AN OPTIMAL FUTURE
for Woodland Park Zoo Elephants

by Lisa Kane, JD

A Report in Collaboration with Friends of Woodland Park Zoo Elephants

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PREFACE

This report, authored by Lisa Kane, JD, in collaboration with Seattle community group Friends of Woodland Park Zoo Elephants, addresses the current status and future of the Woodland Park Zoo's three elephants. The report explores community concerns for the well-being of Chai, Bamboo and Watoto, and identifies foreseeable costs, risks and benefits associated with allowing them to retire.

The purpose of this report is to encourage a well-informed debate on the merits of a competing vision for the Zoo's elephants' future. All parties contributing to the report believe that the Seattle community wants to provide the best possible future for the Zoo's resident elephants. We are committed to promoting an outcome that benefits the Seattle City Council, Office of Mayor, and Woodland Park Zoo, and that strengthens their reputations as responsive, enlightened, and progressive institutions.

Neither the author, members of the community group, nor any contributor has a direct or indirect financial interest in the outcome of this matter.

ABOUT THE AUTHOR

Lisa Kane, JD

Lisa Kane, JD, is a retired attorney residing in the Queen Anne neighborhood of Seattle. She has written, traveled and spoken on elephant issues since 1999. She co-founded the Coalition for Captive Elephant Well-Being in 2004, addressed the national convention of the Association of Zoos and Aquariums (AZA) on elephant welfare issues in 2005, and co-edited and co-authored *An Elephant in the Room: The Science and Well-Being of Elephants in Captivity* (2009). She also authored *A Case Study of African Elephants' Journey from Swaziland to U.S. Zoos in 2003: A Question of Commerce and a Tale of Brinkmanship*, published in 2010 by the *Journal of Animal Law,* Michigan State University College of Law.

CONTRIBUTORS

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Gay Bradshaw, Ph.D., Ph.D., holds doctorates in ecology and psychology. She directs the Kerulos Center and is president and co-founder of the Trans-Species Institute. She frequently discusses the psychology of elephants and other animals in the national media and is author of *Elephants on the Edge, What Animals Teach Us About Humanity,* Yale University Press 2009 and is co-author of *An Elephant in the Room: The Science and Well-Being of Elephants in Captivity* (2009).

David Hancocks

David Hancocks was director of Woodland Park Zoo, 1976-1984, and subsequently led the Arizona-Sonora Desert Museum in Arizona, 1989-1998, and Werribee Open Range Zoo, Victoria, Australia, 1998-2003. He is author of *A Different Nature: The Paradoxical World of Zoos and Their Uncertain Future* (2001), finalist for the Los Angeles Times' Best Science Book of the Year Award, co-author of *Elephants and Ethics* (2008), the Smithsonian Institution's seminal volume of scientific literature on elephants, and co-editor and co-author of *An Elephant in the Room: The Science and Well-Being of Elephants in Captivity* (2009).

Keith Lindsay, Ph.D.

Keith Lindsay, Ph.D., is an elephant ecologist, having worked in research and conservation with the Amboseli Elephant Research Project/Amboseli Trust for Elephants (Kenya) since 1977, where he currently sits on their Scientific Advisory Committee. He has also been involved in elephant management in southern Africa and in the well-being of captive elephants in Europe and North America during the past ten years. He obtained a Ph.D. from the University of Cambridge for his studies in Amboseli and is now based in Oxford, where he works for a small consultancy firm specializing in international development and natural resource management.

Joyce Poole, Ph.D.

Joyce Poole, Ph.D., spent 30 years as a key field biologist with the Amboseli Research Project, Amboseli Trust of Elephants, Nairobi, Kenya. Her work focused on elephant reproductive and social behavior with special emphasis on communication. She is director of ElephantVoices, an international project dedicated to elephant research. She is the lead author of *The Elephant Charter* and co-author of *Elephants and Ethics* (2008) and *An Elephant in the Room: The Science and Well-Being of Elephants in Captivity* (2009).

Mel Richardson, DVM

Mel Richardson, DVM, as zookeeper and later veterinarian, has cared for African and Asian elephants in zoos, wildlife parks, circuses and sanctuaries. He was associate veterinarian at Woodland Park Zoo from 1989 to 1991 where he cared for Watoto, Bamboo and Chai. In all, his career caring for captive wildlife spans 42 years.

