.1 Zoo Leadership*

Zoo leadership is defined as zoo staff in senior roles, including director, curator, staff biologist, business managers (including accountant), and veterinarians. In addition to these individuals, other members of this category include the *Patronato*, or Board of Trustees. This latter group was not included in my study due to limited ability for interaction with them during

my time in León – as they all have careers outside of the park – as well as the ever-changing group composition.

During my initial fieldwork at León, the Zoo Director also served as the Accountant. His experience at the zoo was less than a year and he came from a government accounting background. His daily duties greatly revolved around financial matters. This fiscal mindset limited his personal connection with the zoo's conservation mission, creating a disconnect between himself and other zoo leaders and educators.

In the months between my visits to León, the Education Director became the new Zoo Director, with the former Director returning solely to his post as Accountant. The new director, a young woman named Sofia, has a background that is quite distinct from that of the former director. Trained as a veterinarian, with eight years of experience at the zoo in the education department, she has created greater cohesion between the veterinary and education staffs with the zoo leadership. While still working with the same budget limitations, the new Director has much greater institutional support, as well as a good rapport not only with her staff, but with the Board of Trustees. This can be attributed to two factors: her length of service and her science background.

She serves as the public face of the zoo (much as the Education Department does), meets regularly with the Board of Trustees, and also still serves as a direct advisor the education staff member that was promoted to fill her position. This veterinary and zoo education background clearly defines her personal connection with conservation. The importance in promoting conservation at the zoo, she states, is “the urgency that currently exists in the environmental scope due to the disproportionate deterioration of ecosystems. We are acting late in repairing the damage.” Due to her administrative responsibilities as Zoo Director, much of this conservation education must be the duty of the Education Department through their programs that “always have the intention of provoking a positive experience for the visitor,” she furthers. That being stated, she represents a strong voice for strong educational programming

and presence in the park. She also maintains a watchful eye on a program with which she was personally involved for a number of years.

The general curator at Zooleón is in charge of the entire animal collection in terms of planning, importing/exporting, in meeting AZA regulations, and implementing AZA recommendations. He also serves as the zoo liaison in interactions with the Association of Mexican Zoos and Aquariums (AZCARM) and the World Association of Zoos and Aquariums (WAZA), with both of which the zoo maintains an active membership.

A U.S.-born and former bilingual educator in California, Curator John has been with Zooleón since its inception 30 years ago. Prior to his role as curator he also served on the Board of Trustees. Outside of the zoo, John also participates in civic organizations, such as the Rotary Club, and is a representative for León in its interactions with sister cities, including Irving, Texas. His oldest son was elected as President of León in 2009.

The Zooleón staff views John first-and-foremost as one of their own. In English-language interactions, John is typically at the forefront. He hosts AZA and other international visitors. Indeed, John was my initial contact when I inquired about completing fieldwork at Zooleón. John's grandchildren were common faces at zoo education programs, such as Summer Camp. In fact, his granddaughter served as a teen volunteer during my first experience in the field.

John's personal connection to conservation is clear – and the importance in his work as curator in managing the zoo's animal collection is evident, yet his civic duties often demand time away from the zoo. His face is not the public face of the zoo, and his conservation beliefs ultimately are not the beliefs shared with the public. His low-key presence with the public seems to underscore a reality that his son faced in the election: his opponent used, "We are León" as his campaign slogan, portraying John's son and family as clear outsiders. Outside of the politics of campaigning though, Richard is well-known and recognized throughout the city.

The Zoo Leadership also includes a staff biologist. Eduardo, a former federal

employee, has been at Zooleón for seven years, after an invitation to join the zoo by zoo leadership. His job is to serve as the advocate for the animal collection. All changes to animal exhibits, training, and enrichment must be approved by him. Essentially, his biology training is used to ensure animal welfare.

As a biologist, Eduardo is aligned to the conservation message of the zoo, but he has no interaction with the public. His job, rather, is to ensure that the unstated message – as experienced through a zoo visit – is consistent with the zoo’s mission and his professional goal of species maintenance and environmental equilibrium. He states that the zoo should better integrate “specific programs over the species that are involved in conservation projects.”

In comparison with United States zoos, Zooleón employs a significant number of veterinarians, and due to their intimate work with the zoo’s animal collection, animal care staff, and educators, they are important members of zoo leadership. These individuals refer to those whose job is that of daily emergency animal care and preventative medicine. Those individuals that do not pertain to this category are the employees that are trained as veterinarians, but work outside of their field as animal trainers, commissary supervisor, or non-animal leadership roles.

Zooleón’s veterinarian leadership, in a similar manner to the biologist, is greatly aligned with the zoo’s conservation mission, but their daily functions – animal medicine and procedures – allow little freedom to actively participate in conservation. Again, their presence and focus is necessary, and ultimately effect the zoo’s conservation image as a whole.

There are limited conservation interactions with the public by the zoo’s veterinary staff. During my fieldwork, two of the veterinarians made presentations to the Summer Camp attendees. Although these were not specifically conservation messaging, the talks did allow for interaction between the young campers and *an actual zoo veterinarian* – an exciting and memorable experience for children at any zoo or aquarium. The veterinary staff, just as with the Director, Curator, and Biologist, represents some of the most experienced members of the Zooleón faculty.



Zoo Leadership represents two important sectors in the zoo: the most educated group and a highly experienced group. Although their educational experiences are quite varied – veterinary medicine, business, and education – a common vision, in terms of conservation education is present. This vision mirrors that of the AZA – an urgent message of conservation and empowerment of the public to change the course of habitat and species loss, both locally and globally.

In addition to the important conservation mission, zoo leadership is also clear to point out that Zooleón is home to a picturesque slice of nature that must also be an attractive tourist destination. The daily decisions of the zoo leadership are well-rounded – while always taking costs and limitations into account, they ultimately seem to base decisions on the forward movement of conservation efforts, given that business and animal welfare is accounted for. In aspects where this is unachievable or difficult, the Director states, “[at least] in theory [the zoo conservation mission] sounds good.” To have a desired goal in place, she implies, is as important as being able to achieve it.

This unequivocal conservation support makes Zooleón’s mission clear: to be a leader in conservation, yet for much of the zoo leadership, they do not serve as the interface of this mission with the public in a direct way due to their daily administrative and job duties. That task is the sole responsibility of the education staff and their limited volunteers.

#### *6.1.2 Education Staff and Volunteers*

The education staff at Zooleón – approximately 10 individuals – represents less than seven percent of the total full-time staff. This small proportion of educators stands in stark contrast to many AZA institutions in the United States. The Dallas Zoo, for example, maintains 29 full-time and 28 part-time educators with a total zoo staff of 290 individuals. While only several percent more than León, the education department also utilizes 440 youth and adult volunteers – making them a much more substantial force in the zoo.

A third of the staff at Zooleón has been part of the education team for nearly five years. The rest of the staff, at the time of my fieldwork, had between a month and two years of experience at the zoo. Two of the most recent staff members, one of which is a veterinarian, and both of whom served as animal trainers, had extensive experience at several Mexican zoos, including Africam Safari (Puebla), the *Museo del Desierto* (Desert Museum, Irapuato), and the Tlaxcala Zoo.

The educational background of the education staff is as varied as their experience at Zooleón. The three most senior staff members all have business backgrounds – with work experience in call centers, engineering departments, and event promotions. Of the three, one has a university degree – although not in education or science.

The remaining animal care staff members, with the exception of one, are all students in various fields. Again, there is a noticeable absence of training in education. This represents a distinct difference from educators at United States AZA institutions. Most education departments are composed largely by former school educators or students pursuing education degrees.

Despite this lack of “formal” education training, all of the education employees are clearly aligned with conservation of plant and animal species and their ecosystems. Also, they all explicitly state the importance of educating the younger generation. One of the recent animal trainers states, “It’s very important to create a conscience of conservation, more than anything, in the child population so that from an early age they can be invested in the [plight] of contamination and species extinction.”

A subgroup of the education staff is the small volunteer force that they utilize. These individuals are secondary school and university students seeking to fulfill government-mandated social service. The younger volunteers choose the zoo for an interest in animals, while the older volunteers are completing career tracks in some way related to zoo activities, such as veterinary medicine or psychology. All of these terms are for a set number of hours, often

completed within a two to three month time period, although there are others that spread the hours out over more than a year. The university students complete many of the same functions of the full-time education staff, including daily education animal care, program presentations, and some animal training. Many show great enthusiasm in education programs, but are limited by the hours of their service and the slight chance of gaining future employment at Zooleón. Interestingly, members of this group spoke often about creating a new culture of respect for nature among the younger generation. The secondary school students generally serve as education aides – camp counselors and children’s zoo attendants. Their main task is to provide a positive and enthusiastic image to a child’s zoo visit.

The education staff clearly sees their role in conservation at the zoo: they are the only consistent conservation voice and their actions must make the connection of the physical grounds and animal collection with the greater goal of species and habitat conservation amongst the public. This goal is almost exclusively completed through two types of interaction: school programs and off-grounds animal encounters including the *Ranchito* at local fairs, television and other media opportunities, and education animal demonstrations at community events.

