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Extinction Breeds Innovation: A History of the Oregon Zoo

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Extinction Breeds Innovation: A History of the Oregon Zoo

A Senior Thesis submitted to
The Department of Humanities-Arts College of Theology,
Arts, & Sciences

In partial fulfillment of the requirements
for a Bachelor of Arts degree in History

by

Anna Mikail Doty

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July, 2017

Abstract

This thesis is a study of the history of the Oregon Zoo, hereafter, Zoo, from the early 1800s to today. It places a particular emphasis on questions related to animal welfare and historical trends in human/animal relationships. Two research questions emerged in the study. First, how did this zoo go from a collection of living oddities to a standard to which other facilities are compared? And secondly, while the Zoo is exemplary, what challenges still linger regarding animal welfare? This thesis attempts to address these questions. It does so by exploring the general history of human/animal relationships. Then it delves deeper into four main eras of the Oregon Zoo's development over the last 150 years. The Zoo was officially founded in 1888 thanks to the collection of local pharmacist Richard B. Knight. Over the course of the next few decades, through both World Wars, the Great Depression, and other major national events, the Zoo had many challenges but managed to survive and grow, but with the help of the community, it developed into a notable institution recognized far beyond Oregon. Between 1960 and 1989 concern about animal welfare and environmentalism increased globally, and the Oregon Zoo began to investigate various paths of research to improve the exhibits and the animals' level of care. It was during this time that the Zoo shifted its focus from animal survival towards recreation and education for visitors. This was also when Packy the Elephant, one of the biggest attractions until 2016, was born. The years 1990-2016 were marked by various scandals and concerns about the true level of the animals' care, including many criticisms of the Zoo's elephant care. Despite these scandals, since 2001 the Zoo has been working on many conservation, education, and sustainable practices to

enhance animals survival, mostly in their natural habitats. In the past few years, the Oregon Zoo has created state-of-the-art exhibits and work tirelessly towards improving not only their zoo but the world.

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My committee for their help and patience (that was not driven by the biological motive
to see their own child survive and thrive),

Dr. Horten in particular, who supported my decisions that ultimately made his job more
difficult,

And the animals, wild and domestic, that continue to inspire my love and fascination.

Significant Moments in Zoo History:
Oregon Zoo History in **Bold**.

| | |
|-----------|--|
| 1856 | Planning of the first American zoo commenced in Philadelphia |
| 1861-1865 | American Civil War |
| 1874 | Philadelphia Zoo opened |
| 1881-1885 | American Recession |
| 1885 | Charles Myers hired as Portland park keeper, in 1888 would receive the title of the first Oregon Zoo keeper |
| 1886 | The first iteration of the U.S. Biological Survey was developed |
| 1888 | Richard Knight wrote to the Portland City Council offering the sale of his two bears |
| | Six months after, Knight offered the bears as a gift to Portland |
| | <u>Establishment of the Oregon Zoo</u> |
| 1894 | The inventory of the Zoo included one grizzly, six deer, and one seal |
| | Oregon Zoo's collection had grown to 300 animals |
| | Rudyard Kipling's <i>Jungle Book</i> was released |
| 1901 | The Philadelphia Zoological Garden Facility developed the first research center in an American zoo: the Penrose Research Laboratory |
| 1904 | Two alligators and a handful of kangaroos were donated by Australian sailors to the Oregon Zoo |
| 1905 | Portland hosted the Lewis and Clark Exposition |
| | The Zoo purchased a lion and polar bear when the exposition ended |
| 1907 | Carl Hagenbeck's "tierpark," aka a bar-less and moated zoo, opened in Germany The New York Zoological Society published the first American zoo-related scientific journal, <i>Zoologica</i> |
| 1909 | An article denouncing zoos as inhumane was published by <i>The Oregonian</i>, prompting citizens to write to the Zoo demanding it be closed |
| 1916 | NY Zoological Society created the first veterinary clinic and zoo based research program |
| 1917-1918 | America's involvement during WWI |

| | |
|-----------|--|
| | 1917 Richard Knight's death |
| | Zoo's larger animals sold or released due to war time economy |
| | Rat infestation of Oregon Zoo |
| | Denver Zoo included bar-less exhibits |
| 1919 | St Louis Zoo incorporated bar-less exhibits |
| 1924 | Funds set aside for Zoo improvements due to Superintendent Keyser's avocation |
| 1925 | The Zoo moved from above West Burnside to the present day location of the Japanese Gardens |
| 1940 | On average, two zoos opened annually in the United States |
| | West Hills Golf Course first considered as a possible site for the Zoo to move to |
| 1941-1945 | America's involvement in WWII |
| | Funding for the Zoo was cut, and construction was "deferred for the duration" of the war. |
| 1951 | Portland City Club recommended "a New Zoo" |
| 1953 | Rosy the elephant gifted to Portland by Austin Flegel and his wife |
| 1954 | Move to the West Hills Golf Course Approved |
| 1956 | Many major additions added to the Zoo by private donors as well as other zoos, including two elephants and a kangaroo |
| 1957 | Penguin colonies come, but due to their enclosure not being completed, the penguins live at Peninsula Park pool |
| 1962 | Rachel Carson's <i>Silent Spring</i> released |
| | Packy the Elephant was born |
| | Zoo's annual attendance exceeded 1 million for the first time |
| 1965 | First research done on "non-human" primate welfare |
| 1966 | First legislation on Endangered Species passed |
| 1970 | EPA founded |
| 1971 | Portland Zoological Society took over Zoo management |
| | Zoo funded by the City of Portland |
| 1972 | Hal Markowitz started his behavioral enrichment research with Oregon Zoo primates |
| 1975 | |

Publication of Peter Singer's book *Animal Liberation* (1975) and the dawn of recognizing "animal ethics" and welfare as a science

- 1976 **Oregon Zoo's volunteer program was created**
- Oregon Zoo placed under jurisdiction of MSD (now known as Metro)**
- Renamed the Washington Park Zoo (previously known as the Portland Zoo)**
- Voters approved 5 year 10 million dollar levy**
- 1980 **Zoo "reordered their priorities" to emphasize "recreational and educational potentials"**
- Oregon Zoo provided larger enclosures for their elephants**
- 1981 **The Zoo made major adjustment and additions to their Primate House**
- 1982 **"Washington Park Zoo Master Plan" drafted**
- Zoo opened Cascade Stream and Pond Exhibit, which won the American Association of Zoological Parks and Aquariums' "Top Exhibit" award**
- 1983 **Penguinarium renovated**
- 1985 **Alaska Tundra exhibit added to the Oregon Zoo**
- 1986 **The Oregon Zoo renovated the bears west grottos, and added exhibits of Polar bears and Sun bears**
- 1988 **First Zoo Lights**
- For the second time, the Zoo's annual attendance exceeded 1 million**
- 1989 **Africa exhibit added**
- 1993 **First Conference on Environmental Enrichment held at the Oregon Zoo**
- 1998 **The Washington Park Zoo changed its name to the Oregon Zoo, "to better reflect its location and its emphasis on native wildlife"**
- 2000 **A study stated that unless breeding of Asian elephants is resumed, there would be less than twenty Asian Elephants in North American zoos by 2050**
- The Oregon Zoo resumed elephant breeding**
- 2001 **The Oregon Zoo gained membership into the U.S. Fish and Wildlife Service California Condor Recovery Program**
- 2002 **The Oregon Zoo started the Future for Wildlife Program**
- 2003 **California Condors breeding and release program started at the Oregon Zoo**
- 2012 **End of Coco the Chimpanzee's life**

The Zoo's Veterinary Medical Center gained a Leadership in Energy and Environmental Design (LEED) Gold Certification

- 2013
 - The Zoo won three awards from the Association of Zoos and Aquariums (AZA)**
 - In Defense of Animals (IDA) protested the celebration of Packy's 51st birthday**
 - A study voiced concerns about the viability of California Condors' eggs in the wild**
- 2014
 - "Have Trunk Will Travel" scandal**
 - The Oregon Zoo received three awards from AZA (for the second time)**
- 2015
 - PETA sued the United State's government due to the US Department of Agriculture's decision to stop requiring elephants to be tested for tuberculosis**
 - AZA recognized the Oregon Zoo for dozens of projects concerning education, conservation, research, and sustainability.**
- 2016
 - Zookeepers at the Oregon Zoo contracted tuberculosis from the Zoo's elephants**
- 2017
 - The Zoo was honored at the Daily Journal of Commerce's (DJC) TopProjects ceremony**
 - The Zoo was again honored at the DJC TopProjects ceremony**
 - Packy euthanized**

Introduction

The Oregon Zoo is one of the oldest and most admired zoos in the United States. From its founding in 1888 to today, the Oregon Zoo has evolved from a simple collection of exotic creatures to one of the most respected research and conservation animal facilities in the United States. Its history maps how one man's collection of abandoned wildlife became a "world-class" and respected center that teaches its visitors about conservation and care. The Zoo managed to improve significantly despite challenges of limited funding, the disruption of two world wars, economic depressions, public scandals and criticism, and the unique demands of each species, and even individual animals.

When research for this thesis began, the question in mind was whether the Oregon Zoo was the result of the cultural climate within which it matured or an innovative outlier. The sources used explored where historians, theologians, and scientists believe the human fascination with zoos stemmed from. The idea was to explain how the development of animal rights may have shaped the Oregon Zoo over the years, and in return how the Zoo itself affected local and global culture and expectations. The research proved that this was the wrong cluster of questions to ask.

Instead, two research questions emerged over the course of my investigation. First, how did this zoo go from a collection of living oddities to a standard for conservation, education, and sustainable practices with which other facilities are compared? Second, while the Oregon Zoo is exemplary, what problems still linger in terms of animal welfare? These questions are resolved in the ensuing chapters, but Figures 11 and 12 in the conclusion chapter provide summaries of the Zoo's most

significant developments and challenges. Patterns emerge that suggest that it is the will, passion, and efforts of people and groups that helped create the Oregon Zoo we recognize today. By understanding how this particular zoo developed, we not only gain valuable insight into an important regional and national social institution, but we may also start to understand better how to improve conditions for animals in varying degrees of captivity. The history of this particular zoo also demonstrates the value of researching and cataloging history. Looking over the Zoo's history provides us an understanding of the kind of interventions that can be made most successfully, making zoos and the world better places for animals and improving the related education of human beings.

Zoos in America were increasingly fashionable and numerous by the early 20th century, and Oregon Zoo's establishment in 1888, while an early entry into the field, fit neatly into the peak of zoo growth in the United States. There are a few theories explaining the apparent American obsession with zoological gardens: that they are physical proof of "civilization" conquering the "wild," that American literature and environmentalism had reinforced the concept of the divinity of nature (such as the Garden of Eden), and/or that they help humans to place themselves in relation to the rest of the natural world. There is a steady development of themes that emerge when looking at the chronological history of the Oregon Zoo. These themes include its growth, increased involvement of political and other local actors in the Zoo, physical improvements particularly in exhibition practices, specific and general concerns with animal welfare and breeding, and substantial initiatives and questions related to conservation. Despite the Oregon Zoo's efforts and improvements, there are still many

valid criticisms of its practices. In seeking to address those criticisms, from collection to conservation, the Oregon Zoo is one of the prime role models for institutions attempting helpful, instead of harmful, animal captivity.

When attempting to answer the research questions and working to piece together the history of the Zoo, a wide range of sources were consulted: primary sources, such as the letter that Richard B. Knight wrote to the mayor and city council offering the sale of his bears (Figure 1); or the Oregon Zoo's own newsletter *ZooTracks* summarizing its 125 year history in 2013; Eric Baratay and Elisabeth Hardouin-Fugier's book, *Zoo: A History of Zoological Gardens in the West*; to scientific studies assessing the impact of releasing California Condor's bred by the Oregon Zoo's offsite facilities. Images over that history, such as Figure 4, help illustrate how different the Zoo at different time periods was from the institution we recognize today -- in a way that only an image of an elephant in chains can do.

This thesis is comprised of six additional chapters beyond this Introduction. The first provides a short and pointed history of humankind's relationship with domesticated and captive animals. The second outlines the creation, growth, and political and popular involvement with the Oregon Zoo from 1880 to 1960. The third chapter catalogues the most important improvements in the exhibition spaces and practices at the Oregon Zoo, particularly as informed by the growing ecology and animal welfare movements from 1961 to 1989. The fourth chapter looks closely at major critiques of the Oregon Zoo from 1990 to 2016, especially specific instances of concern about the welfare of animals in its care. The fifth chapter identifies and explores some of the Oregon Zoo's most important

and widely recognized efforts in animal conservation, education, and sustainability, particularly its Future for Wildlife Program and Zoo Animal Presenter (ZAP) programs, from 2001 to 2017. The sixth chapter concludes the study, offering a brief summary of how the two major research questions have been addressed, and highlighting especially the human agency in each chapter to further defend my verdict that it is the passion of the people that has created such an outstanding zoo, and it is the care and emotional investment of these people that will engage the challenges today and going forward.