Dr. Dame Daphne Sheldrick, DBE, MDB, MBS, DVMS

Dr. Dame Daphne Sheldrick, DBE, MDB, MBS, DVMS, is the Chair of the David Sheldrick Wildlife Trust, Nairobi, Kenya. She has operated the Orphaned Elephant Project for 25 years and was recognized as the 1992 UNEP Global 500 Laureate, won the BBC Lifetime Achievement Award in 2001, and received a knighthood from Queen Elizabeth II in January 2006. Daphne Sheldrick has campaigned tirelessly at an international level against the abuse of captive animals. Through four books, an autobiography due out in March 2012, numerous articles, lectures and television appearances, and an Imax 3D film "*Born to be Wild*," she has promoted wildlife conservation worldwide.

Peter Stroud

Peter Stroud has worked in major Australian zoos for 23 years as keeper, curator and director. From 1993 to 2003, he was active in the development of zoo elephant management in the Australasian region. He now works as an independent consultant. He is a member of the Asian Elephant Specialist Group of the IUCN Species Survival Commission and is a co-author of *An Elephant in the Room: The Science and Well-Being of Elephants in Captivity* (2009).

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EXECUTIVE SUMMARY

1. Historic Context

Zoo professionals unanimously agree that elephants are the most expensive and difficult animals to keep in captivity. The Woodland Park Zoo (the Zoo) currently holds three, unrelated, aging female elephants: Bamboo, 45, Chai, 32 and Watoto, 42,[1] at an estimated cost of about $400,000 each year.

The Zoo acquired elephants decades ago, long before accurate, science–based knowledge of elephant biology and ecological evolution was established. Scientists now know that elephants have flourished on the planet for nearly 40 million years, evolving into creatures whose cognitive abilities are similar to or surpassed only by humans and certain great ape and marine mammal species.[2] Female elephants are intensely gregarious; their experience of life is marked by the fidelity of lifelong social connection and attachment to their female kin. All elephants are physically vigorous and non–territorial, routinely covering 7 miles a day or more foraging, exploring, socializing, and seeking out resources in a core home range of 15 to 11,000 square miles.[3] Elephants in the wild are remarkably fertile.[4]

2. The Zoo's Elephants Suffer Environmental and Social Hardship

The Zoo's three elephants have been continuously confined for decades in a series of paddocks totaling approximately one acre in aggregate. Two key features of a wild female elephant's life are almost wholly absent from their experience: (1) a large, complex range and habitat in which the animal's competence and autonomy are promoted through the long arc of their lives; and (2) a healthy, natural elephant social system marked by deep attachments between and among them.

A fundamental requirement of female elephants is membership in a bonded social group.
Photo credit: Joyce Poole/Petter Granli. Amboseli National Park, Kenya.

The elephants are commonly observed standing in their tiny paddocks, ignoring one another. When outdoors, they spend considerable amounts of time in front of feeding stations, consuming hay and other edibles placed by Zoo staff. Most natural vegetation, whether inside the exhibit or on its edge, is beyond the elephants' reach due to hot-wired fencing.

The smallness, the sameness, the tedium of the Zoo environment deprives the elephants the opportunity to use and enjoy their great brains and their great bodies. Based on our observations over the past four years, the Zoo's elephants do not move with vigor, climb, swim, roll in mud or dust, rub on or knock down trees, pull apart browse or root balls, move with purpose to explore new devices or temporary installations of scent or stimulating objects, nor enjoy varied, changing sight lines, whether short or long. Why is this so? Because there is precious little in their environment providing the opportunity for them to engage in this ordinary, natural behavior. The Zoo does not maintain mud wallows for them, does not routinely rotate interesting objects they might manipulate in and out, does not provide temporary plantings for them to knock down or strip or trample, nor routinely move in mounds of dirt of sufficient size for them to shape into berms for climbing or for leaning against for a lovely long nap on a summer's afternoon.

The smallness, the tedium of the Zoo environment denies the elephants the opportunity to use and enjoy their great brains and their great bodies.