The noticeable difference in interactive, family-centered programming on zoo grounds is in the weekend keeper talks and training demonstrations presented by one staff member, Marco. As previously discussed, these talks are interactive, involving keeper staff, animals, and the public – an engaging activity for all. Given the importance of the family experience, as emphasized by visitors in the previous chapter, Marco’s program represents an outstanding opportunity for bridging the gap between educator and visitor expectations (or merging the two).

In terms of their mission of positively impacting local/global conservation, the Zooleón educators are inconsistent. When engaged in conversations about what the importance of conservation is, all of them spoke at a global level – saving ecosystems, preventing species

loss, “a better world”. No one explicitly or implicitly discussed the importance of local action or empowerment.

Interestingly, though, the education staff, while never explicitly discussing the importance of local conservation (recycling, appropriate exotic pets, etc) with me, do seem to practice these key messages – they are, as is said colloquially, “practicing what they preach”, but they fail to share the importance of these actions with the visiting public. As the sole voice for environmental stewardship at Zooleón, outside of the limited interactions by zoo leadership, this failure results in a public that gains little personal empowerment from the educators, particularly in terms of local conservation – an arena that could have great impact given the prevalence of opportunities to change personal behaviors concerning recycling, limiting waste, and seeking domestic rather than exotic pets. There is, therefore, some overlap in the emic explanation of their goal as educators in that they are consciously making personal decisions that positively affect local conservation, but their failure is in not conveying their conservation message to the public. This difference in the emic description of their conservation activities and beliefs and the etic reality of how they personally serve as environmental stewards but fail to reach zoo visitors with a “takeaway message” underscores the limited conservation impact that the education staff has.

Overwhelmingly, this group is aligned with the environmental conservation mission of the zoo, yet they largely envision a global change set into action by a future generation without actually empowering their audiences. The level of seriousness in reaching this goal, while varying on a daily basis, is generally high among most staff members. In the few staff members that seem to spend less time considering the conservational importance of their work, their charismatic personalities make for highly entertaining and engaging zoo experiences with children – a necessary compromise recognized by some members of zoo leadership, given the limited positions and capital available towards maintaining educators at the zoo. Greater

resources could result in well-trained educators that effectively convey the messages that they personally support and currently fail to convey to the visiting public.

### 6.1.3 Animal Care Staff

In recent years, the animal keeper has stepped out from inside the buildings and cages, to take an active role as educator in the AZA zoo and aquarium. Daily keeper talks engage animal keepers and trainers with the public in a way that early AZA institutions probably never envisioned. Not only do keepers demonstrate portions of their daily routine such as trained behaviors – like a gorilla opening its mouth to have its teeth cleaned or a male baboon being trained to sit at a target while his submissive females are given a chance to eat – but also share bits of information about individual animals, their natural histories, and their native habitats. The zoo's education department has essentially doubled or tripled its impact through these keeper/visitor interactions. For this reason, it is important to understand the role of the animal keeper at Zooleón.

The relative solidarity in terms of environmental ideas and attitudes by zoo leadership and education staff is much less evident amongst animal care staff – a symptom, it seems, of the clear generational and educational gap in their group. In fact, it seems most appropriate to discuss Zooleón zookeepers as two distinct groups – experienced career-men and university-educated upstarts.

The most experienced keepers, I would call *career-men*. Keepers in this group are guided by experience rather than formal education. They represent the large majority of keepers in the zoo, and they are formed entirely by men. Many of these individuals have been a part of Zooleón since its inception. As a whole, their ages are at least 10-20 years higher than the other group of keepers.

One keeper, Sergio, was previously a shoemaker. Other keepers came from other unskilled laborer positions – as a whole representing a clear class distinction amongst other groups such as zoo leadership and educators. Zooleón recognizes this difference and offers

free elementary and secondary school classes to all of its employees, including several of these men. Upon completion of each school level, the zoo holds a ceremony celebrating their accomplishments.

In terms of the job duties, these individuals are devoted to providing their animals the best care possible – through daily feeding, exhibit maintenance, and keeping exhibits clean and safe. While some have become involved in animal training, particularly with salient species such as elephants, bears, and cats, their preference is to remain anonymous to the public, because their job, as Sergio puts it, “is to keep everything as clean as possible”. In fact, through observations, it is clear these men are truly driven on this mission. For them, therefore, conservation is seen as the obligation to maintain the animal's living spaces in the zoo. The participation in animal training is primarily for the safe care of the species under their care (training for easier husbandry) rather than interaction and education opportunities for the public. Concepts of natural habitat preservation and international conservation efforts are outside of their scope of reference. “Public interactions,” states another keeper, Luis, “are the job of the educators.”

This separation of the role of animal keeper and educator, while not completely eliminated in U.S. institutions, continues to diminish. In fact, many zookeepers are hired with job descriptions that clearly require great public interaction and education opportunities. This change is not the standard at Mexican institutions, so we must be careful in assuming that animal keepers should interact with the public and maintain a high personal connection with conservation education as is seen at U.S. institutions. This cultural difference is slowly changing, and it seems likely will continue to diminish as university-educated keepers join institutions like Zooleón.

Working alongside the experienced-career men are a class of young keepers with university experience in biology and the life sciences – *university upstarts*. These keepers generally only give service to Zooleón for a very short period of time due to the low income

possibilities at the zoo, coupled with greater opportunities in government and business posts relating to the sciences.

One such keeper, Andrés, age 19, has an obvious passion for animals. As quixotical as it may seem, even the most mundane daily chores, such as removing animal waste from the buffalo enclosure, are done with such vigor and unbridled excitement, that he seems more like a child on a school field trip than a animal keeper. When I asked him to explain his reasons for joining Zooleón, one word exploded from his tongue: “passion”. This passion, along with completing his secondary education – in contrast with the other group of keepers – has resulted in a more thorough, and globalized, view of conservation. Andrés recognizes the importance of a clean exhibit and positive image for the public, but he also discusses the importance of conservation on a larger scale – including the breeding of zoo animals and the protection of wild species and habitats.

Along with Andrés are a small number of keepers with a similar background and conservation view, and just like Andrés, none of these keepers remain at Zooleón for very long. There is, though, a small, but constant, influx of similarly-minded keepers. They represent the growth of importance of formal education and an economy, albeit nowhere near the “developed world”, that is much stronger than a generation before. While Mexico does not have a clearly defined middle-class, keepers like Andrés demonstrate the expansion of social movement that was not available to the older class of keepers that he works alongside.

Interestingly, the education growth is equally present in United States zoos – as well as the inability by some institutions to retain such individuals for a significant portion of their career. While more of the experienced (older) keepers hold university degrees than in León, they, too, are less formally educated than the younger generation of keepers, and, certainly, all new keepers being hired in AZA institutions have a college degree or at least substantial experience. Despite a general sense of fraternity being present, this discord creates a clear conflict in times of uncertainty: when staffs are reduced and when promotions are offered. While I was not

present at Zooleón to witness either of these uncertainties, personal experience of being part of this divide in U.S. AZA institutions, seems to indicate such a divide would readily arise during similar situations in León.

These distinctions between career-men and young upstarts demonstrate another cultural barrier at Zooleón – while both groups of keepers are devoted to the individual animals under their care, the younger and more highly educated group maintains a more expansive view of their personal connection to conservation and are most likely to seek interactions that share this connection with the public.

#### *6.1.4 Other Staff*

The largest group of staff at Zooleón consists of office workers, grounds people, housekeeping, commissary employees, gate and attraction attendants, and gift shop and food service employees. Their daily duties are essential to the successful functioning of the zoo. Their backgrounds are as varied as their job descriptions, yet some generalities emerge.

The grounds crew – including landscaping, maintenance, and housekeeping – are greatly experienced in what they do. Most have worked at Zooleón for years, many since it began. Nearly all of them chose Zooleón due to its proximity to their homes and because it represented a unique atmosphere to work in. These individuals work without stop, and the cleanliness of the park is impressive, particularly in light of the cultural differences in terms of refuse etiquette. Children and adults alike discard trash on the ground, in the bushes, and in the animal exhibits throughout the zoo. This is not abnormal – the same is true throughout the city of León. One reason, it seems, for this behavior is that there is always someone to clean it up. At Zooleón, the morning dust cloud that arises from a chorus of sweeping brooms is tangible – it rises up throughout the small clearings amongst the mature pine and eucalyptus trees like smoke from a paper factory fire. Many of the housekeeping employees were actually weary to stop their work and talk with me until I reassured them that zoo leadership had invited me to the zoo and knew that I would asking them to stop and talk with me.