A Brief History of Human's Relationship with Domesticated and Captive Animals

Humans have always had a fascination with nature and wild animals. This fascination has developed in part to help us understand our own identity through how we relate to the world around us. Of course the focus of this thesis is primarily about the fascination with wild animals in captivity, rather than wild animals in the wild or domesticated animals in captivity. E.O. Wilson, a Harvard biologist, wrote that the human species “has an instinctive affiliation with the natural world”; he called this affiliation *biophilia*.¹ Since ancient times, humans have domesticated or watched animals in some form (“watched” over as well as “watched” for amusement). If animals were not able to be domesticated, they were held captive for entertainment. It was common practice to fight unnatural combinations of animals. One story set during the height of Roman gladiatorial fighting describes a battle between a cow and more “ferocious” and exotic animals (a lion, wolf, and multiple tigers). According to the story, the cow miraculously won:

This victory was interpreted as that of culture over nature... If menageries proclaimed the human victory over the wild through the imprisonment of animals, then animal combat confirmed this domination by reducing the latter to performing for the pleasure of the former.²

Whether this story is true or myth, it reflects a societal value. As an observational space, a zoo can be a reflection of society's views and attitudes while simultaneously helping to

¹ Hal Herzog, *Some We Love, Some We Hate, Some We Eat: Why It's so Hard to Think Straight about Animals*. New York, NY: Harper, 2010, 39.

² Eric Baratay and Elisabeth Hardouin-Fugier, *Zoo: A History of Zoological Gardens in the West*, London: Reaktion, 2002, 26.

shape them.³ As mentioned above, this was my initial path of research, and while this is a major part of zoo history, it is only part of the story.

It can be argued that another ancient influence on human/animal relationships is theology. When humans understand themselves as descendants of Adam, they believe that God created the earth for them and gave them dominion over animals.⁴ The historical predominance of Christianity in the western world has given us a unique view of nature and animals. Western culture understands humans as separate from nature, that it is “God’s will that man exploit nature for his proper ends,” and that animals are a symbolic way in which God communicates with humans.⁵ Animals in captivity can “symbolize the intentions and actions of human societies towards wildlife, and, in a more general sense, towards nature.”⁶ Therefore, the Western cultural values present at the development of menageries and zoos shaped their purpose and organization. While this may not reflect contemporary understandings of the relationship, at the dawn of zoo establishment this would have been a very common contextual paradigm.

Until very recently, there had been no complete accounts of global or western zoo history.⁷ Although this lack is starting to be addressed, these sources are still few and far between. For now, it is much more feasible to find specific institutions that have recorded their own history or books with a mere chapter on the entirety of zoo history and sociology. Lisa Uddin, a professor of art history and visual culture at Whitman College,

³ Ibid., 102.

⁴ RJ Hoage, William A Deiss, and the National Zoological Park, *New Worlds, New Animals : From Menagerie to Zoological Park in the Nineteenth Century*, Baltimore: Johns Hopkins University Press, 1996, 24.

⁵ Ibid., 24.

⁶ Baratay and Hardouin-Fugier, *Zoo: A History of Zoological Gardens*, 25.

⁷ Hoage, “Deiss, and the National Zoological Park,” *New Worlds*, 9.

states in her book on zoo reform in postwar America that histories of zoological parks are “prone to amnesia, hyperbole, and progressivist models of time.”⁸ Histories written by people close to or within the institutions often “chronologize each period of animal exhibition as a decisive improvement from the last, particularly with respect to the treatment of zoo animals and the quality of the zoo-going experience for visitors.”⁹ It is difficult for any historian to avoid this tendency.¹⁰ While there are major milestones and general periods of improvement, to give an accurate depiction of zoo history, one must address that there are continually positive *and* negative aspects to address within an institution and the institutions’ choices. As science historian Sally Gregory Kohlstedt put it, “we should remember that reasonable and humane treatment of animals has existed simultaneously with some unspeakable brutalities.”¹¹

Menageries were the predecessors to zoological parks, although not all menageries turned into zoos. To understand how zoos developed from a culture of menageries, it is vital to first differentiate between the two. Menageries are collections of animals, while zoological parks are locations specifically dedicated to housing collections of animals with the intention of making them available for viewing. Zoological parks are menageries, but menageries have been manifest in many forms other than that of a zoo.

⁸ Lisa Uddin, *A Quadrant Book : Zoo Renewal : White Flight and the Animal Ghetto*. Minneapolis, US: University of Minnesota Press, 2015, Accessed September 26, 2016. ProQuest ebrary, 5.

⁹ *Ibid.*, 5.

¹⁰ In fact, my own thesis “chronologize[s] each period of animal exhibition as a decisive improvement from the last, particularly with respect to the treatment of zoo animals and the quality of the zoo-going experience for visitors.” That being said--I also attempted to live up to Kohlstedt’s quote, and included major problems within each era and an entire chapter on concerns and criticisms during what is arguably the peak of contentious animal welfare thus far.

¹¹ Hoage, “Deiss, and the National Zoological Park,” *New Worlds*, 6.

Thomas Veltre gives the etymology of the term *menagerie* in his piece on *Menageries, Metaphors and Meanings*:

The term... commonly thought to be an old French word for “farmyard,” is actually derived from the French root *ménage*, which means to manage, or management, and the suffix *rie*, which is used to indicate a place, as in *boulangerie* (bakery).

In the literal sense, therefore, a menagerie is a place for the management of animals, a word that implies not only containment but, in a sense, domination and control as well. Veltre then lists other defining features of menageries such as the necessity of “novelty” animals. Novelty is used here in the sense that these animals were seen as either exotic, or, if local, were mutated in some way (a cow with an extra leg, a two headed snake, etc.).¹² It may seem intuitive for a collection of animals to develop from a menagerie to a zoological park, considering the only major difference is a permanent location. But it took losing profits to motivate menageries to settle down. The paradox of their situation was that once menageries gained popularity, they started to lose their appeal -- exotic animals were simply becoming less exotic.¹³

The first substantial traveling menageries were introduced in the early 19th century.¹⁴ In Europe, menageries were often utilized as status symbols for the wealthy. In the Americas, however, menageries were instead developed as a source of profits.¹⁵ Therefore, instead of private collections, American menageries were widely publicized

¹² Hoage, “Deiss, and the National Zoological Park,” *New Worlds*, 19.

¹³ *Ibid.*, 5.

¹⁴ *Ibid.*, 43.

¹⁵ *Ibid.*, 4.

sources of amusement. Menageries were very successful in both senses (as status symbols, as well as creating an entirely new market from which to profit). These collections of animals were very different from any other at the time. Livestock on farms, ranches, or in stockyards served “primarily utilitarian” purposes.¹⁶ Pets (though rare until the 20th century) were seen more as family members.¹⁷ Menageries were a very unique category; the animals present “[had] been singled out to be representatives of their species.”¹⁸ This singling out created an understanding of and response to the animals that was “different from any other encounter humans have with other creatures,” and therefore a menagerie, in any form, has been “primarily concerned with the symbolic role of animals within a culture.”¹⁹

The keeping of wild animals has often been an “indicator of an advanced level of social development and a sign of economic stability.” [Source??] Animals and zoological parks were expensive and required substantial land and labor for an arguably “non necessary” function in a society.²⁰ It was not until after the American Civil War that zoos really started to develop in the United States. The Philadelphia Zoo is considered the first “American zoo,” but there were a handful of menageries in place by the time they opened. Planning for the Philadelphia Zoo had started in 1856, but it did not open until after the Civil War in 1874.²¹ Most full-fledged zoos appeared in the late 1800s, with a total of twenty opening between 1885 and 1900. By 1940, an average of two zoos opened

¹⁶ Hoage, “Deiss, and the National Zoological Park,” *New Worlds*, 20.

¹⁷ *Ibid.*, 20.

¹⁸ *Ibid.*, 20.

¹⁹ *Ibid.*, 19-20.

²⁰ *Ibid.*, 20.

²¹ Uddin, *Zoo Renewal*, 5.

annually.²² The 1888 establishment of the Oregon Zoo fits neatly into the national context.²³

At this same time, zoological research and university courses on the subject were growing in popularity. Federal studies of birds and mammals developed as there were national territory surveys, and development of railroads gave Americans access to more land and therefore contact with more unfamiliar species.²⁴ A Division of Ornithology and Mammalogy in the U.S. Department of Agriculture was developed in 1886 (now retitled the U.S. Biological Survey, a part of the U.S. Fish and Wildlife Service).²⁵ Jeffrey Scott, a PhD student at the University of California, wrote his dissertation on the “intellectual history” of American zoological parks. Scott argued that American zoos, especially those developed at the turn of the 20th century, reflect society’s fears of the rapid loss of nature.²⁶ This period saw a massive transition to urban life, with rampant industrialization eating up resources and changing the American experience for those who had once known a more unadulterated landscape. This is what Eric Baratay and Elisabeth Hardouin-Fugier called the “inversion of the utopia of acclimatization” in their account of western zoo history.²⁷

²² Baratay and Hardouin-Fugier, *Zoo: A History of Zoological Gardens*, 92.

²³ “History,” Oregon Zoo, Accessed April 1, 2016, <http://www.oregonzoo.org/about-oregon-zoo/history>.

²⁴ Tracy I. Storer, "Some Pacific Coast Zoological History," *Bios* 30, no. 3 (1959): 131-47, <http://www.jstor.org/stable/4606088>, 137.

²⁵ Ibid., 138.

²⁶ R. Jeffrey Stott, 1981, "The American Idea of a Zoological Park: An Intellectual History," Order No. 8206234, University of California, Santa Barbara, <http://cupdx.idm.oclc.org/login?url=http://search.proquest.com/docview/303100292?accountid=10248>.

²⁷ Rebecca Bishop, "A Complex Millennium of Zoos," *Cultural Studies Review* 10, no. 1 (2013): 199-203.

Since the identity of the zoo is so closely aligned with the American identity and values, it can change just as quickly as the country's social mores do. From the very beginning, American zoos have claimed three purposes: recreation, preservation of life, and the promotion of science.²⁸ Stott calls these purposes a "kneejerk reaction" to American standards, rather than intentional objectives.²⁹ Baratay and Hardouin-Fugier make the argument that popular culture such as Rudyard Kipling's *Jungle Book* (1894) and the later prevalence of anthropomorphism in Walt Disney films "became the touchstones which invalidated zoos" because people grew more emotionally attached to animals and viewed them as sentient beings. This attachment made the public demand for zoos to shift toward a focus on preservation and education rather than entertainment.³⁰ Zoos reflected some of the *negative* aspects of that time period as well: "The zoo had come to typify the themes of the Age of Control: exploration, domination, machismo, exhibitionism, assertion of superiority, manipulation."³¹ That being said, there were often several, sometimes conflicting, motivations for those who instituted the establishment of zoos.³²

One must recognize that these values were a whole new approach if one looks at the zoo movement more broadly. Not to say that what America was doing was shocking for the time, but zoos in existence before this time (in Europe in particular) were *just* making the shift to a more conservationist perspective. America just happened to be

²⁸ Stott, "American Idea of a Zoological Park."

²⁹ Ibid., 20.

³⁰ Bishop, "Complex Millennium of Zoos," 201.

³¹ Bryan G. Norton, *Ethics on the Ark: Zoos, Animal Welfare, and Wildlife Conservation*. Washington: Smithsonian Institution Press, 1995, xvii.

³² Hoage, "Deiss, and the National Zoological Park," *New Worlds*, 9.

starting their zoos as this trend was taking off, so it was the main platform of their mission by circumstance. While European influence was a big factor across all of American culture, the collection and displaying of animals in America took on very different approaches from the received wisdom of the old countries. This difference was already evident with menageries, as Europe understood them primarily as status symbols while America saw them instead primarily as an opportunity for profit. Thus, when historians look back at these developments in context, there is little surprise that zoos developed in different ways as well. Through the late 19th century in Europe, most animals displayed in zoos and menageries were shown “for the ‘gratification of curiosity and the underlining of the magnificence and power of their owners.’”³³ In America, conservation was already a part of the formula. When the Oregon Zoo began its initial steps into forming a zoo, this was the cultural climate that institution entered.

³³ Ibid., 15.

Creation, Growth, and Political and Popular Involvement (1880-1960)

Although the Oregon Zoo refers to Richard B. Knight as a “British sailor and animal lover,”³⁴ further research revealed that the Portland pharmacist and the inadvertent founder of the Oregon Zoo was not in fact an avid sailor and may not have been especially fond of animals or particularly eager to collect them.³⁵ It was out of happenstance (and his own generosity) that Knight found himself with an odd collection of animals, which eventually included a young brown bear and a pregnant female grizzly bear that overwhelmed Knight and compelled him to sell to the city.³⁶

His daughter Edith said that he had never had much luck with animals stating that their pigs often escaped to dig up the garden. Knight could not even milk a cow due to his rheumatism.³⁷ Knight came from a Quaker background, of which one of the main values is generosity. In the 1882-1885 recession, Knight had been known to fill prescriptions for families that could not afford to pay.³⁸ Perhaps this is why he helped to lessen the burden for sailors who had acquired a variety of animals while overseas. Knight had always been in the pharmacy business, barring a short and apparently unhappy stint as a sailor. The only reason Knight had tried his hand in sailing was to find his father who had never returned from the 1840s Australian gold rush.³⁹ He had found sailing “tiring, strenuous,

³⁴ Kim Smith and Jani Iverson, "Happy 125th Birthday Oregon Zoo," *ZooTracks*, 2013, 5-25, Accessed May 20, 2017, <http://oregonzoo.org/sites/default/files/downloads/125%20Zootracks%20Spring%202013.pdf>, 7.

³⁵ Dawn Stanton, 2008, “Founder of the Oregon Zoo: Richard B. Knight,” *Pharmacy in History* 50(1), American Institute of the History of Pharmacy: 24-26, <http://www.jstor.org/stable/41112379>.