1 Timeline of their acquisition and life histories at the Zoo appears in Appendix 1.

2 Woodard, C. June 26, 2011. "The Intelligence of Beasts." Chronicle Review/The Chronicle of Higher Education. Accessed at http://chronicle.com/article/The–Intelligence–of–Beasts/127969 on July 2, 2011.

3 Sukumar, R. 2003. *The Living Elephants.* New York: Oxford University Press.

4 Lee, PC and Moss, C. (2009) "Welfare and Well–being of Captive Elephants: Perspectives from Wild Elephant Histories in *An Elephant in the Room: the Science and Well–Being of Elephants in Captivity,* eds. Forthman, D. Kane, LF, Hancocks, D., and Waldau, P. Tufts University Center for Animals and Public Policy, North Grafton: MA.

Left: One acre elephant yard separated into five tiny paddocks bordering Highway 99. The yard is flat and unchanged since it was designed in 1986. The elephants' sightline for over 25 years has been walled in by trees. The trees are fenced off, making them inaccessible for the elephants to engage in the most basic natural behaviors. Picture of WPZ sign.

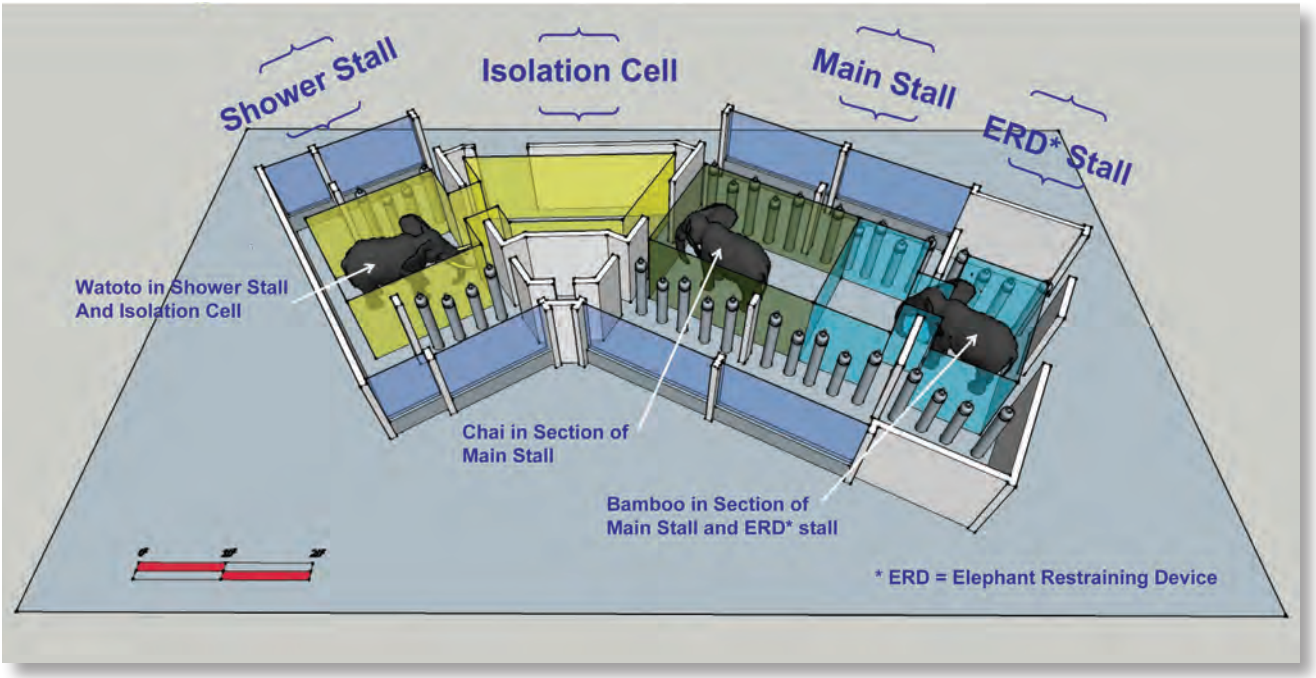
Middle Left: Paddock #2 with a ball, logs chained in place, and plastic garbage can feeding station. Small and unchanged in years, the size and features are similar to the other paddocks.

Middle Right: Partial view of Paddock #4 with ball, 55 gallon metal drum feeding station, and logs, all unchanged in years.