Much as the older generation of animal keepers had stated, the majority of the ground crew felt little connection between conservation and their position at the zoo, outside of maintaining a clean park. In fact, one employee said instead of asking about conservation, the zoo should be more concerned with whether people are doing the job they are supposed to do. This is contrasted by many U.S. institutions that have created a culture of conservation across all employee sectors. Therefore, individuals in horticulture or housekeeping understand and celebrate the importance of their job in the overall zoo mission of conservation, and feel more a part of that movement than do individuals at Zooleón.

One exception to the rule is Sabrina, age 50. Conservation is “so important” at the zoo, she states, “so that there will be more birds and [less] animals in danger of extinction. If not, they will cease to exist.”

The gate and attraction attendants, as well as the gift shop and food service employees, are a generally younger group than the ground crew. Many work at the zoo and attend classes when they are not at the zoo. Just as with zoo visitors, this group has a working knowledge of conservation in a general sense, invoking action verbs – conserve, protect, take action – when discussing their personal connection to conservation. It seems, these responses are more an effect of their childhood which took place in the 1980s and 1990s during which conservation messages began to spread across the globe. Much as with the educators – their peers – these zoo employees underscored the importance that children understand the grave state of the Earth’s habitats – highlighting a lack of feelings of personal empowerment.

The individuals in the Other Zoo Staff represent the largest sector of employees in the park, as well as the most diverse backgrounds in terms of generation, education, and conservation attitudes, but the most important feature to emerge from my interactions with them is no one feels a strong enough personal connection between their role at the zoo and the promotion of conservation to the visiting public. Just as with the older class of zookeepers, this reality is an effect of class and education level – they have not had access to the globalized

education that so many of the younger keepers and educators have. The job of educating the public, they stated (implicitly and explicitly), is accomplished (to varying degrees of success) by the education department.

#### 6.1.5 Synthesis of Conservation-oriented Staff

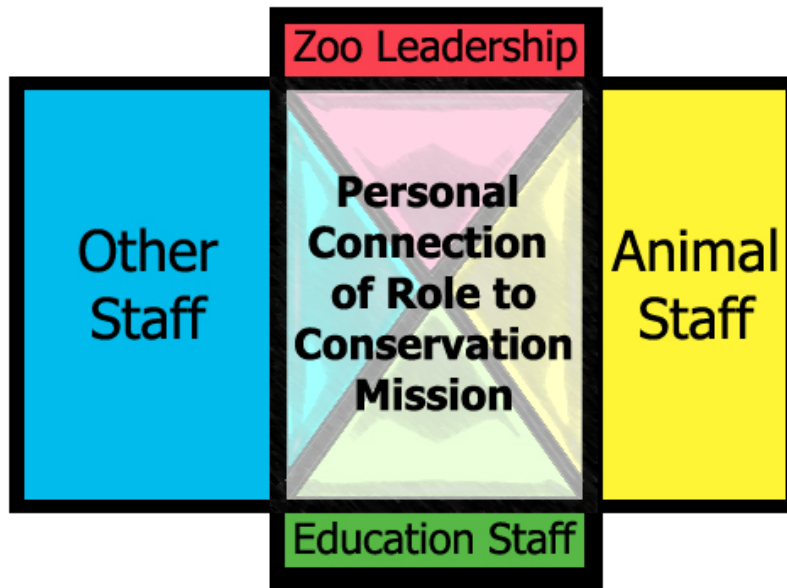


Figure 6.1 Personal connection to zoo conservation mission by Zooleón employee groups

The figure below illustrates personal connection to Zooleón's conservation mission by each sub-group of zoo employees. The least numerous groups in the zoo – Zoo Leadership and Education Staff – represent the groups with the most personal connection between their role at the zoo and the zoo's conservation mission. On the contrary, the most numerous groups – Animal Staff and Other Staff – while containing the most individuals maintain the least personal connection to the zoo's conservation message. In fact, as previously discussed, the issue of articulating conservation messages and making that connection with the public, is viewed solely as the job of the education department. This underscores a significant difference

in the role of conservation at Zooleón and other AZA institutions. In the United States, many zoos have labored to convey the importance of incorporating all staff into the zoo's conservation mission regardless of their specific job duties.

Several members of Zoo Leadership discussed the importance of empowering all zoo employees to feel a part of the “grander scheme” of conservation, but their daily responsibilities limit their personal involvement in making that desire a reality. That being said, with the exception of a few educated young animal keepers, the education staff is seen as the sole facilitator in empowering the Zooleón public to support and practice conservation.

#### 6.2 Education Staff Perceptions of Visitor Motivation and Conservation Attitude

While it is necessary to understand how the Zooleón employee's job duties shape their conservation attitude, it is also important to develop how personal background and attitudes shape the individual's interaction with the public. Early in my fieldwork, it became evident that the education department is the epicenter of public interaction and conservation education. Therefore, the bulk of my time spent away from interviewing and observing the public was spent with the education staff. I also lived with the newest member of the education staff, Luis Angel, who served as the animal trainer for all education animals, as well as mentor for his co-workers due to his extensive zoo and animal training experience.

Perception is a powerful motivator. Clearly, the visitor's perception of what Zooleón has to offer – and whether these offerings meet their expectations – is essential in their decision whether or not to visit the park. With the education staff, perception is just as powerful – it shapes how they interact with the public, what information they choose to share, and how they convey that information.

The entire education staff, when asked what the visitor's primary motivation is, gave the same response: recreation or a family outing. Santos, the new Director of Education, explains, “The average citizen visits with goal of enjoying family and to distract themselves from the daily grind.” Animal trainer Luis Angel added, “Basically, kids love animals, and that is why the family

comes to the zoo.” This belief coincides with the results of my proposed visitor motivation typology in the previous chapter. Therefore, perhaps more important than this assertion by the education staff, is that most of them were also clear to further define this explanation, by stating that the conservation messages they share with the public while often favorably received, don’t result in any sort of environmental stewardship due to this family-centered motivation.

This overwhelming perception that visitors come to the zoo solely to pass time with family, failing to take away an empowering conservation message, clearly shapes the education staff’s perception of what conservation knowledge and attitude the visitor enters and leaves the park with.

One staff member, Anita, states, “I consider that [the public of León] has a very poor culture and they do not give [our message] much importance. Zoo Director Sofia “unfortunately” agrees that the education message is not effective. This sentiment is elaborated upon by animal trainer Luis Angel:

The ideology of the common visitor is poor in relation to the theme of conservation and education that we pretend to impart here in the zoo – and in many zoos in Mexico. An important aspect is that the social elite visit [the] zoo with an acquired level of education. For example, Africam Safari [in Puebla] is oriented toward a higher elite class and due to this their entrance fee is five times higher than at León. In the meanwhile, the people that visit [Africam Safari] have a different income level and perhaps a higher [educational] preparation than in León. Therefore the visitors [at Africam Safari] show a better education in respect to the theme of environmental education.

This theme of class and education level affecting the public’s conservation knowledge and reception of the zoo’s messaging underscores the way the education staff’s perceptions shape their actions and interactions. Zooleón’s educators assume that only people with higher

education status are open to environmental consciousness. This belief is troubling if the zoo educators are to effectively engage their varied audience. If the educator doesn't believe their public cares, what incentive do they, the educator, have to act other than a personal connection to the conservation mission? This belief underscores a class bias by the education staff – a bias that they don't seem to recognize. This bias is likely a result of their overall elevated education status in comparison with many zoo staff members and visitors. It seems the education staff could seek alternative methods of involving their public in conservation education by simply acknowledging the varied motivation for their visit and the varied conservation knowledge and attitudes each public member holds. Assuming the visiting public is not interested in educational activities or messages, terminates the interaction before it can even begin.

A second misperception held by the education staff is the belief that the public enters the zoo a “tabula rasa”. In fact, as discussed in the previous chapter, as a whole, much of the public has a working knowledge of action-based conservation terminology. Only a complete study of visitor conservation background and pre/post assessments of conservation learning at the zoo could truly articulate where the education staff is erring in judgment and how to best engage their visitors. What is clear, though, is the notion that the public does not care about education or does not actively seek to learn, only limits the impact that the education department can have. Not one staff member discussed altering education programs, content, or presentation methods – how is the public to change if the educators do not?

One area that does seem particularly effective, according to personal observations and discussions with education staff, is the weekend animal training and enrichment talks given by Marco. “[We need to] realize more interactive activities with the public that invite them to participate and understand the situation of the world’s wildlife,” he says. The primary reason that this program seems highly effective is that it does not isolate the child from the family (thus meeting the whole family engagement requirement) and it keeps the family in the park and

viewing animals rather than separating them from the park into the education classroom. The program also does not assume that the public is uninterested in conservation issues, but rather, discusses conservation and personal actions through an interactive experience with the zoo's captivating animal collection. The recent addition of the interactive farmyard at local festivals also makes a stride in this direction by providing families with an experience that includes the family unit as a whole, inviting all to participate.

### 6.3 Synthesis of Staff Perceptions

The previous chapter demonstrated that most visitors to Zooleón are largely in favor of the zoo's conservation mission and come to the zoo equipped with an action-driven conservation vocabulary. That being said, few were able to specifically articulate a personal change they could make towards better environmental stewardship – a clear lack of empowerment.