³⁶ “History,” Oregon Zoo.

³⁷ Stanton, “Richard B. Knight,” 25.

³⁸ *Ibid.*, 25.

³⁹ *Ibid.*, 25.

and dreadful.”⁴⁰ So, when sailors started coming by with animals they had gathered in their travels but could no longer care for, it is very likely that he had taken in the animals for the sailors’ sake rather than any passion for the animals. Knight began to have quite the collection of cockatiels, monkeys, and other exotic and relatively small animals in the back of his pharmacy.

Knight’s wife was never a fan of his animals, and the purchase of the two bears proved to be too much for her. Mrs. Knight called the two bears, collectively bought for \$125 -- worth about \$2,850 today -- “a foolish extravagance.”⁴¹ The Knights also had four children under the age of twelve, and while the bears were well contained, the children were not. Knight could not guarantee that the children would not venture too close if no one was watching. In June of 1888, Knight wrote to the Portland Mayor and City Council, asking if they had any interest in purchasing his two bears.⁴² On Druggist and Apothecary letterhead, Knight wrote:

To the honorable Mayor & City Council

Gentlemen,

I have brought to this city and have for sale two bears, one young male brown, and a she grizzly, which latter is said to be with cub. They are gentle, easily cared for, and cost but a trifle to keep, and knowing they would prove a great source of attraction to the city park, would like an offer for them before sending elsewhere.

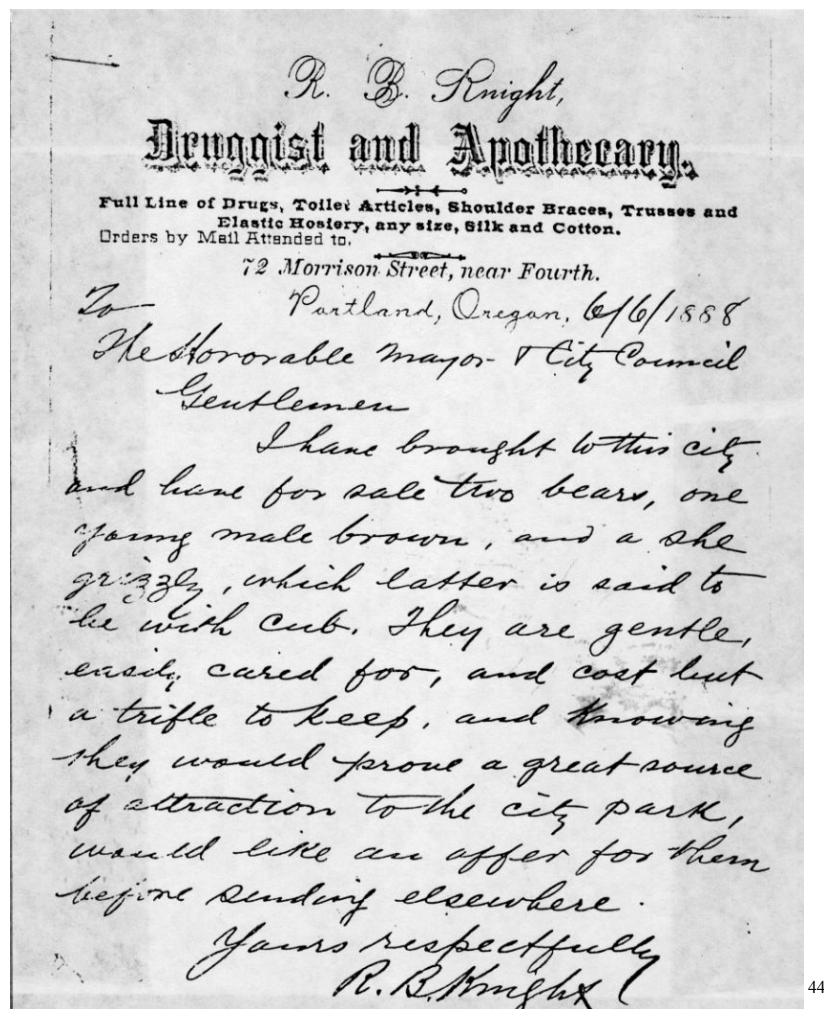
Yours respectfully,

⁴⁰ Stanton, “Richard B. Knight,” 25.

⁴¹ Ibid., 24-25.

⁴² Ibid., 24.

R. B. Knight⁴³ (Figure 1)



(Figure 1): Letter from Richard Knight to the Portland mayor and city council in June 1888. Image from the Oregon Zoo's web gallery.

The mayor at the time, Van B DeLashmutt, along with the Portland City Council, elected to offer Knight two circus cages and a location in City Park (modern day Washington Park), but informed him that he and his family would be still responsible for the animals'

⁴³ 1888 Letter from Richard B. Knight to the Portland Mayor and City Council, Digital image, Oregon Zoo, Accessed July 4, 2016, http://www.oregonzoo.org/sites/default/files/gallery/images/V_orig_robert_knight_sale_bear_1888_city_gal.jpg.

⁴⁴ Ibid.

care.⁴⁵ In less than six months, Knight wrote again with a new offer: the grizzly and her cub would be a free gift to the city if they would be willing to take them.⁴⁶ It is unclear what had happened to the young brown bear. On November 7, 1888, the Portland City Council approved the offer and appointed Charles Myers as the first zookeeper.⁴⁷ [Did they use another name for his job??] Thus, the Oregon Zoo was born.

Myers was never officially named the first zookeeper, he was more zookeeper by extension due to his appointment as park keeper in 1885.⁴⁸ Myers was a gardener and florist, originally from Germany.⁴⁹ Myers had organized the parks gardens and paths with a European influence that was not common to see among other nearby state parks.⁵⁰ Myers arranged for very naturalistic and large areas to house the bears, with a sunken grotto that was bar-less, an almost unheard of feature at the time.⁵¹ It was not until 1907 that Carl Hagenbeck's "tierpark," aka a bar-less or open and moated zoo, opened in Germany, so Myers was even ahead of his more famous German counterpart.⁵²

Of course the Zoo was very rudimentary at first. An 1888 inventory listing one grizzly, six deer, and one seal.⁵³ At this time the Zoo's location was still in the area that is now Washington Park's upper reservoir, but in 1893 when construction began for the reservoir, the animals were moved to an area between Burnside and Wright Avenue.⁵⁴ By

⁴⁵ "History," Oregon Zoo.

⁴⁶ Stanton, "Richard B. Knight," 24-25.

⁴⁷ "History," Oregon Zoo.

⁴⁸ Smith and Iverson, "125th Birthday," 7.

⁴⁹ Ibid., 7.

⁵⁰ Ibid., 7.

⁵¹ Ibid., 7.

⁵² Vernon N. Kisling, *Zoo and Aquarium History: Ancient Animal Collections to Zoological Gardens*, Boca Raton, Fla.: CRC Press, 2001, 164.

⁵³ Smith and Iverson, "125th Birthday," 7.

⁵⁴ Ibid., 7.

1894 their collection had grown to about 300 animals, the native origin of which was primarily North American.⁵⁵ “Exotic” animals included a small number of monkeys and birds, and a single kangaroo.⁵⁶ By 1904 two alligators and more kangaroos had been donated by Australian sailors.⁵⁷

In 1900 the Board of Park Commissioners created three subcommittees to function under their purview.⁵⁸ These committees included the following: the Committee on Judiciary, Finance, and Rules and Regulations; the Committee on Engineering; the Committee on Equipment of Parks, Purchasing Supplies, and Employment of Men; and the Committee on engineering, Landscape Gardening, Zoology, Botany, and Forestry.⁵⁹ This made it sound as though each department would now get better funding and time distribution which would help them to better attend to their specific needs, but unfortunately the newly formed Board of Park Commissioners did not show much interest in their duties and operations.⁶⁰ Harry Lane, the Mayor a few years after the creation of the subcommittees, declared that as far as the Zoo the “existing animals could live out their lives, but no new animals would be added.”⁶¹ Oregon’s Zoo in 1900 was very different than what we would now consider modern zoo. It was not uncommon to allow people to leave and later retrieve pets or wild animals at the Zoo, especially as the Zoo’s population declined due to lack of funding and support.⁶²

⁵⁵ “History,” Oregon Zoo.

⁵⁶ Smith and Iverson, “125th Birthday,” 8.

⁵⁷ Ibid., 8.

⁵⁸ Portland Parks & Recreation, “History 1852-2000,” The City of Portland Oregon, Accessed May 1, 2017, <https://www.portlandoregon.gov/parks/39473>.

⁵⁹ Ibid.

⁶⁰ Smith and Iverson, “125th Birthday,” 9.

⁶¹ Ibid., 9.

⁶² Ibid., 9.

The year 1905 was a turning point for the Zoo as well as Portland as a whole. This was the year that Portland hosted the Lewis and Clark Exposition. Portland's first (and only) world's fair intended to prove that Portland was a notable city and imply that it was a good and stable place to do business.⁶³ This fair was held from June to mid October of 1905, with 1,588,000 paying visitors visiting the 400-acre fairgrounds during those months.⁶⁴ When the exposition came to a close, the Zoo purchased a few animals from the fair, including two major additions: a lion and a polar bear.⁶⁵ But while things improved in some areas, the Zoo still faced challenges.

The beginning of the 20th century was an influential time in the larger picture of United States zoo history. Between 1901 and 1905 the Penrose Research Laboratory was developed at the Philadelphia Zoological Garden Facility, making it the first research center in an American zoo.⁶⁶ Two years later, the New York Zoological Society published *Zoologica*, the "first American zoo-related scientific journal."⁶⁷ So the Zoo was beginning to be seen as a professional organization. And yet it was in 1909 that *The Oregonian* published an article criticizing zoos as inhumane, prompting readers to write letters to the Zoo demanding it be shut down. It is important to keep in mind that even in the early 20th Century it was still very uncommon for people to show concern for animal welfare; the social context was very different and the information and resources available to us today were nearly nonexistent at the time. The Zoo hung in, but controversy still

⁶³ Carl Abbott, "Lewis and Clark Exposition," *The Oregon Encyclopedia*, Accessed April 10, 2017, https://oregonencyclopedia.org/articles/lewis_clark_exposition/#.WVVnEDPMz-a.

⁶⁴ Ibid.

⁶⁵ Smith and Iverson, "125th Birthday," 8.

⁶⁶ Kisling, *Zoo and Aquarium History*, 164.

⁶⁷ Ibid., 164.

erupted now and then. The early 1900s were simply not the golden era of Oregon's Zoo. In 1913 the Zoo's lion, Nero, escaped, but was luckily captured "without incident."⁶⁸ In 1918 there was a rat infestation that was resolved by introducing a virus to the rat population that not only managed to kill them but conveniently caused the rats to leave the premises before dying (later there was a city and park earwig infestation that was wiped out using the same virus).⁶⁹

Nevertheless the Zoo survived, even if it did not thrive. The Oregon Zoo had been, and continued to be, a fairly popular destination despite the stint of bad publicity, accidents, infestations, and lack of involvement from the Park Commissioners. The local neglect by the political leadership only worsened as the United States become involved in the first World War and subsequently fell into an economic depression.⁷⁰ The war-time economy led to the sale of some of the larger animals from the Zoo in 1918.⁷¹ The Zoo's elk were also lost, but they were not sold but were taken to Estacada and released into the forest in the area.⁷² After the war, the new Superintendent Charles Paul Keyser criticized the poor conditions of the Zoo, and in his 1923 annual report suggested that the Park's Bureau should attempt to obtain a portion of land between Washington Park and Canyon Road to develop a more extensive and centralized zoo.⁷³ In 1924 funds were budgeted for zoo work, and with help from the continuing noise complaints of new homeowners in the quickly developing area of the Zoo's current location above West Burnside Street, the

⁶⁸ Smith and Iverson, "125th Birthday," 8.

⁶⁹ *Ibid.*, 8.

⁷⁰ *Ibid.*, 9.

⁷¹ Portland Parks & Recreation, "1852-2000."

⁷² Smith and Iverson, "125th Birthday," 9.

⁷³ Portland Parks & Recreation. "1852-2000."

Zoo was able to relocate to a more remote area of Washington Park a year later, the present day location of the Japanese Gardens.⁷⁴

This period was a time of change for many zoos around the country, including improvements, despite tightening of budgets everywhere. Many of these improvements were large projects that would have had to been set in motion much earlier – probably at the turn of the century -- to be completed by this time. In 1916 the New York Zoological Society created the first veterinary clinic and zoo-based research program.⁷⁵ In 1918 the Denver Zoo included bar-less (also known as “moated”) exhibits with which we are familiar today. In 1919 the St. Louis Zoo also incorporated some bar-less exhibits.⁷⁶ As mentioned above, this approach to zoo enclosure construction was seen as a new and very European approach. The Oregon Zoo only had a couple of its bear grottos designed this bar-less way initially because of the innovative creativity of their original German gardener and zookeeper.⁷⁷ Unfortunately these progressive exhibits were later exchanged for the bright, bold, and “futuristic” design aesthetic of the 1950s and 1960s, and it would take quite some time for them to reappear.

Even before the United States’ involvement in World War II, the country, and the Parks Bureau in particular, focused on unity and patriotism. There was an increase in public programs, encouragement of community engagement, and an overall focus on recreation, hospitality, and morale.⁷⁸ As more citizens became involved in the war effort,

⁷⁴ Smith and Iverson, "125th Birthday," 9.