Above left: A tree and a bush, features that would stimulate an elephant's natural foraging and exploratory behavior, are separated from them by hot wire. Paddock #4.

Above right: View of paddock #3: flat, monotonous, compacted substrate, one garbage can feeding station (outside camera view) and a small, artificial, chlorinated water feature. In more than 150 observations over 4 years, the elephants have not been seen swimming, bathing nor playing in the water.

Representation of Watoto, Chai, and Bamboo in their Stalls



Scale diagram of elephant barn stalls in which Watoto, Chai and Bamboo are locked for 16-17 hours a day for over half of the year. Shower stall: 23′ x 22.5′. Main stall: 23′ x 37.5′. Elephant Restraining Device (ERD) stall: 23′ x 15′. Isolation room dimensions not available.

Even worse, during Seattle's seven long months of often cold, wet, inhospitable weather, the elephants are effectively immobilized on an impenetrable surface inside a 2,500 square foot concrete barn space for 16–17 hours out of every 24.[5] Chai and one of the other elephants occupy the main stall space, about the size of a three–car garage, often separated from one another by a hot wire. The elephant not placed with Chai finds herself locked in the barn's steeply sloping shower room, a space linked to an isolation stall, both of which equal the size of a small two–car garage. This means that at least one elephant is locked in virtual solitary confinement every night the barn is used.

3. Local Weather and the Zoo's Small Space and Substrates Cause Elephants Unnecessary Physical Suffering

The impact of the impoverished, small space in a frequently cold and wet climate has led the Zoo's elephants to suffer painful chronic medical disabilities. Mel Richardson, DVM, formerly an associate veterinarian at the Zoo, has reviewed more than 2,900 pages of veterinary records of the Zoo elephants. His report makes two key points: (1) all three elephants suffer from chronic, painful skin conditions caused by the cold, wet climate of Puget Sound; and (2) they suffer from foot and skeletal ailments consistent with living for years on hard indoor and outdoor surfaces.[6] Foot disease in captive Asian elephants is especially worrisome since it is identified as a cause of premature death.[7]

4. The Zoo's Aggressive Breeding Program Does Not Aid Conservation and Diminishes Chai's Welfare

In the midst of this poor physical environment and long history of physical misery and suffering, the Zoo continues its breeding program, pouring effort and money to advance its ambition. For the past 20 years, the Zoo has subjected Chai to 58 artificial insemination procedures. All failed. In 2000, Chai delivered a calf named Hansa, after Chai was shipped to Missouri to breed with a bull.

5 Bruce Upchurch, WPZ Curator, reported, "The elephants get out 7–8 hours a day" at the December 2, 2008 Zoological Board of Directors meeting. (Personal comm. of Alyne Fortgang, November 12, 2011.)

6 Dr. Mel Richardson's Statement is located in Appendix 4.

7 Foot health is of vital concern. Infections related to elephant foot disease are the leading cause of death in captive Asian elephants. Kaufman G. and J. Martin. 2009. "Health as an indicator of well–being in captive elephants." *In An Elephant in the Room: The Science and Welfare of Elephants in Captivity.* eds. Forthman, D., Kane, L. Hancocks, D. and P. Waldau. North Grafton, MA: Tufts University's Center for Animals and Public Policy.

Watoto in Shower stall after 17 hours, observed pacing in her own feces and urine. Videos of this can be viewed on Friends of Woodland Park Zoo Elephants web site: www.freeWPZelephants.org.

Chai in her side of Main stall at the beginning of her 16.5 hour lockup.

Bamboo on her side of Main stall separated from Chai by electrified wire cable. The interior of the barn is barren. Food stations are only enrichment provided during the elephants' lockup. The value of this enrichment ends when food supplies run out.

Bamboo standing in windowless ERD stall at beginning of her 16 hour lockup.

Although the Zoo claims its breeding efforts are directly tied to conservation of the species, the Zoo has no intention of breeding Chai to return her or her calf to the wild, the accepted measure of ex–situ wildlife conservation.

Sadly, Hansa died at age six from an elephant endotheliotropic herpes virus (EEHV) infection, a disease almost wholly confined to zoo environments. Despite Hansa's death from EEHV, the Zoo remains firmly committed to artificially inseminating Chai.