There seem to be several clear reasons that attribute to this deficit. First, few job positions at Zooleón include education-oriented interaction with the public. Outside of zoo leadership – whom face great daily and fiscal responsibility – the sole voice interacting with the public is the Education Department. As a whole, the rest of the zoo staff – including animal keepers, grounds crew, office employees, and facilities workers – either view conservation in a limited scope or sees it as the sole work of the education staff. This view, in large part, is shaped by their educational and class background, but it is also formed by the organizational structure of the zoo. In U.S. AZA institutions, both animal keepers and horticulturalists join the zoo with two clear understandings – that their role will require interaction with the public and that they are expected to be an active voice for conservation. Even those individuals that rarely even see the public seem to derive a sense of pride in their job can only be attributed to the nature of the zoo's mission. Due to these reasons, there is overwhelming support for conservation across all work departments in U.S. institutions.

At Zooleón, many employees have been staff members for decades and their job functions have never included education or conservation-oriented interaction with the public. The AZA model of all employees as environmental stewards and educators is not the normative that many Zooleón employees have always followed, and their perception that they are not educators shapes their daily routine.

The second perception that shapes public interactions is that of the education department. They seem to hold a misguided understanding of who their public is and what they seek from their zoo visit. The public does visit seeking a family experience in a large sector of the population, but they are not vehemently against an educational experience so long as it functions within their family-centered framework. It seems the education staff has over-generalized the necessity for a family experience as a lack of interest in conservation. This is coupled with a class bias – the education department is more highly educated than much of their visiting public.

Perception is powerful. Currently, Zooleón is limited in being an effective voice for conservation because much of their staff believes they are not a part of the zoo's conservation mission and because those that are charged with public education overwhelmingly view the public as uneducated and unreceptive to conservation messaging.

CHAPTER 7  
UNDERSTANDING THE AUDIENCE: CONCLUSIONS  
AND IMPLICATIONS FOR ZOOLEÓN

We are the most dangerous species of life on the planet, and every other species, even the earth itself, has cause to fear our power to exterminate. But we are also the only species which, when it chooses to do so, will go to great effort to save what it might destroy.

Wallace Stegner

The idealized goal of modern zoos and aquariums under the Association of Zoos and Aquariums umbrella is clear – to empower the public to affect positive change in their lives, their communities, and their world. This is a far cry from the earliest menageries whose function was that of displaying grandeur and political and economic strength. History has changed the course of zoos and aquariums for many reasons, but the most recent incarnation is a response to the environmental reality of our world. A greater quantity of species are dying at a more accelerated rate than ever before, with the exception of the extinction of dinosaurs. This astounding loss is due primarily to human population expansion and the associated habitat loss.

The AZA hosts more individuals each year than the combined attendance of United States professional sports – a potentially position to affect positive change in millions of individuals. Member institutions are charged with the overwhelming task of using this presence to leverage influence in conservation and education. Indeed, member institutions must be active participants in local, regional, and global conservation efforts. This growth by AZA institutions in terms of education is coupled with institutional expansion to zoos and aquariums outside of the United States, such as ZooLeón in León, Guanajuato, Mexico.

As an industry, zoos have reinvented themselves time and time again, in response to the social, economic, and environmental climate of the times. There is no doubt that AZA membership represents an opportunity for greater inter-institutional and multinational



partnerships, due in large part to the globalization of conservation ideas since the 1970s and the ever-deepening relationship between institutions. Gone are the days of an individual institution existing as an “island”. The necessity of animal trades, species-wide strategic planning, corporate sponsorships, and regional and national conferences are a reality for all zoos and aquariums – regardless if they are AZA members. For AZA members, a number of required programs virtually mandate such interactions. Conservation International ranks Mesoamerica’s forests as the third largest among the world’s hotspots for conservation with Mexico containing much of these areas. Therefore, it is understandable why the AZA and ZooLeón (and other foreign members) would seek to expand their net by joining forces and resources, but this growth in partnerships is not without very real costs. Zooleón’s case should serve as an example for other institutions. I suggested in my introduction that the joining of the AZA by ZooLeón might have some far-reaching implications in terms of fundamental paradigmatic differences with United States member institutions. To uncover these differences and confirm the incongruence of AZA membership for ZooLeón without substantial variations of education and visitor experience practices, I spent portions of 2009 and 2010 living and working in León with the education staff. During my fieldwork, I uncovered significant structural and cultural barriers that make AZA membership a strenuous relationship for ZooLeón.

### 7.1 Structural Barriers

ZooLeón, in comparison with other AZA zoos with a similar annual operating budget, maintains a much larger staff size and services one of the largest totals of annual visitors. Stated quite simply, ZooLeón has to do more with less. Certainly, the everyday costs associated with labor, animal diets, and facility maintenance are substantially less in Mexico than in the United States, but ZooLeón does not solely operate within Mexico. Thus, it is quite fair to compare León’s budget with other AZA members’ budgets. Just recently a rhinoceros arrived to the zoo from the United States, and the fees associated with shipping and purchase of the animal made a much greater impact than it would on a U.S. establishment.

These differences are compounded by another reality – a culture of volunteerism and institutional membership does not exist at ZooLeón. In the United States, though, such programs provide significant resources in both labor and capital. This lack is a result of several factors including fundamental differences in volunteerism in the country, the nature of governance of the state, and a lack of a solid and stable Mexican middle class. For zoos of a similar budget, volunteer totals can number from the hundreds to several thousand – and all but two institutions report more volunteers than ZooLeón. Even this figure is deceiving, though, because all volunteers at ZooLeón are completing required social service for their education, and do not represent the long-term commitment that is found amongst a large segment of U.S. AZA zoos' volunteer force. On the contrary, membership and volunteer programs are crucial to the success of many U.S. AZA institutions. More than just the monetary benefits that these programs signify, they also represent the opportunity for growth of social capital.

According to French sociologist Pierre Bourdieu, social capital is “focused on the benefits accruing to individuals or families by virtue of their ties with others (Portes 2000: 2).” In terms of institutional membership and volunteer programs, the zoo also acquires a greater level of social capital through increased pride or ownership in the institution and its mission by members. AZA zoos or aquariums repay and maintain this social capital through membership and volunteer perks, and in turn, can count on these individuals during times of transition, economic difficulty, or capital campaigns. They can also count on members and volunteers to join a specific environmental cause or action based on this relationship. A lack of membership and volunteer infrastructure, therefore, not only has economic impacts on ZooLeón, but limits opportunity for an increased sense of personal ownership and responsibility in the zoo by the public as well.

Where many U.S. member institutions can turn to sponsorships to make up financial gaps, yet this corporate culture is not nearly as developed in Mexico and ZooLeón.

Sponsorships at León take on a very basic nature: snack stands wrapped in corporate logos and soft drink exclusivity contracts are the extent to which sponsorships are present.

Another structural barrier encountered at ZooLeón is in the required annual membership fee imposed by the AZA. Were ZooLeón to be assessed a membership fee based upon the same fee rate as U.S. member institutions, it would be nearly a 25 percent savings (or \$1500 dollars less). There is no clear reason for this fee differential. Animal transfer costs (shipping, housing of personnel, etc) are the sole cost of the receiving institution. AZA inspectors and leadership must fly to León, but the same is true for many other member institutions that they would visit. Virtually all correspondence, outside of mail service, can be done electronically, thus limiting costs – clearly the AZA does not spend that much more on postage for foreign members. Zooleón’s curator has unsuccessfully lobbied for a change in this policy since their membership. While \$1500 a year seems a petty discussion, in reality, this fee coupled with the other structural barriers that León faces, is substantial, and the AZA’s failure to recognize this incredible cost signals a substantial misunderstanding Zooleón’s infrastructure.

What do all these structural barriers – a large workforce and visiting public with a limited budget, the lack of a membership and volunteer programs, limited sponsorships, and a higher than normal annual AZA membership fee – mean for ZooLeón? They are significantly limited in the amount and degree of improvement, and capital campaigns are nonexistent. Animal exhibits in desperate need of cosmetic repairs must remain in their dated state. Unpaved pedestrian walkways that are subject to seasonally heavy rains are quite often unvisited by the public due to muddy or impassable conditions. The most highly educated staff members that are not zoo leadership are often lured away by significantly larger paychecks at government jobs. Purchases or transfers of unique or highly exotic animals are rare, if possible at all. A lack of volunteers necessitates that animal keepers and educators spend much of their day completing routine activities, which in many AZA institutions can be accomplished by unpaid volunteer laborers. Professional training opportunities are also severely limited, quite often only

being available to the most senior staff. All of these realities are quite the opposite of the ideals that the AZA promotes – yet they seemingly do little to remedy this situation despite accepting and soliciting foreign memberships.