⁷⁵ Kisling, *Zoo and Aquarium History*, 164.

⁷⁶ Ibid., 164.

⁷⁷ Smith and Iverson, "125th Birthday," 7.

⁷⁸ Portland Parks & Recreation. "1852-2000."

playground supervisors would “tend to” small children when their mothers were working.

⁷⁹ In Portland, organized sports and free zoo trips became available to these children as well.⁸⁰ Unfortunately during this time funding for the Zoo was still cut, and construction was “deferred for the duration” of the war.⁸¹ While there was concern that running the Zoo during wartime would be an unnecessary expense, increased attendance kept the Zoo open.⁸²

A concern for many cities, and Portland in particular, was the potential for high unemployment after the war when war work slowed and eventually stopped. Robert Moses, who had served as New York City’s park commissioner, was hired to create a public works plan to lessen the blow of the decline of war industry.⁸³ Moses’ 85-page two-year plan for Portland consisted of large projects such as an efficient sewage system, widening and paving streets, as well as many improvements focused around parks and playgrounds.⁸⁴ His plan also recommended moving and expanding the Zoo, and purchasing more land for parks. The plan was a little more extensive and expensive than Portland could manage at the time, but was thorough enough that it was used within the Parks Bureau as a framework for public works and city planning for the next twenty years.⁸⁵

⁷⁹ Ibid.

⁸⁰ Ibid.

⁸¹ Ibid.

⁸² Ibid.

⁸³ Ibid.

⁸⁴ Ibid.

⁸⁵ Ibid.

In 1940 the West Hills Golf Course, the current location for the Zoo, was first considered as a possible site for the Zoo to move to and develop on.⁸⁶ It was Arthur M. Greenhall, the Zoo's second director, with assistant Jack Marks who first scouted the golf course.⁸⁷ Marks would eventually become the Zoo's longest director, serving a total of 24 years.⁸⁸ At the time there were not proper funds for the move to be feasible, but in 1951 the Portland City Club recommended "a New Zoo" and agreed that the West Hills Golf Course was the best location.⁸⁹ There was a \$3.85 million bond measure that nearly passed that year, but it was not until 1954 that the move was approved.⁹⁰ This support for the Zoo could easily be attributed to the popular gift of Rosy the elephant.⁹¹

Rosy was a gift from native Portlander Austin Flegel and his wife who were working in Thailand.⁹² News of her arrival spread quickly, and when she docked there were so many people that her transfer truck could barely squeeze through the crowd.⁹³ At the "Welcome Rosy" parade there were 100,000 people lining the streets to see her.⁹⁴ In fact, Rosy was so popular she was regularly taken off the grounds to attend openings and anniversaries; people started to complain that she was never at the Zoo.⁹⁵ Whether she was physically there or not, Rosy attracted thousands of additional visitors to the Zoo.⁹⁶ An attendance study was taken around this time, and found that children of the baby

⁸⁶ Smith and Iverson, "125th Birthday," 10.

⁸⁷ Smith and Iverson, "125th Birthday," 10.

⁸⁸ *Ibid.*, 10.

⁸⁹ *Ibid.*, 10.

⁹⁰ *Ibid.*, 11.

⁹¹ *Ibid.*, 11.

⁹² *Ibid.*, 11.

⁹³ *Ibid.*, 11.

⁹⁴ *Ibid.*, 11.

⁹⁵ *Ibid.*, 11.

⁹⁶ Portland Parks & Recreation. "1852-2000."

boom, between five and nine year olds, and seniors, over 60, used park and recreational facilities the most.⁹⁷ These were also the populations that were steadily increasing, creating new opportunities and challenges for parks and schools.⁹⁸ With Rosy's popularity increasing attention and affection for the Zoo, and the growing demographic of zoo-goers, Portland voters were quick to approve funding for a New Zoo the second time it appeared on the ballot.⁹⁹ In 1955 construction began. This New Zoo would be called the Portland Zoological Gardens.



(Figure 2): In 1954 the Zoo began a program with the State Blind School in Salem that gave blind and visually impaired students opportunities to hold, feed, and pet the Zoo's gentler animals. This tradition continues today. Pictured above is one of the visually impaired students invited to touch Nikki, the Oregon Zoo's Siberian tiger, while she was anesthetized for her physical in 2013.¹⁰⁰

⁹⁷ Ibid.

⁹⁸ Ibid.

⁹⁹ Smith and Iverson, "125th Birthday," 11.

¹⁰⁰ Ryan Broderick, "The Oregon Zoo Invited Visually-Impaired Children To Touch A Sleeping Tiger," *BuzzFeed*, July 25, 2013, Accessed June 9, 2017, https://www.buzzfeed.com/ryanhatesthis/the-oregon-zoo-invited-visually-impaired-children-to-touch-a?utm_term=.cbveqjXPk#.jsB2P3Rm5.

This New Zoo included the Portland Zoo Railway “a true community-led undertaking.”¹⁰¹ The main men responsible for the Railway were Union Depot Manager John H. Jones and assistant editor of *The Oregonian* Edward M. Miller.¹⁰² The design for and construction of the 4-mile loop around the Zoo’s perimeter had plenty of other help as well. Local train-enthusiasts offered suggestions, fundraising, and labor, but Jones and Miller “mooched, wheeled, and browbeat materials, parts, designs, labor, and equipment from anyone they could.”¹⁰³ Children also chipped in: they sold “stock” for the Railway at \$1 a share, and a children’s book “Clickety Clack and the Bandits” helped fund the project as well.¹⁰⁴ Zooliner, the first train in 1958 is still the primary train today.¹⁰⁵ The train was not the only big addition to the New Zoo. In 1956 multiple large additions were donated or exchanges were made with other zoos for more exotic animals (Figure 3). In 1957 the Zoo acquired Emperor and Adelie penguins thanks to director Jack Marks’ penguin expeditions. The enclosure was not yet ready for these new penguins though, so the new additions lived in North Portland’s Peninsula Park swimming pool until their enclosure was completed.¹⁰⁶ Construction had been delayed, but the Zoo was still scheduled to open in May of 1958.¹⁰⁷

¹⁰¹ Smith and Iverson, "125th Birthday," 12.

¹⁰² Ibid., 12.

¹⁰³ Ibid., 12.

¹⁰⁴ Ibid., 12.

¹⁰⁵ Ibid., 12.

¹⁰⁶ Ibid., 12.

¹⁰⁷ Portland Parks & Recreation. "1852-2000."

1956 Additions

| Donator | Donation |
|-----------------------|---|
| King of Thailand | Four year old male elephant |
| Orville Hosmer (?) | Female elephant → Tuy-Hoa |
| San Diego Zoo | Great grey kangaroo Sarus crane |
| San Antonio Zoo | Sarus crane |
| Calgary Zoo | Platinum foxes (2) |
| Texas Zoo | [Exchange] Portland's polar bear for Texas' black leopard |

(Figure 3): List of donations (and one exchange) made in 1956 to the Oregon Zoo¹⁰⁸

In 1958 construction was still behind schedule. The bear grottos were completed 15 months late; the Commissary and paddocks were one year late; fortunately the Penguin Pool was completed on time so they could be moved out of the public pool.¹⁰⁹ It was vital to move the penguins at this point as over half of them had already died before their enclosure was ready.¹¹⁰ In 1959 the Zoo was *still* delayed, though this time from inclement weather. Despite this, enough was put in place to move in the large animals such as the bears, elephants, and primates; the New Zoo opened July 1959.¹¹¹ Between

¹⁰⁸ Portland Parks & Recreation. "1852-2000."

¹⁰⁹ Ibid.

¹¹⁰ Ibid.

¹¹¹ Ibid.

opening and the end of November, there were 316, 229 visitors grossing \$65, 299.¹¹² The health of animals was an ongoing problem, despite the popularity of the Zoo; nonetheless, slowly but surely the animals improved. In 1960 “income doubled while animal mortality decreased.”¹¹³

¹¹² Ibid.

¹¹³ Ibid.

“As Animal Welfare Evolves, so do Exhibits” (1961-1989)

Scientists recognize the 1960s and 1970s as notable due to their examination and exploration of environmental and animal welfare issues. Resources worldwide were dedicated to pursuing these paths of research in ways and with funding of which they had not been before. Public awareness grew, making these issues that were important to the average American, not just scientists. Rachel Carson’s 1962 book *Silent Spring* highlighted dangers of the pesticide DDT and is considered by many to be the major work that initiated the environmental movement. Around this time, major cities such as New York and Los Angeles were also seeing the dramatic effects of air pollution, bringing concerns about *their* environment [the survival of animal habitats] much closer to home. Congress quickly became involved and started passing numerous legislative acts that were motivated by concerns for environmental protection. In 1966 the first legislation concerning Endangered Species was passed, and by 1970 the Environmental Protection Agency (EPA) was founded.¹¹⁴ The field of “animal ethics” took off after the publication of Peter Singer’s book *Animal Liberation* (1975),¹¹⁵ and in less than ten years, *Zoo Biology* (a journal dedicated to the sciences of animal welfare, environmental enrichment, and conservation) entered circulation.¹¹⁶

Much of the Oregon Zoo’s growth since the 1960s could easily be attributed to the birth of Packy the Elephant. Packy is still considered a symbol of the Oregon Zoo

¹¹⁴ Smith and Iverson, "125th Birthday," 12.

¹¹⁵ Ramona Cristina Ilea, Review of *The Animal Ethics Reader (2nd ed.)*, *Teaching Philosophy*, March 2009, 83-86.

¹¹⁶ Terry L. Maple "Toward a Science of Welfare for Animals in the Zoo," *Journal of Applied Animal Welfare Science* 10, no. 1 (2007): 63-70, doi:10.1207/jaws.2007.10.issue-1.

today, even after his recent and controversial death. Born in 1962, Packy was the first Asian elephant born in the northern hemisphere in almost half a century. Before Packy there was not much information on captive elephant birth (e.g. “maternal behavior, fetal development, etc.”). With the information the Zoo was able to learn from this one elephant, the Oregon Zoo became the leader in Asian Elephant breeding, with an amazing total of twenty-eight elephants born at their facility since 1962.¹¹⁷ Matthew Maberry, the Zoo’s first veterinarian, worked alongside a team to create a state-of-the-art elephant facility.¹¹⁸ The facilities were revolutionary (at the time). Most zoos chained elephants indoors overnight, while Maberry and his team’s design allowed for freedom that encouraged normal social interactions and breeding.¹¹⁹ Despite the major improvements for the animals care, Bob Lee, the Zoo’s current elephant curator reminds us:

What we need to realize is the folks who were here back then had literally no experience to draw from. If you think about the time when Packy was born, it's mind-boggling — Kennedy was president, the Beatles hadn't made any records yet, cigarettes didn't have warnings from the Surgeon General. It was a different era. They were writing the book on elephants as they went.¹²⁰ (Figure 4)

Nineteen out of the twenty-eight Asian elephants born in the North America before 1980 were born in the Oregon’s facility. Before Packy in 1962, the only other elephant born in an American zoo had been born in 1918, and did not survive longer than

¹¹⁷ Jessie McClendor, “Packy the Elephant,” *The Oregon Encyclopedia*, Accessed February 8, 2016, <http://www.oregonencyclopedia.org>.

¹¹⁸ “Zoo Looks Back as Elephant Lands Nears Completion,” Oregon Zoo, April 29, 2015. Accessed December 1, 2016.

¹¹⁹ Ibid.

¹²⁰ Ibid.

a few weeks.¹²¹ None of the nine elephants born at other institutions during this era lived to be one year old.¹²²



¹²³ This photo of Tamba, a female Asian elephant from the early days of the zoo's elephant program, shows how far we've come in the past 50 years.

(Figure 4): Caption reads: "This photo of Tamba, a female Asian elephant from the early days of the Zoo's elephant program, shows how far we've come in the past 50 years." You can see Tamba is chained and in an enclosure that appears to be mostly concrete with only hay softening the ground. This enclosure is a far cry from the Oregon Zoo's contemporary "Elephant Lands." Image from the Oregon Zoo's web gallery.

¹²¹ "Zoo Looks Back," Oregon Zoo.

¹²² Ibid.

¹²³ Female Asian Elephant Tamba, Digital Image, Oregon Zoo, Accessed July 4, 2016, <http://www.oregonzoo.org/gallery/tags/history?page=3>.

In 1971 the Portland Zoological Society took over management of the Zoo, and Zoo funding was provided by the City of Portland.¹²⁴ In 1976, the Oregon Zoo was taken under the jurisdiction of the Metropolitan Service District (MSD) and renamed the Washington Park Zoo. MSD, now known as “Metro,” was created in the late 1960s and early 1970s.¹²⁵ It was created as a catch-all government unit for any institutions that did not fall under travel or transportation.¹²⁶ Initially it had a very small budget and was not really intended to plan much for the city, but it is now the major planning force in the area. This shift happened when the Columbia Region Association of Governments’ (CRAG) functions were merged with MSD in the late 1970s.¹²⁷ Previous to this, MSD had really only been an organization intended to make Oregon and the Portland area eligible for certain federal funding. After the merger, Metro primarily had the major responsibility of defining the Portland Urban Growth Boundary (UGB) among other regional tasks such as the oversight of the Zoo.¹²⁸ These changes happened to benefit the Zoo, because after the being taken under MSD, voters approved a 5-year 10 million dollar levy.¹²⁹ Voting was not the only way that Oregon residents got involved with the Zoo. In 1975 the Zoo's volunteer program began as well.¹³⁰

This was the era when research and shifting public opinions about animal welfare altered zoos significantly. Zoos transitioned from cement and steel cages that offered

¹²⁴ “History,” Oregon Zoo.