We believe the Zoo's actions are unwise, unwarranted, and deeply antithetical to Chai or her calf's well–being. An active EEHV infection is painful and almost always lethal to Asian calves. Watoto tested positive as an EEHV carrier in 2008. The Zoo has no publicly announced virus infection control program in place. The disease has no cure. Although the mode of transmission is not known, similar herpes viruses are transmitted through close contact from animal to animal.[8] Dr. Laura Richmond, pathologist with Smithsonian's National Zoo in Washington, D.C., was quoted in the Seattle Post Intelligencer in December 2007 as saying: "Hansa would have gotten it (EEHV) from another elephant. Hansa had not left Woodland Park Zoo since she was born, which suggests the virus was passed from one of the zoo's other elephants, either her mother Chai, or Watoto, or Bamboo." [9]

Still, the Zoo remains determined to impregnate Chai. It is not dissuaded by its own expert knowledge that the elephant exhibit and at least one of the elephants who lives in it harbors a potentially lethal herpes virus that will kill any calf of Chai's who comes in contact with it. This apparently callous disregard for the unborn calf's well–being or the risks to Chai attendant to any pregnancy or the psychological devastation to Chai if she were to lose another calf is unreasonable and deeply objectionable on ethical grounds.

Although the Zoo claims its breeding efforts are directly tied to conservation of the species, the Zoo has no intention of breeding Chai to return her or her calf to the wild, the accepted measure of *ex–situ* wildlife conservation.[10]

Consistent with Woodland Park Zoo's medical records, Chai is being treated for urine scald in November 2011. Chai's painful skin conditions are a predicable consequence of her being confined in tiny barn stall. Unlike free roaming elephants, she is unable to avoid stepping and splashing in her own urine.

Bamboo being treated for an unhealthy foot. Foot disease is the leading cause of premature death in Asian elephants in zoos.

We are left to conclude the Zoo's claim is false.[11]

As for breeding Chai in order to promote an "insurance" population in Association of Zoos and Aquariums (AZA) zoos, AZA–sponsored research discloses that AZA accredited zoos will be unable, even given 100 years and the most optimistic assumptions imaginable, to maintain their current elephant population.[12] The hard truth is that

8 http://seattlepi.nwsource.com/local/322086_elephant03.html.

9 http://seattlepi.nwsource.com/local/342326_elephant05.html.

10 Zimmerman, A. 2010. "The Role of Zoos in Contributing to In Situ Conservation" in *Wild Mammals in Captivity*, eds. Kleiman, D.G., Thompson, K.V., and C.K. Baer. Chicago and London: University of Chicago Press.

11 The IUCN's African Elephant Specialist Group recognized via formal resolution in 1998 that in light of zoos' poor breeding success and low life expectancy, it did "not see any contribution to the effective conservation of the species through captive breeding per se."

12 Faust, L.J., Thompson, S.D., and J.M. Earnhardt. "Is Reversing the De-

The elephants at the Zoo comprise a group of asocial or socially isolated individuals, each of whom has been denied the central social feature of natural elephant life: lifelong membership in its maternal family and the lifelong affection and support such membership bestows.

elephants in AZA zoos are headed to extinction. This grim prognosis is attributable to appalling rates of infant mortality (reportedly 48 percent of calves born in zoos compared with approximately 7 percent of calves born in Amboseli National Park, Kenya, annually[13]), massive numbers of non–cycling females, and a high incidence of unsuccessful artificial inseminations.[14] Of course, this losing game is on full display at our Zoo: its handling of Chai and Hansa is sad evidence of the first and third factor; Bamboo and Watoto's infertility is plain evidence of the second.[15]

5. The Zoo Cannot Meet its Elephants' Social Needs

Putting aside for a moment the shortcomings of the Zoo's small space, its arguably inadequate occupational and enrichment programs, and its futile breeding ambitions, there is the equally dispiriting matter of the elephants' social privation at the Zoo. The elephants at the Zoo comprise a group of asocial or socially isolated individuals, each of whom has been denied the central social feature of natural elephant life: lifelong membership in its maternal family and the lifelong affection and support such membership bestows.[16]

The most obvious victim of the social poverty of the

Watoto, now 42 years old and the sole African elephant at Woodland Park Zoo, has not seen nor been in the company of another African elephant since she arrived at the Zoo as a baby in 1971.