Despite these important obstacles, it seems clear why the AZA would begin to expand its territory, and also quite understandable why ZooLeón has joined the AZA. For the AZA, the expansion of the captive animal pool serves to ensure the necessary genetic variety to maintain captive populations for the long-term. It also signals an opportunity to provide necessary shelter and support for endangered or threatened species endemic to Mexico. For ZooLeón, despite the current organizational differences and realities, membership represents monumental opportunities for developing partnerships – in terms of animal collection, animal care, and education, amongst other arenas.

ZooLeón has made a sacrifice to obtain AZA membership, but they are not the sole benefiter of the alliance. The AZA must recognize that if they are to accept culturally-foreign members, they must fully understand the economic and cultural realities of the institutions that they are accepting, and by acknowledging the value of such institutions through membership, they must seek to make the partnership effective for both parties. The annual membership fee should be assessed equally across all institutions – foreign or domestic. The lack of institutional membership and a culture of volunteerism represent enormous areas of discord in the AZA model for ZooLeón. The AZA must seek to address how to best rectify these institutional differences. While this does not necessarily imply investigations into how to effectively implement such programs, that certainly is one possibility. An alternative solution is that the AZA must seek a more equitable system of accounting for institutional operating budgets, particularly in terms of revenue – capital or labor – earned through membership and volunteer programs – and use this system to guide decisions in scholarships or financial aid to member institutions in need.

While each AZA institution has its particular interests and priorities, if the AZA is to recognize culturally-foreign members, they must seek to encourage and enforce greater partnerships, particularly amongst those institutions that have well-developed programs in terms of donor opportunities, animal care, or education, but they must recognize and celebrate cultural differences and seek programs that incorporate these differences. A powerful first step would be to aid León in securing international sponsorships and donors. Mexico is home to uniquely diverse flora and fauna that the world would support if given the correctly-framed opportunity. The AZA should also equally acknowledge the particular strengths of members like ZooLeón and integrate them into partnership programs. Most importantly, the AZA must recognize that the current assessments and standards used to measure U.S. institutions are culturally-specific and do not necessarily coincide with the zoo experience in culturally-foreign institutions such as León.

#### 7.2 Cultural Barriers

While the structural barriers that ZooLeón faces appear to be great, it seems the cultural barriers they encounter are also a significant challenge to being successful as an AZA member. Zooleón's public does not act upon the same motivations as those found amongst the recent *Why Zoos and Aquariums Matter* (WZAM) research produced by the AZA. In this research, the investigators used visitor surveys to understand the primary motivation for their zoo visit. Amongst the study visitors – surveyed in zoos and aquariums throughout the continental United States – the most common motivation was to explore the institution or to facilitate the visit of another person (adults bringing children). From this data, the researchers created a toolkit for all AZA institutions to use in determining, analyzing, and engaging their particular audience groups – a simplified and systematic method for all institutions to educate their visiting publics. The AZA intends to have individuals trained on implementing the research in at least 50% of all AZA institutions by the close of 2011.

My research in León underscores a significant cultural barrier with universally implementing the AZA research – the investigators purport continuity across all AZA institutions in the study in terms of visitor motivations and hence recommend implementation at all institutions, but the reality at ZooLeón is quite different and necessitates a different approach. My interactions and observations with visitors indicate a distinct difference in the importance of family and family-building to ZooLeón visitors. While the study results by Fraser and Sickler discuss the importance of family, the Falk et al. summary of motivation groups does not even mention the word family. How can this be? The difference, it seems, is that family is not seen as a paramount motivator for AZA visitors in the WZAM study, but rather an underlying factor of all visitors. The importance of an experience that explicitly focuses on family-building at León cannot be understated. The difference, therefore, is that family integration is an expressed and obvious motivator for the largest segment of the public – not only the children, but also the adults are actively gaining from the experience alongside their children. The AZA research seemingly takes family out of the picture when it is so vitally important. The visit to ZooLeón is substantially more than providing a unique experience to children, but rather represents an escape from the daily grind and an opportunity to play, learn, and experience life as a family unit.

This difference, therefore, nullifies the usefulness of the WZAM toolkit because it does not address their specific audience. Before any toolkit could be implemented to positively affect education, site-specific research is necessary to fully understand the visiting public's specific motivations. In personal communications with one of the lead WZAM researchers, he acknowledged the potential for the necessity to adjust the motivation categories currently being implemented by the AZA, offering access to the initial Likert-style visitor surveys. A second and larger investigation of the ZooLeón public using this type of surveys could serve to better elaborate the visitor groups that I propose in my typology. The WZAM research and toolkit represent a unique opportunity for AZA institutions to assess visitors on a common level and

better address their specific visitor groups, but ZooLeón highlights the incongruence of a blanket approach to applying the study and its results to all AZA institutions. The AZA must acknowledge this discrepancy and seek an appropriate solution rather than ignoring the contradictions of their framework. They must seek to greatly develop their understanding of cultural differences across member institutions.

Another cultural barrier is encountered in the implementation of the zoo's conservation mission – to foster education for the conservation of plants and animals. ZooLeón can be divided into four employee groups – leadership, educators, animal care staff, and other staff. Just as with the visitor motivation groups, each of these categories have defining characteristics and distinct personal connections with conservation at the zoo (as well as in the broader sense). Zoo leadership is personally and professionally-aligned with the zoo conservation mission, yet the daily duties of their positions limit the impact they have in terms of imparting this message upon the public. Educators are overwhelmingly aligned with conservation, yet most lack a specific background in education. Animal care staff is composed of two clear groups – a larger, more experienced group that views conservation within the context of the zoo and maintaining the animals and their exhibits, and a smaller, younger, and higher educated group that has a more global view of conservation that is aligned with zoo leadership and educators. The final group, composed of all remaining staff, while maintaining a mixed level of personal connection to conservation, can be viewed as a continuum of the previous groups.

The analysis of these groups reveals two key factors in conservation attitude differences – age and education. The greater the amount of education and the younger the age, the greater the personal connection to conservation and the greater the depth and explanation of precisely what it entails and how it should be implemented at the zoo. This represents a clear class difference amongst the ZooLeón staff groups – those charged with the articulation of the conservation messaging are the most educated and the youngest group at the zoo – the Education Department.

As the conservation mediators, the Education Department's implementation of programs, their perceptions about the public, and how these perceptions shape their interactions are of paramount importance – each of these items also demonstrate cultural barriers to an effective education program at the institution.

ZooLeón features a comprehensive amount of education materials – in fact, their annual education plan is far more ambitious than their limited staff and budget allows for. Each educator clearly describes the importance of local conservation and its ties to global conservation, citing examples such as appropriate exotic pets, recycling, and water conservation. Furthermore, in conversations, they describe the importance of discussing these actions with visitors and empowering them to act, but this emic description does not match the etic reality. With the exception of weekend animal training and environmental enrichment demonstrations by a sole staff member, the vast majority of all interactions are essentially animal “show and tell” with little mention to conservation, or actual suggestions for positively impacting the environment, much less personal empowerment on a local level. Despite solid concepts of conservation and conservation related issues, the department is failing to articulate specific targeted messages to their audience. Much of the motivation for this patronizing approach, it seems, is due in large part to educator perceptions of the visitor's education level and interest in education during the zoo visit. They are blinded by their education level and their perception of the visiting public's lack thereof.

A common feature of interactions with educators when discussing the public is that the public does not come to the zoo to learn and enters the zoo with little environmental knowledge. While this study did not address the specifics of the visitors education level in exact environmental or conservation knowledge, all visitors demonstrated, minimally, a working conservation vocabulary, based in action verbs – conserve, protect, save. Additionally, no individual that I interviewed disagreed with the zoo's mission in terms of education, but many stated the zoo had made little impact in their conservation knowledge and did not provide them



with specific actions they could take to make a difference. Moreover, this also demonstrates that despite specific visit motivations, many members of León's visiting public were open to education opportunities provided they did not take away from their specific visit criteria. Again, more targeted research amongst the León visitors in terms of their educational expectations could greatly benefit ZooLeón. It seems the educators suffer from the same misperception as the AZA visitor study – they don't truly understand their audience or how to effectively engage them. The distinction between the two groups, though, is that the AZA fails to acknowledge cultural differences, and the education department implements education activities based on their class-based perceptions.

This deficit in understanding the visitor's motivation and "conservation literacy level" relates to the class distinctions found amongst the zoo staff groups. Educators, while not specifically trained as teachers, as a whole, are generally more formally educated than other zoo groups with the exception of zoo leadership, and see the visiting public as a similar class as those individuals in the zoo that complete grounds work or housekeeping duties. On multiple occasions, a class distinction between themselves and the public was even stated by ZooLeón educators. Educators use this perception as a cue that they must "teach down" to the public, which explains why most interactions take the course that they do – the educators don't think the public wants much explanation and doesn't consider them capable of taking action were they to engage them in such conversations. This is a difficult social and class barrier to overcome, but undertaking a visitor motivation and conservation knowledge study could do a great deal to aid the Education Department in moving past this bias. While it is easy to maintain a bias without results to the contrary, a study that firmly demonstrates a willing and capable public could sway the opinions of educators that are unknowingly affected by class differences.