¹²⁵ Carl Abbott, *Greater Portland: Urban Life and Landscape in the Pacific Northwest* (Philadelphia: University of Pennsylvania Press, 2001), 158.

¹²⁶ *Ibid.*, 158.

¹²⁷ *Ibid.*, 158-160.

¹²⁸ *Ibid.*, 160.

¹²⁹ “History,” Oregon Zoo.

¹³⁰ *Ibid.*

patrons 360 degree viewing, to enclosures that mimicked “natural” habitats and offered more refuge for the animals.¹³¹ Primates were a major focus of research at the time. 1965 and 1967 were when the first research was done on primate welfare in the United States.

¹³² Hal Markowitz, who is considered one of the “first and most influential people to adopt... environmental enrichment,” worked extensively with the Oregon Zoo’s primates throughout the 1970s and 1980s.¹³³ Environmental enrichment is defined as

An animal husbandry principle that seeks to enhance the quality of captive animal care by identifying and providing the environmental stimuli necessary for optimal psychological and physiological well-being.¹³⁴

At the time methods to enhance environmental enrichment were not seen as true science, or even quantifiable. It was not until the 1990s that environmental enrichment got recognition on a national scale. The summer of 1993 the First Conference on Environmental Enrichment was held at the Oregon Zoo, at the time still known as the Washington Park Zoo, (see sixth chapter for more on the first Conference on Environmental Enrichment). The program that Markowitz headed at the Oregon Zoo was initially referred to as “behavioral engineering” but this gave some people the impression that the work and devices Markowitz put in place were intended to “engineer” the behavior of animals. The phrase was changed to “behavioral enrichment” to avoid this misconception.¹³⁵ Markowitz pioneered a system that has been replicated in some form at

¹³¹ "Washington Park Zoo Master Plan. (Portland, Oregon)." *Progressive Architecture* 67 (1986).

¹³² Maple "Toward a Science of Welfare."

¹³³ David J. Shepherdson, Jill D. Mellen, and Michael Hutchins, *Second Nature: Environmental Enrichment for Captive Animals*, Washington: Smithsonian Institution Press, 1998, 8.

¹³⁴ *Ibid.*, 1.

¹³⁵ *Ibid.*, 47.

various institutions with a variety of species: he created a way for white-handed gibbons to activate a food dispenser by brachiating (swinging) and leaping high in their enclosure where there were stations with stimulating lights and levers.¹³⁶ The gibbons continually decided to feed themselves even though they were given the leftovers at their regular feeding time.¹³⁷

At the beginning of Markowitz' research, there were not the resources to completely overhaul the animal's enclosures, so he did his best to find ways for the animals to control their own feeding.¹³⁸ Markowitz put his theories to the test with other primates after the white-handed gibbons. His project with the gibbons had encouraged fairly "species-typical" behaviors, but with the Zoo's Diana monkeys Markowitz created a system that provided plastic tokens that the monkeys could then use to "buy" food.¹³⁹ The monkeys could use the tokens to buy food immediately, hoard the tokens to use later, steal tokens from others, buy food in bulk and hoard that, etc. Although the tendencies that informed the monkey's decisions to immediately use, hoard, or steal are natural, this intervention encouraged atypical behavior because there are no tokens and automats in any natural environment. There are some modern criticisms that although this type of device may have amused the monkeys, it was encouraging unnatural behavior.¹⁴⁰ A counter argument is made by Markowitz that "nature is full of contingencies to which animals must learn to respond in effective ways," and, "where captive environments

¹³⁶ Ibid., 8.

¹³⁷ Ibid., 47.

¹³⁸ Ibid., 47.

¹³⁹ Shepherdson, Mellen, & Hutchins, *Second Nature*, 47.

¹⁴⁰ Ibid., 48.

cannot include the replication of natural contingencies, unnatural ones may serve to provide animals with power.”¹⁴¹ Research confirms that, similar to humans, primates’ stress levels lower when they are given more control over their environment.¹⁴²

Although there are different opinions on what is the most beneficial form of enrichment for animals, there is evidence that a lack of stimulation can have long-lasting consequences. Deprivation of enrichment can cause equally “unnatural” behaviors for healthy animals (such as head swaying in elephants, or pacing in big cats). The benefits of making these environmental changes even go beyond those for the animal’s mental health. Environmental enrichment can also be used to highlight strange behavior in animals, or help assess if animals are possibly injured or sick. If you have ever seen a porpoise or sea lion show at a zoo, the trainers often explain how the “tricks” the animals learn can be helpful for the keepers and veterinarians to do health check ups without having to restrain or anesthetize the animals. For example, having the sea lions touch their nose to a marker or lay on their backs can give veterinarians access to certain parts of the animals’ bodies, or allow them to perform certain tests while also keeping the sea lions’ brains stimulated.

¹⁴¹ Ibid., 48.

¹⁴² Ibid., 48-49.

Coco the Chimpanzee

(1952–2012)

Coco had no shortage of life or experiences. Previous to her death in 2012, she had far exceeded the average life expectancy for chimpanzees (around 38 years for females). Coco was not only the oldest animal at the Oregon Zoo, but was the second oldest chimpanzee in the United States.

**"DURING HER 50 YEARS HERE,
SHE TOUCHED MANY LIVES."**

-Jennifer Davis: Oregon Zoo Primate Curator

Coco's exact date of birth is difficult to pinpoint, but the best estimate is about 1952. Coco made her way through the pet trade, and was donated to the zoo in 1961.

In the 1970s, Coco was part of a study that was interested in finding out why captive chimps were not breeding very well.

Over 15 years, the chimps at the Portland Zoo proved that chimps that were cared for by their mothers (rather than keepers) were "more likely to exhibit natural breeding behaviors" later in life.

During this time the Oregon Zoo also had a relationship with Jane Goodall, who significantly helped to raise support for the Primate House remodel (which opened in 1980).

Coco clearly had friends in high places, and even managed to earn a mention in the comic strip "Stone Soup."



<http://www.oregonzoo.org/news/2012/11/zoo-mourns-loss-oldest-resident-coco-chimpanzee>

(Figure 5): Coco the Chimpanzee¹⁴³

Patrons of the Oregon Zoo really saw renovations and new additions being implemented around 1980. The voter approved levy in 1976 provided the funding and

¹⁴³ "Zoo mourns loss of oldest resident, Coco the chimpanzee," Oregon Zoo, November 30, 2012, Accessed July 09, 2017.

<http://www.oregonzoo.org/news/2012/11/zoo-mourns-loss-oldest-resident-coco-chimpanzee>.

designated timeline to make these improvements. The year 1976 is also around the time the Zoo “reordered their priorities” to emphasize the Zoo’s “recreational and educational potentials” (which apparently increased their attendance and income significantly).¹⁴⁴ As stated previously, the 1970s and 1980s focused on research and improvements -- the Oregon Zoo was one institution where you could see the application of the previously theoretical discussions on animal welfare.

In 1981, the Oregon Zoo (known as the Washington Park Zoo at this time) drafted what they called the “Washington Park Zoo Master Plan.”¹⁴⁵ This plan consisted of two volumes: The first gave an analysis of “existing land use, circulation, buildings, vegetation, landscaping, exhibits, and visitor services” ending with “an analysis of the Zoo's public relations efforts and financial condition, with recommendations for improvement.”¹⁴⁶ The second volume gave a 12-year plan focusing on “expanding the market for attractions on the Zoo” -- a focus on construction with a goal of increasing interest through the physical nature and design of the Zoo.

The Cascade Stream and Pond exhibit opened in 1982 and was awarded “Top Exhibit” from the American Association of Zoological Parks and Aquariums. Construction from 1980 to 1990 consisted of many new exhibits and renovations at the Oregon Zoo. Renovations and additions are always a sign of an institution not only surviving, but fiscally thriving. Renovations at this time included the larger enclosures for the elephants in 1980 and the extensive primate house remodel, as well as renovations to

¹⁴⁴ “Master Plan,” *Progressive Architecture* 67.

¹⁴⁵ Ibid.

¹⁴⁶ “Master Plan,” *Progressive Architecture*, 128.

the Penguinarium in 1983 and the bear west grottos in 1986. In 1985 the Zoo added their Alaskan Tundra exhibit which is no longer its own section -- many of the animals held there have been dispersed, for example to the bear grottos. The renovations in 1986 to the west bear grottos notably also included additions of polar bears and sun bears. The Lila Callen Holden Elephant Museum also opened in 1986. In 1988 the Zoo laid out the African Aviary, a terraced concert lawn, and the first Zoo Lights (Figure 6). The Zoo's major addition in 1989 was the Africa exhibit.

2013 MARKED 25 YEARS OF THE OREGON ZOO'S INFAMOUS LIGHT DISPLAY

FAST FACTS:



ZOO LIGHTS HAS BEEN AN ANNUAL EVENT SINCE 1988

THE FIRST ZOO LIGHTS WAS COMPLETELY COORDINATED AND RUN BY THE ZOO'S VOLUNTEER STAFF

1988 WAS THE SECOND YEAR THE ZOO'S ANNUAL ATTENDANCE EXCEEDED 1 MILLION (THE PRIOR YEAR WAS 1962)

THE MODERN DISPLAY NOW CONTAINS MORE THAN 1.5 MILLION LIGHTS, AND SINCE 2000 HAS SAVED ENERGY BY EXCLUSIVELY USING LED LIGHTS

Image source: Michael Durham
<http://www.oregonzoo.org/gallery/tags/zoolights>

FOOTNOTE SOURCES
[HTTP://WWW.OREGONZOO.ORG/EVENTS/ZOOLIGHTS](http://www.oregonzoo.org/events/zoolights)
[HTTP://WWW.OREGONZOO.ORG/ABOUT/ABOUT-OREGON-ZOO/HISTORY](http://www.oregonzoo.org/about/about-oregon-zoo/history)
[HTTP://WWW.OREGONZOO.ORG/NEWS/2011/12/ZOO%2%80%99-USE-LEDS-GO-GREEN-HOLIDAY-LIGHT-DISPLAYS](http://www.oregonzoo.org/news/2011/12/zoo%2%80%99-use-leds-go-green-holiday-light-displays)

(Figure 6): Fast Facts about Zoo Lights at the Oregon Zoo.
Image from the Oregon Zoo's web gallery.

Concerns (1990-2016)

“Providing good animal welfare means ensuring that animals don’t just survive, they thrive” -- Kim Smith, Director, Oregon Zoo ¹⁴⁷

Since 1990 the Oregon Zoo has focused on conservation. The Zoo's mission statement is “Caring now for the future of life” and proclaims that “wildlife conservation is the unbreakable thread that is woven into every idea, action, and program of the Oregon Zoo.”¹⁴⁸ Available on the Zoo’s website are resources that support and explain their conservation efforts. These resources range from global research collaborations to what anyone can do on a daily basis to protect endangered species. At the Zoo itself, employees and volunteers participate in the “Future for Wildlife” Program. This program focuses on fighting the extinction of endangered species native to the Pacific Northwest. For example, one of their most successful efforts has been the breeding and release of California Condors since 2003. Even animals that cannot be released back into the wild became both “ambassadors” for their species and used to gather information that might otherwise be impossible to gather from animals in the wild.¹⁴⁹

The Oregon Zoo has grown physically and philosophically since its creation but it still faces challenges and questions of morality of its very existence that many modern zoos struggle with: “The care of animals brings with it often complicated problems of economics, ecology, and science,” says Matthew Scully, the author of *Dominion: The Power of Man, the Suffering of Animals, and the Call to Mercy*, “but above all [the care

¹⁴⁷ Smith and Iverson, "125th Birthday," 18.

¹⁴⁸ Ibid., 19.

¹⁴⁹ “A New Zoo,” Oregon Zoo.

of animals] confronts us with questions of conscience.”¹⁵⁰ Such observations beg the question, what does good care of animals look like? The next three decades of the Zoo attempted to answer this question and cater to the ideal answer. Although *relatively* modern, this conversation is by no means a new one, yet it is not a conversation that will be ending anytime soon.

The Oregon Zoo is criticized as often as it is praised, as is the case with any institution that houses captive animals. Despite being revered by those in attendance at the first-ever Environmental Enrichment Conference, there are still many arguments that the Oregon Zoo is not doing enough for the mental and physical well being of their animals.¹⁵¹ As with any zoo, there is always room for improvement, although many animal-rights organizations would not be happy with anything less than freeing all animals into the wild or lightly supervised sanctuaries.

Despite praise from scientists, a major point of contention from the public has been the Zoo’s care for its elephants. Although criticisms are to be expected when one is part of the zoo industry, that should not make the arguments dismissible without further investigation. That being said, it is difficult to know which sources and arguments have the most credible information especially when it comes to controversial issues where each side has something to lose or to gain. More often than not, though, these criticisms come from groups and critics who are opposed to the entire zoo system and culture, making it impossible for the Oregon Zoo to live up to their expectations without freeing

¹⁵⁰ Matthew Scully, *Dominion: The Power of Man, the Suffering of Animals, and the Call to Mercy*, New York: St Martin's Griffin, 2002, xi.