Bamboo's unnatural behavior of pressing her head against a gate or post. *Copyright 2011. Denise Tabor.*

Bamboo hanging her trunk over fence in unnatural behavior of "fence hugging."
Copyright 2011. Denise Tabor.

Zoo's elephant program is Watoto. She has not laid eyes on another African elephant since she was an infant, some 40 years ago. Denied such companionship, it is difficult to imagine a greater cause for a female elephant's

cline of Asian Elephants in North American Zoos Possible? An Individual–Based Modeling Approach." *Zoo Biology* 25:201–218 (2006)

13 Personal communication to author from Cynthia Moss 2005.

14 Faust, L. 2005 Technical Report on Demographic Analyses and Modeling of the North American African Elephant Population; Faust, L. 2005. Technical Report on Demographic Analyses and Modeling of the North American Asian Elephant Population.

15 Since 1998, the Zoo has contributed approximately $19,366.72 per year to wild elephant conservation. In contrast, the Zoo spent approximately $300,000 to $400,000 per annum over the same period to maintain its elephants. Please see footnote 30 for further discussion of Zoo expenditures on its elephant program.

16 Females remain in the family herds into which they are born. The depth and fidelity of their familial attachment is unparalleled by most of the animal kingdom. It certainly surpasses human attachment customs.

Given that "affinity for gregariousness – being with other elephants – is a basic elephant 'need,' " it is difficult to overstate the magnitude of suffering and unnaturalness conveyed by the Zoo's elephants' striking preference for social isolation from one another.

sense of despair. But, regardless of species affiliation, the behavior of the Zoo's elephants, whether Asian or African, discloses that they are socially dysfunctional, having failed to bond with one another.[17] They do not routinely seek each other out, drape their trunks on one another, lean into each other, nor exhibit any of the other unmistakable gestures of elephant social connection. Whichever the underlying cause of their profound social dysfunction – being torn from their mothers as infants, decades of harsh treatment before the Zoo finally gave up bull hooks in 2002, or being transferred in and out of the Zoo – the Zoo has failed to meet their individual need for a deep, enduring attachment to another of their species.

Female elephants spend their lives in the company of other elephants. Female elephants, whether African[18] or Asian, are highly dependent upon relationships with other elephants, relationships that endure for a lifetime. Given that "affinity for gregariousness – being with other elephants – is a basic elephant 'need,' "[19] it is difficult to overstate the magnitude of suffering and unnaturalness conveyed by the Zoo's elephants' striking preference for social isolation from one another.[20]

Accurate depiction of free-ranging elephants (here, Asian elephants in Sri Lanka) experiencing the scale and complexity of a lush home range in the comfort of their bonded social group.

Elephants at The Elephant Sanctuary in TN, enjoying a swollen creek after spring rains. This bonded group is engaged in synchronized behavior – exploring, bathing, and playing – in a complex, natural environment as they would in the wild. *Photo credit: The Elephant Sanctuary in Tennessee.*

Chai ignoring Watoto, choosing the behavior of "gate hugging" rather than the healthy behavior of engaging with another elephant. The elephants' preference for social isolation and rejection of the artificial water feature attests to the social and ecological poverty of their zoo life compared to the life of elephants in sanctuary or the wild. In observations spanning four years, the elephants have never been seen going into the water.

A second indicator of the elephants' suffering is their daily displays of stereotypic behavior.[21] [22] Stereotypic behavior is behavior not observed in the wild:

- Chai is frequently observed rocking back and forth on her front legs while bobbing her head up and down in a fixed, predictable manner.
- Bamboo paces in counter–clockwise circles while swiveling her head. At other times, she can be

17 Bonding is defined as both positive conduct seeking proximity and physical contact (like touching, entwining trunks, laying their trunks on one another's back, or resting or standing together with sides touching) as well as low levels of agnostic behavior to the other. Siedensticker, J., Doherty, J.G. 1996. "Integrating animal behavior and exhibit design" in *Wild Mammals in Captivity: Principles and Techniques*. Eds. Kleiman, D.G., Allen, M.E. Thompson, K.V. and S. Lumpkin, eds. Chicago, IL: University of Chicago Press.