Another cultural barrier related to public perceptions and ZooLeón staff perceptions is the actual education programs that are offered. While it is likely that the public is open to many of the conservation messages that ZooLeón would like to convey, one must also proceed with

caution in offering suggestions for implementing such programming. Perhaps the very nature of how the programs are constructed – the dialogue, the format, the location – could be more effective if the public’s input is acquired. From my extensive interactions and discussions with the public, it is evident that education activities in the education building for school groups are far less effective than a program that integrates the entire family within the setting of the central heart of the zoo. Therefore, instead of fitting the current education programs into specific visitor motivation groups that have emerged from my research, ZooLeón should seek the input of the public in creating new programs all together. This is, of course, a substantial cost in time and resources that ZooLeón does not have – particularly the Education Department which is in a constant state of movement between school groups, zoo tours, special events, and local fairs and festivals. Again, forming multi-institutional partnerships could be an effective method of enacting such change – and the AZA could serve as an instrumental facilitator in this process, but to date, its impact at ZooLeón has been underwhelming for staff and visitors with little long-term changes seen.

### 7.3 They Want to be Involved

The fundamental finding in the AZA’s *Why Zoos and Aquariums Matter* study was simply stated: The public wants to be involved. While this statement refers to zoo and aquarium visitors, it is also true of many actors involved at ZooLeón: the AZA, the education staff and leadership, and the public. The difficulty in involving all of these actors, though, is in bridging significant structural and cultural gaps.

The future of ZooLeón does not ultimately lie in the hands of the AZA. While membership has opened the door to greater opportunities in their animal collection and partnerships with U.S. member institutions, it has also demonstrated substantial structural barriers that must be overcome or worked through. These structural barriers are coupled with cultural barriers as well. An under-evaluated opinion by zoo staff about the public’s visit motivation and environmental knowledge has far-reaching consequences in terms of program

presentation and messaging. The true future of education programming at Zooleón must be in the hands of zoo staff and the visiting public if they are to find an effective method of meeting their education goals. This does not mean that the Education Department cannot push for greater public participation – for this is what effective educators do across the world. Without personal empowerment that is based upon what is truly important to Zooleón’s public – the family – no great strides can be made. ZooLeón has several education programs that may very well fit into the public’s criteria – the weekend interactive talks and the recent *Ranchito* that travels to local festivals are avenues that could be further elaborated and deepened with environmental messaging that encourages personal empowerment in conservation.

While the average visitor to ZooLeón may enter the park with a motivation that is unique to other AZA institutions, incorporation into the Association of Zoos and Aquariums does not necessarily represent a paradigm shift for the park, but both the AZA and ZooLeón must address the serious structural and cultural barriers that currently inhibit a successful partnership. ZooLeón must engage the public in a manner that is consistent with their public’s expectations, while pushing forward with an impassioned conservation message that underscores the reality of species and habitat loss while it also respects the social and economic realities of the León public. Ultimately, it only seems likely that the knowledgeable and charismatic education staff can bridge this gap and empower the public with the impactful statement that Edmund Burke made over two centuries ago – *No one could make a greater mistake than he who did nothing because he could do only a little*. It is equally the responsibility of the AZA to recognize and facilitate the integration of the considerable cultural differences they have ignored in accepting a foreign member like ZooLeón. The AZA must learn to see conservation through “cultural lenses” if a successful partnership for both institutions is to emerge. Not only must these differences be brought to the surface, but also incorporated into the future of their partnership. As Aguilar and Mikota (1996: 302), two AZA veterinarians, pointed out in a recent editorial, this does not mean that institutions like Zooleón should seek to

emulate U.S. institutions because they “do not have all the answers” for their specific publics. Mimicking successful U.S. institutions is not enough, but rather ZooLeón’s educators must seek to dismantle their prejudices towards their own public and seek an effective approach to empower and engage their willing audience. For both the AZA and ZooLeón: Great change must start from within.

As a result of my personal experience in AZA institutions as an educator, volunteer, and animal keeper and my field experience in ZooLeón, as I returned to Dallas to write the findings chapters of this thesis, the necessity of building partnerships between institutions like ZooLeón and U.S. zoos and aquariums located in geographic areas with large Hispanic populations emerged. The initial idea that I envisioned was a U.S.-funded education staff exchange. In this exchange, ZooLeón would send several staff members to work in Dallas for a two week period. During this time, they would participate in education programs at the Dallas Zoo – perhaps offering Spanish-language programming. Moreover, they could view the education programs in action and serve as evaluators as to whether such programs effectively engage the Hispanic public in Dallas. Such interactions would also serve to strengthen education programs at León. Additionally, the opportunity for professional interaction in the zoo field always results in the generation of unique and novel solutions to a multitude of problems – the multicultural approach to such an interaction could only serve to have great positive impact on both institutions.

In addition to the education programming impacts, the visit by ZooLeón would have other impacts. First, Dallas could capitalize on their presence by creating a cultural event focused on Mexican flora and fauna, the use of these species in historic cultures (such as the importance of Jaguar imagery amongst Pre-Colonial peoples), and exhibits or demonstrations of Mexican (and León) fine arts and dancing on the zoo grounds. Many Texas zoo educators and directors that I spoke with were enthusiastically in favor of opening their gates for a visit by ZooLeón staff as a portion of their initial visit to Dallas.

In return, Dallas would send several staff members to León. Education staff in León expressed a great interest in workshops on education animal husbandry and training – an area in which the Dallas Zoo has a large deal of experience. The ZooLeón Education Department also maintains a substantial animal biofact collection that is largely disorganized, unlabeled, and under-used. At Dallas, educators and civic organizations are able to check-out trunks and backpacks that contain such biofacts, along with lesson curriculum. Dallas also has biofacts that are strictly used at the zoo at animal exhibits such as the Gorilla Conservation Research Station and the new Savanna exhibit. Dallas educators could serve as a resource of information in how to organize, implement, and maintain such interactive pieces. The use of these biofacts in ZooLeón public areas could dramatically increase family enjoyment and integration within an educational setting – thus allowing staff members to develop their conservation themes.

Of course this initial exchange would ideally result in a long-term partnership – not only in terms of education resources, but perhaps on a more diversified scale, such as with animal care staff. The initial capital investment by Dallas to receive León staff in Dallas, and to send their staff to León, could be substantially repaid not only through the possible onsite programs that I have mentioned, but also through the social capital it could gain through a greater awareness of the diversity of its public.

Presently, this partnership proposal has reached a year of inactivity and non-implementation – and not for a lack of interest by the entirety of ZooLeón’s education staff and leadership, and Dallas Zoo’s education staff. Rather, inaction and limited “buy in” by Dallas Zoo’s leadership has stagnated progress. Ultimately, it seems the Dallas Zoo does not perceive much benefit from the interaction when it comes to allocating resources to realize such a partnership.

After a preview of my fieldwork results at the AZA Annual Conference in Houston, Texas, in September of 2010, another potential opportunity emerged with Fresno’s Chaffee

Zoo, which also hosts a substantially Hispanic audience. The zoo works closely with a local university, which they indicated could be an effective source of funding to implement a partnership with bilingual educators in need of completing a professional internship. This is an idea we plan to further elaborate in the near future. Certainly, these two examples provide a glimpse of the potential for United States AZA zoos and aquariums to partner with culturally-foreign institutions in relationships that are mutually beneficial.

Without the support of zoo leadership, multinational partnerships between U.S. AZA institutions and foreign members is nearly impossible, but applied cultural anthropology stands uniquely poised to aid in such interactions. The globalization of conservation ideologies and zoo education profoundly shapes humans' interactions with nature, and the considerable structural and cultural barriers that inhibit an effective partnership between Zooleón and AZA underscore the significant opportunities that exist for applied cultural anthropologists in the zoological field. Just as anthropology professionals have responded to the cultural confrontations that result from a top-down corporate approach to conservation in the natural settings of parks and protected areas, so too could they serve as cultural brokers in zoological institutions. The AZA model, regardless of efforts in the contrary, fails to address the structural and cultural reality at foreign institutions including Zooleón. – one message, simply doesn't fit all.

Cultural anthropology represents a new avenue for understanding visitor motivations and learning, as well as zoo staff perceptions concerning and interactions with the public. It also embodies a distinct prospect for facilitating the implementation of multicultural activities within and between parks for visitors and staff alike by seeking programs and paradigms that strike a delicate balance between global conservation and local cultures. No other discipline comprises the manifestly appropriate background and training necessary to facilitate such a complex cultural interaction. Cultural anthropologists must seek an immediate physical presence in zoological parks – both as advocates for visitors and staff at culturally-diverse

institutions, but also as agents of change for the protection of the Earth's imperiled habitats. Perhaps, the greatest effort necessary to curb the plight of our fragile planet first lies in the hands of the cultural anthropologist – at the zoo.