¹⁵¹ Shepherdson, Mellen, & Hutchins, *Second Nature*.

all animals. The intention of these observations is not to undermine the well-founded criticisms, because these have the power to further improve conditions. Criticisms of the Oregon Zoo may seem more prevalent now than in previous decades, but this is due to a few factors beyond the actual care of the animals (although, again, the care is not to be ignored or not held to a certain standard). More than ever, information is readily available. Standards for animal care have exponentially raised in the past century, but so have media platforms which have given anyone and everyone a variety of ways to share their opinions to a massive audience. This also makes local news global, and any news almost instantaneously updated, if not completely live. This is a good thing for a number of reasons, but in controversies such as sensitive ones about animal welfare, it can mean half-cocked stories and misinformation can spread like wildfire.

Packy's birth in 1962 made the Oregon Zoo famous. The Zoo has become a leading elephant breeding facility, with twenty eight elephants born at the Zoo since 1962.¹⁵² Though there was a stretch of time during which the Zoo stopped breeding due to lack of space, they reinstated the efforts after 2000 when a study published stated that unless breeding resumed immediately that by 2050, there would be less than twenty Asian Elephants in North American Zoos.¹⁵³ Despite their fame as an exemplar elephant institution, the elephants have been the stars of multiple scandals at the Zoo. There have been protests against Packy's life-long captivity, issues with the Zoo's acquisition of

¹⁵² McClendor, "Packy the Elephant."

¹⁵³ Katy Muldoon, "The Oregon Zoo: Asian Elephant Rose-Tu Is Pregnant," OregonLive.com, October 20, 2011. Accessed July 09, 2016, http://www.oregonlive.com/portland/index.ssf/2011/10/oregon_zoos_enormous_announcem.html

additional elephants, concerns about the Zoo's removal of babies from their mothers at too young an age, concerns about the health and safety of the elephants, and eventually outrage and doubt about the decision to euthanize Packy.

In 2013 In Defense of Animals (IDA) protested against the celebration of Packy's 51st birthday, arguing that the treatment and conditions of Packy and the other elephants at the Zoo were barely livable and that the humane solution would be to release Packy to a sanctuary.¹⁵⁴ IDA referred to Packy's life as one of "routine exploitation" and "relentless breeding" (Figure 7). Yet breeding is necessary for conservation efforts: by breeding more, logically the elephant population has a higher chance for survival. By using Packy as a "diplomat" for Asian elephants, the Zoo was also able to encourage the local populace's emotional investment in the well-being of Asian elephants.

Earlier that same year, IDA and the Animal Legal Defense Fund (ALDF) also showed concern about the Oregon Zoo's acquisition of two new elephants.¹⁵⁵ Lily and her father Tusko were part of an organization "Have Trunk Will Travel" which provides elephants for special events, rides, commercials, etc. The Oregon Zoo showed interest in, and eventually succeeded in, acquiring the elephants from this organization. IDA and ALDF accused the Oregon Zoo of saving the elephants from "Have Trunk Will Travel" organization's exploitation to only subject them to their own. IDA and ALDF also accused the Oregon Zoo of acquiring the elephants in an attempt to gain some positive

¹⁵⁴ "In Defense of Animals Slams Oregon Zoo's 'Celebration' of Elephant Packy's Miserable Life," *Targeted News Service*, Apr 11, 2013.

¹⁵⁵ "Animal Protection Organizations Warn That More Trouble Lies Ahead for Oregon Zoo Elephants," *Targeted News Service* (Washington, D.C.), February 08, 2013.
<http://cupdx.idm.oclc.org/login?url=http://search.proquest.com/docview/1303868814?accountid=10248>.

PR since they do have a complicated history with their elephants.¹⁵⁶ Although the animal protection organizations were pleased that the elephants were out of “Have Trunk Will Travel,” they remained “skeptical” of how much the elephants’ lives would improve at the Zoo.¹⁵⁷

There was additional outrage at the idea that Lily, although being kept with her father, would be separated from her mother at such a young age. The reality of the story was that Tusko had been at the Oregon Zoo on loan from “Have Trunk Will Travel” since 2005 to breed with the Zoo’s existing elephants; Lily was the second calf resulting from successful breeding of Tusko with Oregon Zoo’s Rose-Tu.¹⁵⁸ The first story that the public heard was that Lily and Tusko were purchased together from the organization, and in doing this Lily would be removed from her mother. This was in fact not the case, as the purchase of Lily and Tusko would mean that they would stay at the Oregon Zoo, so therefore Lily would stay with her mother Rose-Tu. The Zoo Director at the time, Kim Smith, even stated that “given the sensationalized story people were first presented with, that’s exactly how they should have reacted,” further saying that “if [she] thought for one minute that this baby was going to be taken from her mother -- taken from her home -- [she] would have been outraged too.”¹⁵⁹

Nicole Meyer, director of IDA, was still concerned partially because the Zoo had no obligation to keep from loaning out the elephants for further breeding, and according

¹⁵⁶ Ibid.

¹⁵⁷ “More Trouble Lies Ahead,” *Targeted News Service*.

¹⁵⁸ “Has Trunk, Won’t Travel: Lily Belongs to Oregon Zoo.” *Oregon Zoo: News* (blog), February 7, 2013. Accessed June 29,

2016. <http://www.oregonzoo.org/news/2013/02/has-trunk-wont-travel-lily-belongs-oregon-zoo>.

¹⁵⁹ Ibid.

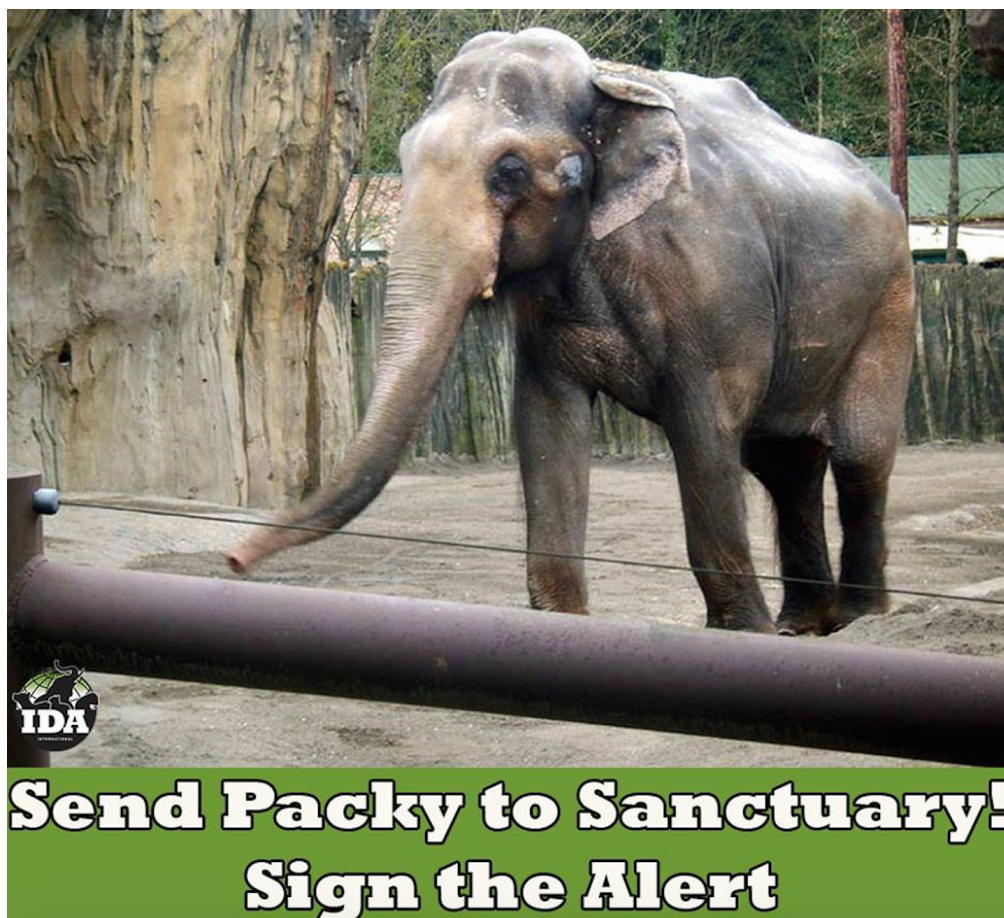
to IDA, the Zoo has a history of removing calves from their mothers too early.¹⁶⁰ The Association of Zoos and Aquariums currently supports zoos sharing endangered species for breeding purposes. The Oregon Zoo never denied that Lily would never be loaned for breeding but stated that as an infant she would not be separated from her mother (meaning that Rose-Tu would also not be used again for breeding until Lily was fully grown).¹⁶¹ Tusko has since passed away, but Lily and Rose-Tu remain at the Oregon Zoo.¹⁶² Kim Smith said that although this controversy started with misinformation and a sensationalized story, it was “incredibly gratifying” to see how the community came together on behalf of elephants, saying that this “passion...seen is precisely what [the Oregon Zoo] aim[s] to inspire.”¹⁶³

¹⁶⁰ “More Trouble Lies Ahead,” *Targeted News Service*.

¹⁶¹ “Has Trunk, Won’t Travel,” Oregon Zoo.

¹⁶² “Asian elephant,” Oregon Zoo, Accessed July 09, 2017, <http://www.oregonzoo.org/discover/animals/asian-elephant>.

¹⁶³ “Has Trunk, Won’t Travel,” Oregon Zoo.



(Figure 7): In Defense of Animals (IDA) posted this image on their facebook page, with the caption: "Free Packy the Elephant!"

IDA's #7 Worst Zoo for Elephants: Oregon Zoo in Portland, Oregon

Packy the elephant was born at the Oregon Zoo in 1962 and has lived in a small, cramped enclosure for nearly of all of his 54 years. In all his life, senior Packy has never had the opportunity to walk on grass, or forage on trees, or choose his friends -- as wild elephants are free to do. For most of his life, Packy has lived isolated from the zoo's collection of what is currently six elephants. Being a male, Packy sometimes exhibits assertive behavior, especially when in "musth," a hormone surge that sends bull elephants' mating instincts into overdrive. Taxpayer money has been used by the Zoo to update the elephant exhibit, and although it has given Packy a little more room to move, the exhibit is still woefully inadequate. The "improvements" mostly benefit visitors, instead of the elephants. In 2013, Packy contracted tuberculosis. His son Rama also contracted the disease, as did Tusko, another bull who was brought in to the zoo in 2005 on a breeding "loan." Currently, Packy is on another round of TB medication that will continue to keep him further isolated from the herd. Click here to read more and take action:¹⁶⁴ And a link to their "Action Center" that at the time had an "Active Action Alert" relating to Packy that is no longer active.

¹⁶⁴"Free Packy the Elephant! IDA's #7 Worst Zoo for Elephants: Oregon Zoo in Portland, Oregon," August 1, 2016, Accessed July 10, 2017,

Tuberculosis has been a recurrent issue for the Oregon Zoo's elephants. Many, if not all, have at one point or another tested positive for TB. The Oregon Zoo is by no means the only institution that has struggled with tuberculosis among their elephants. It is a highly infectious and difficult to treat infection, among humans and animals alike. In a 2006 study there was evidence that 52% of the 113 mastodon skeletons studied showed marks of having tuberculosis, and tuberculosis has been "implicated as a possible causative factor in the extinction of the mastodon."¹⁶⁵ The US Department of Agriculture has stopped requiring elephants to be tested for tuberculosis, a test which was previously required by the Animal Welfare Act.¹⁶⁶ At the end of 2015 PETA filed a lawsuit over the CDC's minimization of the risk of elephant contact resulting in human contraction of tuberculosis.¹⁶⁷ In 2016 a handful of keepers at the Oregon Zoo contracted tuberculosis from direct contact with the Zoo's elephants.¹⁶⁸ One of the infected humans had been in contact with the elephants for less than an hour total, yet this person still required hospitalization.¹⁶⁹ Due to some ongoing cases of tuberculosis, the Zoo has kept up testing despite the lack of a requirement to do so.

<https://www.facebook.com/indefenseofanimals/photos/a.10150796907537346.439113.5956327345/10154341099092346/?type=3&theater>.

¹⁶⁵ Mikota, Susan K. Mikota, "A Brief History of TB in Elephants," www.elephantcare.org, Accessed July 9, 2017,

https://www.aphis.usda.gov/animal_welfare/downloads/elephant/A%20Brief%20History%20of%20TB%20in%20Elephants.pdf.

¹⁶⁶ "PETA Statement: CDC Study Finds Seven Human Beings Have Contracted Tuberculosis From Elephants at Oregon Zoo"; "Implications of Negligence in Dropping Testing Requirement," *States News Service*, January 8, 2016.

¹⁶⁷ Ibid.

¹⁶⁸ Ibid.

¹⁶⁹ "PETA Statement"; "Implications of Negligence" *States News Service*.

Although many of their elephants have had brushes with tuberculosis, Packy is the most well-known case partially because of the aggressiveness of his infection, his susceptibility to the infection, complications due to his age, and his eventual euthanization because of those complications. Of course, there was much mourning after Packy's euthanization, but among that mourning there were some mixed responses. An Oregonian article discussing the "divisiveness" of the decision and PR strategy was the most well-balanced article concerning this incident. The article gave voice to both sides, while avoiding an emotional interpretation of their own.¹⁷⁰ According to the article, and truthfully many articles, the decision to euthanize Packy was a very controversial one, even among those working at the Zoo. A Facebook page, "Team Packy" was run by a now former Zoo employee and was used to question and criticize the care of Packy. Pam Starkey created the page after hearing rumors that Packy's tuberculosis treatment was stopped and that he was to be put down.¹⁷¹ Starkey argued that some employee protests had been ignored, and that Packy's euthanization had been "premature" because he was not suffering.¹⁷² In a series of now publicized emails, the Zoo Director Don Moore and an advocacy group, "Free the Oregon Zoo Elephants," argued about the decision.¹⁷³

The Zoo had considered continuing the protocol with Packy that left him quarantined and without treatment (because his Tuberculosis had been resistant to any forms of treatment thus far), but they considered that option to be cruel considering the

¹⁷⁰ Kale Williams "Emails reveal divisiveness, Oregon Zoo's PR strategy around Packy's death," OregonLive.com, March 09, 2017, Accessed July 10, 2017, http://www.oregonlive.com/portland/index.ssf/2017/03/emails_reveal_divisiveness_ore.html.

¹⁷¹ Ibid.

¹⁷² Ibid.

¹⁷³ Ibid.

social nature of elephants and the advanced age of Packy.¹⁷⁴ The Zoo considered sending him somewhere else, but “elephants don’t do well with abrupt change late in life,” and the Zoo also had to consider the risk to other elephants.¹⁷⁵ On February 8, 2017 a confidential email was sent out to notify staff that Packy would be euthanized the following day.¹⁷⁶ Moore wrote:

I am deeply saddened to inform you that tomorrow we plan to humanely euthanize our beloved Asian elephant Packy. He will be surrounded by the people he knows best and who have cared for him for years.... [W]e did not want his last day to be his worst day; therefore we chose tomorrow so his life would be dignified in the end.¹⁷⁷

Packy’s medical records were later publicized and catalogued his euthanization as well as his health at the time of death.

This focus on Packy’s end of life situation was really all part of a longer discussion whether or not any form of captivity is suitable for elephants. In 2006 an article was published that discussed the question “Do elephants belong in zoos?”¹⁷⁸ The article explored the pros and cons of elephants being in zoos, including benefits (breeding endangered species) and drawbacks (lack of exercise, wrong climate, etc.). The writer also wondered if animal advocates want improvements or just to completely shut zoos? Michael Keele, the retired department director of the Oregon Zoo and head of the

¹⁷⁴ Williams, “Emails reveal divisiveness.”

¹⁷⁵ Ibid.

¹⁷⁶ Ibid.

¹⁷⁷ Ibid.

¹⁷⁸ Jeffrey P. Cohn, 2006, “Do Elephants Belong in Zoos?” *Bioscience* 56, (9)(09): 714-717, <http://search.proquest.com/docview/216471789?accountid=10248> (accessed February 10, 2016).

elephant group of the American Zoo and Aquarium Association, argued that zoos are a place where people can see animals that inspire more conservation efforts. Keele stated that “[the Oregon Zoo] use[s] elephants to get our visitors to care not only about elephants but other wild animals and wildlife conservation.”¹⁷⁹

¹⁷⁹ Cohn, “Do Elephants Belong in Zoos?”

Conservation and Care: “Caring Now for the Future of Life” (1993-2017)

Despite these issues, the Zoo is still doing its best and has been recognized for these efforts. Arguably the first nationally notable conservation and care endeavor at the Oregon Zoo was the first Conference on Environmental Enrichment (1993?). This was the first time environmental enrichment was publicly discussed as a valid behavioral science. Previously the argument was that it is difficult to assess animals’ “happiness.” This conference argued that environmental enrichment is a behavioral specialty that is justifiable as a true science as it contains:

controlled experimentation, systematic field studies, collaborations with pooled data from comparable settings, an infusion of computer-based technology, and [enhanced by] the discipline and context provided by theories of learning and behavioral ecology¹⁸⁰

According to the accounts of the conference, the Oregon Zoo was the “contemporary birthplace of zoo environmental enrichment.” This designation was primarily due to the efforts of Markowitz who as noted above in 1972 started one of the first behavioral enrichment programs at the Zoo.¹⁸¹

In 2015 the Association of Zoos and Aquariums (AZA) recognized Oregon Zoo for dozens of their projects including education programs, work in field conservation, work on green (sustainable) practices within their institution, and research initiatives. “The Oregon Zoo is on the leading edge of zoological exhibits in North America,” argued

¹⁸⁰ Shepherdson, Mellen, & Hutchins, *Second Nature*, 1.

¹⁸¹ *Ibid.*, 47.

Jim Maddy, the President and CEO of AZA in 2010.¹⁸² With the ongoing support of such an institution which primarily assesses the quality of care, education, and conservation, the Zoo is clearly doing some things right.

AZA recognizes fifteen of the Zoo's education programs including their Zoo Animal Presenters (ZAP), and the Urban Nature Overnights (UNO) which are led by ZAP participants. ZAP is a program intended for low-income teenagers that are recruited from local public schools and alternative schools as well as by social services.¹⁸³ The program offers ten lucky teens a 3-year paid internship that teaches them many skills in animal handling, public speaking, education, and conservation. First year ZAPs work with live animals and present information about them to children and families.¹⁸⁴ Second year ZAPs work with the Urban Nature Overnights and teach elementary children "outdoor recreation skills" while camping on Zoo grounds.¹⁸⁵ For their third year, ZAPs are a conservation team. Their work includes collecting native seeds to be used around the city, surveying animals and habitats in natural areas and national forests, as well as providing education about conservation to zoo camps and raising endangered butterflies in the Zoo's butterfly conservation lab.¹⁸⁶

The raising of Oregon Silverspot Butterflies is one of the numerous conservation efforts the Oregon Zoo has ongoing at any one time. AZA's 2015 report listed at least 40 of these programs. In 2001 the Oregon Zoo gained membership into the U.S. Fish and

¹⁸² Smith and Iverson, "125th Birthday," 17.

¹⁸³ *Ibid.*, 121.

¹⁸⁴ Pam McElwee, "Zoo Animal Presenters," Oregon Zoo, Accessed July 09, 2017, <http://www.oregonzoo.org/get-involved/community-outreach/zoo-animal-presenters>.

¹⁸⁵ *Ibid.*

¹⁸⁶ McElwee, "Zoo Animal Presenters."

Wildlife Service California Condor Recovery Program.¹⁸⁷ The Oregon Zoo's breeding facility is the second largest in the United States, but there remains some concern about reintroducing California condors into Oregon and Washington.¹⁸⁸ In 2013 there was a study published that voiced concerns that the carcasses that the condors would be feeding on along the Pacific Northwest coast were currently contaminated by things such as lead and pesticides.¹⁸⁹ The study determined that condors in Oregon were actually at a "lower risk for OC bioaccumulation" than those in their natural region of central California. Unfortunately, there was still evidence that the OC bioaccumulation was enough that the eggs of condors in the lower Columbia River Valley were significantly thinner than they should be, which poses a risk to their ability reproduce in the wild.¹⁹⁰

Despite setbacks such as this, the Zoo still works tirelessly towards conservation. In 2002 they started the Future for Wildlife program, which is in part funded by the Oregon Fish and Wildlife Endangered Species fund which uses fines from violated state wildlife laws to help the program.¹⁹¹ The Future for Wildlife program is really a partnership between the Zoo and the Oregon Zoo Foundation. The Foundation provides grants for local and global conservation efforts, and their grants have helped regional species such as the California Condors as well as global species such as the Giant Panda.

¹⁸⁷ "History," Oregon Zoo.

¹⁸⁸ Deke T. Gundersen, Deborah A. Duffield, Tina Randall, Nate Wintle, Dalin Dalessandro N., James M. Rice, and David Shepherdson. 2013. "Organochlorine Contaminants in Blubber from Standard Marine Mammals Collected from Northern Oregon and Southern Washington Coasts: Implications for Re-introducing California Condors, *Gymnogyps Californianus*, in Oregon." *Bulletin of Environmental Contamination and Toxicology* 90(3)(03): 269-73, <http://search.proquest.com/docview/1314572362?accountid=10248> (accessed February 9, 2016).

¹⁸⁹ Gundersen, et al., 269-73.

¹⁹⁰ Ibid., 269-73.

¹⁹¹ Rachel Smith, "Oregon Zoo," *The Oregon Encyclopedia*, Accessed February 8, 2016, <http://www.oregonencyclopedia.org>

¹⁹² A portion of the funding that the Oregon Zoo Foundation provides is dedicated specifically to species natural to the Pacific Northwest.¹⁹³ Available on the Zoo's website is a link to apply for grants, as well as lists of previewed Future for Wildlife grant projects, dating back to 2013 (Figure 8).¹⁹⁴



(Figure 8): The Columbia Basin pygmy rabbits are one of the smaller but nonetheless important animals grants the Future for Wildlife have helped. In 2013 \$3,500 was granted to the Washington Department of Fish and Wildlife to help re-establish the pygmy rabbit population in the Columbia Basin.¹⁹⁵

¹⁹² "Future for Wildlife program," Oregon Zoo, Accessed July 10, 2017, <http://www.oregonzoo.org/conserv/future-wildlife-program>.

¹⁹³ Ibid.

¹⁹⁴ Ibid.

¹⁹⁵ "Zoo awards \$25K in grants for Northwest conservation," Oregon Zoo, October 3, 2013, Accessed July 10, 2017. <http://www.oregonzoo.org/news/2013/10/zoo-awards-25k-grants-northwest-conservation>.

The Oregon Zoo is also interested in becoming “the greenest zoo in the country.”

¹⁹⁶ The Zoo and its owners (Metro) were interested in gaining a Leadership in Energy and Environmental Design (LEED) Silver rating in 2011.¹⁹⁷ By 2012, the Zoo’s Veterinary Medical Center had gained a Gold Certification due the fact that it was not only a superior medical facility, equipped to deal with the needs “from newts[?] to bears,” but included a “rainwater capture system, solar-heated water, and an energy efficient electrical system.”¹⁹⁸ These green initiatives are not solely implemented in the Zoo’s Veterinary Medical Center, but constructing the Center was simply the first opportunity to build completely with “sustainable materials and practices at every step.”¹⁹⁹

While scrolling through the Zoo’s website, it is impossible to avoid information about conservation. It is clear that this is a priority and a source of pride for the Oregon Zoo. As it should be: the Zoo has been awarded again and again for its work towards conservation, care, and environmental sustainability. In 2014 alone the Zoo received three awards from the Association of Zoos and Aquariums, the organization that is responsible for accrediting zoos nationally.²⁰⁰ That was the second year the Zoo had won three awards, it had occurred previously in 2012.²⁰¹ In 2016 the Zoo received their

¹⁹⁶ Nick Bjork, “Oregon Zoo Construction Projects Approved to Begin,” *The Wisconsin Law Journal*, September 26, 2011. Accessed February 8, 2016. Academic OneFile.

¹⁹⁷ Ibid.

¹⁹⁸ Ibid.

¹⁹⁹ “Sustainability.” Oregon Zoo. Accessed July 10, 2017.

<http://www.oregonzoo.org/about/sustainability>.

²⁰⁰ “Oregon Zoo wins national award for excellence, again.” Oregon Zoo. September 24, 2014. Accessed July 10, 2017.

<http://www.oregonzoo.org/news/2014/09/oregon-zoo-wins-national-award-excellence-again>.

²⁰¹ Ibid.

seventh award from AZA for conservation efforts.²⁰² In 2016 and 2017 the Oregon Zoo was also awarded at the Daily Journal of Commerce's (DJC) TopProjects ceremony, a program which honors "outstanding building and construction projects in Oregon and Southwest Washington."²⁰³ The DJC had in fact named the Oregon Zoo's new Elephant Lands a "Project of the Year," a title that 95 other contestants were vying for.²⁰⁴ This only touches on a few of the Zoo's awards. With all of this regional and national recognition, it is clear that the Oregon Zoo truly is held up as a national standard and a modern feat of conservation and care.

²⁰² "Oregon Zoo earns national conservation award for turtle program." Oregon Zoo. September 16, 2016. Accessed July 10, 2017.
<http://www.oregonzoo.org/news/2016/09/oregon-zoo-earns-national-conservation-award-turtle-program>.

²⁰³ "Zoo's new Education Center earns 'Top Project' awards." Oregon Zoo. May 19, 2017. Accessed July 10, 2017.
<http://www.oregonzoo.org/news/2017/05/zoos-new-education-center-earns-top-project-awards>.

²⁰⁴ Ibid.

Conclusion

Over the 129 years it has been in existence, the Oregon Zoo has gone through a metamorphosis. It managed to do so despite world wars, economic depressions, trying to balance care and costs, and public scandals and criticism. As the Zoo grew it increased involvement with local government as well as the public, made physical improvements, and focused on improving the welfare of its animals, all while dealing with criticisms concerning the welfare of those same animals. The Zoo struggles today to give its animals the best care while finding ways to help wild animal populations as well. It became clear that the Oregon Zoo's success was in large part due to the popular and political agents that encouraged its growth, as well as the public interest inspired by some of the Zoo's most beloved animals. The Zoo's growth and level of care would not have been possible without the passionate people who put time, money, and energy towards its consistent improvement.

This sense of individual and group agency proves an important point about how animal welfare evolves at institutions such as the Oregon Zoo as well as how these issues are seen in the broader culture. There was nothing inevitable about the progress seen at the Zoo – individual people took agency and achieved success, during at times difficult circumstances. It was not the passing of time that improved the Oregon Zoo, but the involvement and passion of different individuals over many years. Considering there are still improvements to be made, it is vital to understand what motivated these past actors and what kind of actions are necessary in the future to keep the Oregon Zoo headed in the right direction.