APPENDIX A

ORAL INTERVIEW SCRIPT FOR ZOO STAFF IN ENGLISH



## ORAL INTERVIEW SCRIPT FOR ZOO STAFF IN ENGLISH

1. What is your first name?
2. What is your age?
3. How long have you been working at Parque Zoológico de León?
4. Have you worked at other zoos?
5. What did you do before you started working here?
6. How did you come to work here at the zoo?
7. I would like to read Parque Zoológico de León's mission statement. Are these ideas that you believe in? If not, how does this affect your work here at the zoo?
8. What is the importance of promoting conservation?
9. How does the zoo promote conservation here at the zoo?
10. How does the zoo promote conservation outside of the zoo?
11. How does the public react to the zoo's conservation messages?
12. What is the purpose of the average person's visit to the zoo?
13. Do you feel the zoo's conservation message engages the public?
14. What could the zoo do to better engage their public in conservation?
15. Is there any area in conservation education in which the zoo is lacking? If so, how should they tackle this problem?
16. How has membership in the Association of Zoos and Aquariums changed the zoo's conservation mission or the public's perception of the zoo?
17. How has membership in the Association of Zoos and Aquariums changed your perceptions about Parque Zoológico de León?
18. What difficulties and/or benefits has membership in the Association of Zoos and Aquariums brought about for Parque Zoológico de León?

APPENDIX B

ORAL INTERVIEW SCRIPT FOR ZOO VISITORS IN ENGLISH

## ORAL INTERVIEW SCRIPT FOR ZOO VISITORS IN ENGLISH

1. What is your first name?
2. What is your age?
3. Why did you come to the zoo today?
4. Have you been here before? If yes, how often do you visit?
5. How many people are here with you today?
6. How does it make you feel to visit the zoo?
7. What do you think is the most important thing the zoo offers to the public?
8. I would like to read you the zoo's mission statement. Are these ideas that you believe in? If not, how does this affect your visit here at the zoo? How would you rank these ideas in order of importance for the zoo? How would you rank these ideas in order of importance for you?
9. What does the concept "conservation" mean to you?
10. Is it important for the zoo to promote the protection of animals and habitats (i.e. conservation)?
11. What are your personal thoughts about protecting plants, animals and their habitats?
12. How does the zoo promote conservation here at the zoo?
13. How does the zoo promote conservation outside of the zoo?
14. What do you think about the zoo's conservation messages?
15. Does the zoo cause you to make changes in your daily life? If yes, how so?
16. How can you promote conservation in your daily life? Where did you learn about this idea?
17. Should the zoo promote conservation? If yes, what could they do to more effectively do this? If no, what should they focus their efforts on?
18. Did you know that Parque Zoológico de León is an Association of Zoos and Aquariums member? If yes, how has the zoo changed since it became a member? If yes, how has membership in the Association of Zoos and Aquariums changed your perceptions about Parque Zoológico de León? If yes, what benefits has membership in the Association of Zoos and Aquariums brought about for Parque Zoológico de León? If no, have you noticed any changes in Parque Zoológico de León since 2006 in regards to education programs and conservation messages?
19. What could Parque Zoológico de León do to make your visit more enjoyable?
20. Other than animals, what is missing at Parque Zoológico de León that would make for a better zoo visit?

APPENDIX C

ORAL INTERVIEW SCRIPT FOR ZOO STAFF IN SPANISH

## ORAL INTERVIEW SCRIPT FOR ZOO STAFF IN SPANISH

1. ¿Cómo se llama Ud.?
2. ¿Cuál es su edad?
3. ¿Por cuánto tiempo ha trabajado en el Parque Zoológico de León?
4. ¿Ha trabajado en otros zoológicos?
5. ¿A qué se dedicaba antes de trabajar aquí?
6. ¿Por qué decidió trabajar en este zoológico?
7. Voy a leerle la declaración de la misión de este parque. ¿Está de acuerdo Ud. con estas ideas? Si no, ¿cómo afecta su trabajo aquí en el zoológico?
8. ¿Cuál cree Ud. es la importancia de fomentar o promover la conservación?
9. ¿Cómo fomenta la conservación el Parque aquí en su propio establecimiento?
10. ¿Cómo fomenta la conservación el zoológico fuera del Parque?
11. ¿Cómo reacciona el público a los mensajes de conservación del Parque?
12. ¿Con qué propósito visita al Parque el ciudadano medio?
13. ¿Cree Ud. que el mensaje de conservación del zoológico atrae la atención del público?
14. ¿Qué cree Ud. pudiera hacer el zoológico para tener mayor impacto en el público sobre el tema de la conservación?
15. ¿Hay algún área donde la educación sobre la conservación no esta presente? Si es así, ¿cómo debería abordarse la educación conservacionista en esa área?
16. ¿Cómo han cambiado tanto la misión del zoológico como la percepción del público sobre el zoo desde que este se hiciera miembro de la Asociación de Zoológicos y Acuarios (AZA)?
17. ¿Ha cambiado Ud. su percepción sobre el zoo desde la afiliación con AZA? ¿Cómo?
18. ¿Qué beneficios ha traído al zoo su afiliación con AZA? ¿Qué dificultades o problemas?

APPENDIX D

ORAL INTERVIEW SCRIPT FOR ZOO VISITORS IN ENGLISH

## ORAL INTERVIEW SCRIPT FOR ZOO VISITORS IN ENGLISH

1. ¿Cómo se llama Ud.?
2. ¿Cuál es su edad?
3. ¿Por qué visitó al Parque Zoológico de León hoy?
4. ¿Lo había visitado antes? Si es así, ¿con qué frecuencia visita Ud. el parque?
5. ¿Con cuántas personas ha venido hoy?
6. ¿Cómo se siente cuando visita el zoológico?
7. ¿Qué cree es lo más importante que ofrece el zoológico al público?
8. Voy a leerle la declaración de la misión del parque. ¿Está de acuerdo Ud. con esas ideas? Si no es así, ¿cómo afecta su visión del zoológico? ¿Podría Ud. poner las ideas sobre la misión del parque en orden de importancia?
9. ¿Qué significa la idea de “conservación” para Ud.?
10. ¿Cree Ud. que es importante que el zoológico promueva la protección de los animales y sus hábitats (por ejemplo, la conservación)?
11. ¿Qué es lo que Ud. piensa sobre la idea de proteger las plantas, los animales y sus hábitats?
12. ¿Cómo fomenta la conservación el Parque aquí en su propio establecimiento?
13. ¿Cómo fomenta la conservación el zoológico fuera del Parque?
14. ¿Qué opina del mensaje de conservación del Parque Zoológico de León?
15. ¿Ha conseguido el zoológico que Ud. haga cambios en su vida diaria? Si es así, ¿cómo?
16. ¿Cómo cree Ud. se podría fomentar la conservación en su vida diaria? ¿Dónde aprendió eso?
17. ¿Cree Ud. que el zoológico debe fomentar la conservación? Si es así, ¿cómo podría hacerlo de una manera más eficaz? De no ser así, ¿en qué debería cambiar el zoológico?
18. ¿Sabía Ud. que el Parque Zoológico de León está afiliado a la Asociación de Zoológicos y Acuarios? De ser así, ¿cómo ha cambiado el zoológico desde su afiliación? Si es así, ¿cómo han cambiado sus percepciones acerca del zoológico desde su afiliación? Si es así, ¿han surgido algunos beneficios desde que el Parque Zoológico de León se afilió a AZA? De no ser así, ¿Ha notado Ud. algún cambio desde 2006 con respecto a los programas de educación y el mensaje de conservación por parte del zoo?
19. ¿Qué pudiera hacer el Parque Zoológico de León para que Ud. disfrutara más de sus visitas?

20. A excepción de los animales, ¿qué echa en falta en el Parque Zoológico de León para que tenga Ud. una visita más agradable?



APPENDIX E

ADDITIONAL EDUCATION STAFF QUESTIONS SCRIPT 2009

## ADDITIONAL EDUCATION STAFF QUESTIONS SCRIPT 2009

1. Muchos han respondido que hay una falta de información educativa y de programas educativos en el zoo (fuera de paquetes escolares). ¿Qué pudieran hacer para rectificar eso? Como departamento ¿cuáles opciones quisieran ofrecer al público a excepción de lo que hacen actualmente?

*Many respondents have stated that there is a lack of educational information and education programs in the zoo (outside of school programs). What could you do to rectify this? As a department, what options would you like to offer to the public outside of what you are currently doing?*

2. Otros visitantes han recomendado el uso de los de Servicio Social como guías especializados en zoo. ¿Qué opinan de esta sugerencia? ¿Quién y cómo deben entrenarlos?

*Other visitors have recommended using Social Service students as specialized guides in the zoo. What do you think about this suggestion? Who and how would you train them?*

3. El zoológico tiene una multitud de expertos muy bien entrenados. ¿Cómo pudiera el parque usarles a cumplir sus objetivos educativos/conservacionistas?