As I further understood the Oregon Zoo and saw the institution develop chronologically, so too did my appreciation grow of the broader American culture in which zoos exist. At the turn of the 20th century, zoological gardens were becoming much more common, but the American fascination with animals of all kinds and zoological gardens in particular started long before the Oregon Zoo was founded. The first chapter of this thesis explored a few of the theories explaining our species' intense interest in captive wild animals. Initially these animals were proof of how human "civilization" conquered the "wild." Both substantial parts of American literature and the early 20th-century environmental movement reinforced the concept of the divinity of nature -- including man's God-given dominion over animals -- as well as providing a way for humans to think about their relation to the rest of the world. As decades passed, standards of care at the Oregon Zoo and for the care of animals in Western culture more generally increased as concern for animals and the environment increased. Previous histories of zoological gardens tend to be structured similarly to this thesis, with a sense that each era "was a decisive improvement from the last."²⁰⁵ My fifth chapter, however, focuses on ongoing challenges and criticisms in an attempt to reflect the reality that "reasonable and humane treatment of animals has existed simultaneously with some unspeakable brutalities."²⁰⁶ Even though standards and relationships have changed, humans never seem to grow out of their *biophilia* (see page 12). The Oregon Zoo was and continues to be a snapshot of local and national feelings towards animals and their care, with all the complexities, blemishes, and triumphs that those feelings exhibit.

²⁰⁵ Uddin, *Zoo Renewal*, 5.

²⁰⁶ Hoage, "Deiss, and the National Zoological Park," *New Worlds*, 6.

The initial collection that started the Oregon Zoo was a menagerie, the natural predecessor to a zoological park. In chapter three we saw how the Zoo developed from this collection, exploring the rise of the Oregon Zoo, including its creation, growth, and the political and popular involvement that helped it to develop as it did into the 1960s. Richard B. Knight took in animals to relieve sailors of the responsibility for their care, and the city of Portland eventually accepted his bears as a donation for the same reason. The groundskeeper Charles Meyers was given the new, and demanding, job of zoo keeper, and gave the bears enclosures that got them out of their circus cages and into barless enclosures -- the quality of which would not be seen at the Oregon Zoo again until 70 years later.

The Oregon Zoo continued to grow and, nation-wide, zoos grew and improved conditions for their animals. In the 20th century more zoos included bar-less or moated exhibits. Just as the Oregon Zoo was gaining traction and developing into a notable facility, the *Oregonian* published an article criticizing zoos, and citizens wrote demanding that the Zoo close. Soon after the Zoo had to release its animals anyway due to the depressed state of the war-time economy. The *Oregonian* article, although a significant challenge for the Zoo at the time, actually signaled a positive movement in the history of zoos of all kinds. People were beginning to challenge the institution of zoos, and cared how humane the treatment of animals housed there was.

Rosy the Elephant's popularity, and more broadly the individuation of animal welfare, were other large steps towards people's emotional investment in the Zoo. With the help of Rosy to raise awareness of and elicit affection for the Zoo and its animal

charges, the proposal for a New Zoo was approved. Unfortunately, with the New Zoo behind schedule, animal mortality increased, causing the Zoo to have to make quick decisions to improve the animals' wellbeing. Soon, mortality levels fell again, and attendance at the Zoo increased. One aspect of the New Zoo clearly shows what can be done with the help of the community: The Portland Zoo Railway was a "true community-led undertaking" -- the result of John H. Jones' and Edward M. Miller's efforts and the assistance of train enthusiasts, suppliers, and even children. Although this ride is not an example of animal welfare itself, it does show how a large project can inspire many hearts and minds and create a pillar of the Zoo's public identity and value as a family destination.

Chapter four consists of some major developments in the Zoo's history. During the 1960s the whole country was gaining passion for environmentalism and animal welfare. The 1960s featured massive cultural shifts in almost every way. This decade also featured Rachel Carson's *Silent Spring* bringing light to environmental issues, the revelation of air pollution becoming visible (and inconvenient) in large cities, the first legislation being passed protecting endangered species, the founding of the Environmental Protection Agency, and the new category of "Animal Ethics" being recognized due to the book *Animal Liberation*. Thus, it is small wonder that the 1960s and 1970s saw massive cultural change in animal welfare as well. Packy was arguably another major change for zoo culture, not just at the Oregon Zoo but nationally. Packy had the emotional impact of Rosy but many times over because he was an especially rare sight as a baby elephant. He is why the Oregon Zoo became the leading facility in the

world in Asian Elephant care, breeding, and births. He is also the most recent reason the Zoo has had some major criticisms. But the emotional attachment the public had to the elephants at the Oregon Zoo is a major part of what helped it to grow to its current size and stature. Undoubtedly these animals have played the role of stars because the sizable, multi-million dollar renovation the Zoo recently made was intended to enhance Zoo life for elephants specifically.

The 1970s consisted of another sort of public involvement -- management and funding changed hands a few times as the Zoo was working towards enclosure improvements very much inspired and motivated by the studies that Hal Markowitz had been doing with the Zoo's primates. Markowitz is the person who really pushed the Zoo to evolve. He not only performed research, but his research led to improvements to enclosures. At the beginning of his research, total overhauls of enclosures were not possible, but Markowitz did his best to find ways for animals to control their own feeding if nothing else, giving them environmental enrichment and a sense of control in captivity. Evidence of remarkable outcomes can be seen at almost every zoo and aquarium in the United States if not beyond (Figures 9-10). Although not every form of environmental enrichment is one that Markowitz is responsible for developing, it is his work and the subsequent Conference on Environmental Enrichment held at the Oregon Zoo that brought attention to the complex and varied psychological and physical needs that all animals have.



(Figure 9): Image shows Oregon Zoo elephants at the “Squashing of the Squash” event, a form of environmental enrichment that occurs around every Halloween at the Zoo. It is not only the Zoo’s elephants that receive these pumpkins, although most animals receive much smaller versions.²⁰⁷

²⁰⁷ Asian elephants prepare to destroy and devour a 650-pound pumpkin at the Oregon Zoo, Digital image, Oregon Zoo, Accessed July 4, 2017, <http://www.oregonzoo.org/gallery/tags/enrichment?page=2>.



(Figure 10): Here is an otter at the San Diego Zoo, enjoying an eerily similar form of enrichment as the Oregon Zoo's elephants.²⁰⁸

Although the Oregon Zoo is at the forefront of environmental enrichment, my fifth chapter laid out contemporary concerns and criticisms of the Zoo. Many of these involved the Zoo's elephants, although today and in eras past there were plenty of concerns beyond the pachyderms (Figure 12). Criticisms can be a good thing -- if not for the Zoo, then for the animals. Criticisms, even ones with incorrect information, mean that the public is paying attention to the animals and is concerned and emotionally involved with their welfare. That being said, simple criticism does not make a good zoo. Some

²⁰⁸ "Otters," Digital image, San Diego Zoo, Accessed July 4, 2017, <http://blogs.sandiegozoo.org/tag/enrichment/>.

criticisms, however, are well founded, and ideally by drawing attention to them the institution will be forced to improve, possibly with the help of concerned external parties.

Despite such criticisms the Oregon Zoo has often been recognized on the national scale. Holding the first Conference on Environmental Enrichment established the Zoo as *the* authority on environmental enrichment. Since that 1993 conference, the Zoo has developed countless other programs, many of which have earned awards from the Association of Zoos and Aquariums (AZA). The awards are not what is important; what is important is what the awards represent. They represent outstanding achievement in conservation and animal care. Each award reflects a project that succeeded at improving conditions for captive and/or wild animals. Even though the Oregon Zoo faces significant problems like all organizations, this major association (AZA) that accredits zoos and aquariums believes that this one zoo meets all important criteria for animal welfare and breeding. The Zoo is working tirelessly towards educating future generations, encouraging community involvement in animals' care, and conserving wildlife while those animals are still capable of inhabiting the wild.

The Oregon Zoo was founded due to the kindness and generosity of one pharmacist, but its fate is in the hands of the local community at large. Holding the institution to the highest standards will only improve it further. Decades of criticism and work are what helped it achieve the level of success it enjoys today. We can hope that the Zoo's leadership, political allies, and public supporters will uphold this historical tradition of kindness and generosity toward animals.

| Development | How it improved the Oregon Zoo or increased its public recognition |
|--|---|
| Richard Knight donated his collection to the city of Portland (1888). | This was the first step of a personal collection turning into a zoo. |
| Lewis and Clark Exposition (1905) | This world's fair brought attention and business to Portland, putting it on the map as a major American city. |
| Superintendent Keiser set funds aside for Zoo improvement (1924). | Besides the initial acceptance of Knight's bears by the mayor and city council, this was the first time the Zoo had received attention and assistance from the city. |
| Portland City Club recommended a "New Zoo" (1951). | This recommendation gave the Zoo a plan for improvement and the funds to achieve it. |
| Rosy given to the Oregon Zoo (1953). | Rosy was the first ambassador/celebrity animal at the Zoo. She became the main attraction that brought thousands of visitors to the Zoo, and helped them build an emotional attachment to a zoo animal. |
| Packy was born (1962). | Packy eclipsed his mother's celebrity. He brought national attention to the Oregon Zoo, and his birth helped the Zoo to reach |
| Developments in national animal rights: First legislation on endangered species passed (1966), and EPA founded (1970). | These events reflect a major shift in American values and opinions. |
| Hal Markowitz researched environmental enrichment at the Oregon Zoo (1972). | Markowitz's research has influenced countless institutions since. We can see the signs of his approach to environmental enrichment in almost every zoo in the United States. His efforts are also what inspired the first conference on environmental enrichment, a conference that still occurs every two years. |
| The Oregon Zoo "reordered their priorities" to "emphasize recreational and educational potentials" (1976). | This change brought the Zoo one step closer to the institution we recognize -- one focused on education about conservation and animal welfare. |
| First Conference on Environmental Enrichment (1993) | This conference wet the Oregon Zoo as the national authority on environmental enrichment and brought the concept of environmental enrichment to a national audience. |

| | |
|--|--|
| Future for Wildlife program founded (2002) | This program sets aside funds specifically for conservation efforts. Projects planned under and funded by this program have proven to have notable impact on the earth. Several of these projects have also been recognized nationally, drawing attention to the cause and to the Oregon Zoo itself. |
| The Zoo's Veterinary Medical Center received a LEED Gold Certification (2012). | This was the first building the Zoo had the opportunity to build with "sustainable materials and practices at every step." |
| The Oregon Zoo received three awards from AZA (2012 & 2014). | The awards represent outstanding achievement in conservation and improving conditions for captive and wild animals. |
| Elephant Lands named "project of the year" by the DJC (2017). | Despite 2017 being a year of loss and controversy surrounding the Zoo's elephants, the Oregon Zoo was recognized for the improvements and outstanding planning and construction that had gone into their newly opened Elephant Lands. The project was not only a feat of planning and construction, but was a notable improvement in the elephants' living conditions. |

(Figure 11): This chart summarizes particular developments in the history of the Oregon Zoo that help clarify responses to the first of the study's two research questions.

| Challenge | How this hurt the zoo + How it was handled or How it could have been handled |
|---|---|
| An <i>Oregonian</i> article denounced zoos as inhumane, prompting people to write to the Zoo demanding it be closed (1909). | This controversy would have been a great opportunity to ask for donations to better improve conditions from people suddenly concerned about the wellbeing of the animals. Many people may have refused because they had decided that they were anti-zoo, but even a few more interested parties could have helped the struggling zoo at the time. |
| America's involvement in WWI (1917-1918) | The war-time economy forced the Zoo to downsize and took politicians' attention elsewhere. Some animals were sold, while others, such as the elk, were released. This development was of course not up to the Zoo completely, and wars are a recurrent theme for severely reduced budgets of a variety of institutions. |
| WWII | Funding for the Zoo was cut, and construction was "deferred for the duration" of the war. Considering these limitations, the Zoo did keep interest and attendance up because the parks service in particular focused on attracting to women and children at home. |
| Penguin colonies were ready to be included, but their enclosure was not (1957). | The penguins were kept at Peninsula Park pool where half of them died. Ideally the penguin enclosure would have been finished before the animals were brought to Portland. Penguins still may have died from the stress of the move, but likely fewer if they were settled in conditions better equipped for them. |
| Packy's 51st birthday was protested by animal rights organizations (2013). | Unfortunately, this protest drew attention to the Oregon Zoo for the wrong reasons and has made it vulnerable to other criticisms. It did demonstrate public passion especially about the Oregon Zoo's elephants, which can be useful to the Zoo's mission. |
| Have Trunk Will Travel scandal (2013) | Lily and Rose-Tu are still together. The Zoo made an announcement to clear up confusion, <i>including thanking people for being so passionate because that is the kind of passion they too feel about animal welfare</i> . This kind of encouragement I believe is what is key to improving poor conditions and facing future challenges. Community passion and interest in elephants has been vital to the Zoo making the improvements that they have. |
| Packy's euthanization (2017) | Packy's euthanization was extremely controversial and has damaged the reputation of the Zoo, even as their state-of-the-art Elephant Lands were unveiled and awarded. |

(Figure 12): This chart summarizes particularly acute challenges that the Oregon Zoo has faced over its history and how some of those challenges were addressed. This figure provides responses to the second research question driving the study.

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