*The zoo has a multitude of well-trained experts. How could the park use them to meet their education and conservation objectives?*

4. ¿Cuáles tipos de entrenamiento/talleres pudieran ofrecer representantes de la AZA y/o equipos de otros parques AZA que les beneficiaran aquí en ZooLeón?

*What types of training/meetings offered by AZA officials or member zoos would be beneficial to ZooLeón?*

APPENDIX F

SAMPLE IN-DEPTH EDUCATION EMPLOYEE INTERVIEW SCRIPT 2010

## SAMPLE IN-DEPTH EDUCATION EMPLOYEE INTERVIEW SCRIPT 2010

### Preguntas \_\_\_\_\_ ENRIQ/ENTREN

1. ¿Cómo va tu trabajo de enriquecimiento y entrenamiento? ¿Qué cosas nuevas haces desde que yo estaba aquí el año pasado?
2. ¿Cómo reaccionan los guarda animales a tu trabajo? ¿el público?
3. ¿Cuáles dificultades has encontrado?
4. ¿Con cuáles otras especies quisieras trabajar?
5. En los EEUU, casi todas las charlas se las dan los guarda animales – no personal del educativo. ¿Crees que lo harían los guarda animales del Zooleón? ¿Crees que cambiaría el efecto del mensaje?
6. Si fuera posible, ¿Cómo desarrollarías el programa de enriq/entren en el Zooleón?
7. En muchos zoológicos EEUU es requisito participar en un programa de entrenamiento animal. ¿Crees que sería o debería existir así aquí en León? ¿Por qué?
8. He visto en otros zoológicos AZA que hay dos grupos de guarda animales: un grupo que lleva mucha experiencia pero poca educación y otro grupo creciente de guarda animales bien educados en manejo, entrenamiento, etc. Según lo has visto, ¿crees que también es así en Zooleón? Si lo es, ¿has visto animosidad o rivalidad entre ellos?
9. Se puede decir que las diferencias entre zoológicos mexicanos y estadounidenses existen debido a diferencias económicas y culturales. ¿Cuáles causan más impacto – las económicas o las culturales? ¿Cómo las pueden superar?

### EDUCATIVO GENERAL

1. ¿Cómo puede el Depto. Educativo integrar mensajes de conservación dirigidos a las familias que visitan al Zooleón?
2. ¿Cómo puede el Depto. Educativo integrar mensajes de conservación dirigidos a todo el personal que labora en el Zooleón?
3. ¿Cómo puede el Zooleón aprovechar mejor a los alumnos de servicio social/prácticas profesionales para lograr cumplir su misión de conservación?
4. ¿Cómo pueden conectar las ideas mundiales (no locales) (por ej. conservación de ecosistemas extranjeras) a las causas locales (por ejemplo el reciclaje, no matar los animales silvestres)?
5. ¿Cuáles mensajes de conservación son más importantes / más pertinentes para el pueblo de León?
6. Los zoológicos y acuarios que pertenecen a la AZA utilizan muchos voluntarios, ¿Podrían cultivar una cultura de voluntariado dentro del zoológico?

7. Han dicho que todo el zoológico debe ser “infantil” – que la experiencia sea interactiva en cualquier rincón de zoológico. ¿cuáles áreas son menos impresionantes/interactivas en ZooLeón? ¿Cómo lo pudieran aliviar/ayudar los del educativo?

APPENDIX G  
AZA INSTITUTIONS RANKED BY ANNUAL BUDGET

AZA Institutions Ranked by Annual Budget							
Name	Location	Total Staff	Total Volunteers	Annual Budget US\$	Attendance	Metro Population	Memberships
Niaba Zoo	Coal Valley, Illinois	45	307	1,500,000	220,000		2,600
Chehaw Wild An. Park	Albany, Georgia	31	100	1,579,000	103,775	164,069	954
Racine Zool. Gardens	Racine, Wisconsin	46	65	1,600,000	90,000	195,099	1,347
Potawatomi Zoo	South Bend, Indiana	47	50	1,610,000	185,128	316,639	5,237
Lee Richardson Zoo	Garden City, Kansas	34	29	1,647,555	181,559	38,295	1,163
Zoo Boise	Boise, Idaho	25	60	1,700,000	279,000	587,689	3,800
Lehigh Valley Zoo	Schnecksville, Pennsylvania	41	12	1,780,000	92,707	803,844	1,688
Turtle Back Zoo	West Orange, New Jersey	91	75	1,800,000	420,000	18,815,988	4,500
Zooleón	León, Gto, MX	190	50	1,917,498	529,135	1,400,000	
Henry Vilas Zoo	Madison, Wisconsin		100	1,947,288	659,000	555,626	2,000
Peoria Zoo	Peoria, Illinois	44	64	1,967,515	82,992	371,206	1,405
St. Augustine Alligator Farm	St. Augustine, Florida	37		2,100,000	200,000	1,400,000	1,610
Lincoln Children's Zoo	Lincoln, Nebraska	30	500	2,140,000	171,000	292,219	6,500
Coyote Point Museum	San Mateo, California	31	116	2,149,104	74,556	3,166,479	3,000
Abilene Zool. Gardens	Abilene, Texas	33	155	2,191,320	161,964	115,930	1,402
CT's Beardsley Zoo	Bridgeport, CT	90	262	2,200,000	260,000	150,000	8,900

APPENDIX H

AZA INSTITUTIONS RANKED BY ANNUAL ATTENDANCE



AZA Institutions Ranked by Annual Attendance							
Name	Location	Staff	Volunteers	Budget US\$	Attendance	Metro Pop.	Memberships
Fresno Chaffee Zoo	Fresno, California	90	1,442	7,578,128	429,272	900,000	9515
Santa Barbara Zoo	Santa Barbara, CA	212	748	7,800,000	432,400	404,197	12,431
Salisbury Zoo. Park	Salisbury, Maryland	27		1,291,477	442,903	119,616	1,200
Cheyenne Mtn. Zoo	Col. Springs, CO	125	135	6,000,000	456,473	609,096	15,500
Erie Zoo	Erie, Pennsylvania	125	673	3,600,000	459,900	279,092	10,320
Kansas City Zoo	Kansas City, MO	270	170	11,300,000	460,459	2,000,000	16,500
Sacramento Zoo	Sacramento, CA	85	1,404	5,089,842	466,609	2,091,120	9,500
Fort Wayne Child. Zoo	Fort Wayne, Indiana	215	400	5,348,224	475,632	410,070	48,000
Lion Country Safari	Loxahatchee, FL	185		8,500,000	489,874	1,250,000	7,500
Birmingham Zoo	Birmingham, AL	127	226	7,805,361	495,835	1,108,210	11,453
Roger Wms Park Zoo	Providence, RI	108		7,743,939	507,357	1,600,856	17,000
Tulsa Zoo and Mus,	Tulsa, Oklahoma	181	337	5,200,000	509,445	905,755	12,752
Reid Park Zoo	Tucson, Arizona	49	125	2,720,000	521,335	1,034,744	8,750
Nashville Zoo	Nashville, TN	148	1,600	7,109,000	529,069	1,521,437	22,117
Zooleón	León, GTO, Mexico	190	50	1,917,498	529,135	1,400,000	
Oakland Zoo	Oakland, California	360	308	7,460,000	550,000	410,000	20000
Sedgwick County Zoo	Wichita, Kansas	159	872	10,714,212	584,076	596,452	17,495
Zoo de Granby	Granby, QBC, CA	568		17,000,000	593,396	87,405	1600/1853
ZooAmerica	Hershey, PA	32	18	1,326,603	595,478	528,892	391
Africam Safari Park	Tecali, Pbla, MX	316	23	5,985,000	599,937	3,500,000	
Honolulu Zoo	Honolulu, Hawaii	85	150	5,268,000	602,265	905,601	8,400
Miami Metrozoo	Miami, Florida	337	118	19,101,000	605,000	5,413,212	15,000
Point Defiance Zoo	Tacoma, WA	144	256	10,344,431	619,467	3,309,347	14,843

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## BIOGRAPHICAL INFORMATION

Dustin Miller graduated from Indiana University-Purdue University Fort Wayne, in 2004 with a B.A. in Anthropology and Spanish, completing a Research Certificate in Anthropology, as well as graduating from the Honors Program. During his undergraduate career, Dustin received an Excellence in Foreign Languages award. While attending The University of Texas at Arlington, Dustin has been honored as a UTA Scholar – a designation reserved for the top one percent academically. He has also been inducted as a member of Phi Kappa Phi, one of the nation's oldest academic honor societies. Dustin's research interests include topics relating to Latin American culture and the globalization of conservation. In 2010, Dustin presented research entitled, "Specific Needs of a Culturally Diverse Audience" as part of a multi-institutional panel at the Annual Meeting of the Association of Zoos and Aquariums. Outside of his university endeavors, Dustin works fulltime as a bilingual elementary educator and remains involved in zoo education activities. Dustin plans to use his training in cultural anthropology to facilitate greater partnerships amongst multicultural zoological institutions.