18 Moss, C. and P. Lee. 2011. Female Social Dynamics: Fidelity and Flexibility, in *The Amboseli Elephants: A Long–Term Perspective on a Long–lived Mammal*. Eds. Moss, C., Croze, H., and P. Lee. Chicago, IL: University of Chicago Press.

19 Lee and Moss, *supra*.

20 Gay Bradshaw, Ph.D., Ph.D., identifies a–sociality as a species–aberrant psychological state. See Dr. Bradshaw's "Psychological Assessment of Elephants" at Appendix 8.

21 Stereotypic behavior is defined by Dr. Bradshaw as: "excessive and repetitive pacing, swaying, chewing, grooming. Dr. Bradshaw explains that such behavior is the consequence of trauma and chronic stress affecting the animal's brain function and predictably leading to species aberrant psychological states. See Dr. Bradshaw's "Psychological Assessment of Elephants" at Appendix 8.

22 Elephants' stereotypical behavior can be viewed on Friends of Woodland Park Zoo Elephants' website.

seen at the steel gates and fence posts alternating between pressing her head against them or hanging her trunk over them.

- Watoto, typically ignoring her exhibit mates, spends her unoccupied time standing in place, apparently withdrawn from everyone and everything. When confined to the barn's shower and quarantine rooms, she frequently paces in circles or stands before the steel door leading to the main part of the barn swaying from side to side.

As Dr. Bradshaw notes in her statement in Appendix 8, the ongoing daily expression of such stereotypy amounts to ongoing evidence of their unnatural and unhealthy levels of suffering.

Joyce Poole, Ph.D., noted: "In over 34,000 sightings of elephant groups [in the wild ranging in size from one animal to groups of 500 animals] not one elephant has been seen swaying rhythmically back and forth or showing other neurotic behavior – ultimately caused by lack of space."

6. The Zoo's Elephant Program Conveys Little Educational Value to Zoo Guests

Another signal failure of the exhibit is its inability to convey educational value to zoo guests. How do we know? Because almost nothing in the exhibit bears a "visual, ecological or other resemblance"[23] to real Asian or African habitat. Even worse, nothing about the elephants' behavior remotely resembles their natural lives.

Examined from the point of view of value to the Zoo's resident elephants or resemblance to the animals' home range, the elephant exhibit is utterly inadequate. Neither the barn nor paddocks offer Chai and Bamboo an environment they can touch and manipulate as they would the wet, lush tropical or semi–tropical forests of their home range. The same deficit is true for Watoto. The Zoo's exhibit fails to create a believable facsimile of her native savanna or forest range. Rather than seeing something that reasonably suggests the complex spatial, visual or tactile qualities of the physical environments to which Asian and African elephants are native, Zoo guests see small, unnatural paddock spaces, each holding a socially isolated elephant, perhaps resting its trunk on a gate, or the sad spectacle of one or more of them pacing, rocking, shuffling, or swaying in place.

The exhibit fails to convey educational value to Zoo guests because almost nothing in it nor the animals' behavior bears a reasonable resemblance to elephant life in the wild.

Precisely because the Zoo cannot provide a fraction of the scale nor complexity of an elephant's home range nor the comfort and stability of membership in a bonded group, the Zoo's message to the public about elephants and their lives is scientifically inaccurate, misleading, and unacceptable.

The Zoo's generic assertion that viewing elephants has a "huge" positive impact on visitors is little more than a cherished industry belief. Industry–funded research has been unable to discover statistically significant data showing any change in guest attitudes or values following a visit to a zoo.[24] Non–industry funded research categorically discloses no change in guest attitudes nor, sadly, any increased financial support of wildlife conservation by guests following visits to zoos.[25]

7. The Problems Associated with Exhibiting Elephants At the Zoo Cannot Be Remedied by the Zoo

Given the deprivations inherent in the Zoo's present treatment of its elephants and the onerous financial burden of altering even a few physical aspects of their lives, we question whether the life our elephants experience at the Zoo is worth continuing, worth supporting, worth defending, and worth paying for.

The Woodland Park Zoo, like most other zoos, is confined to a small, rigid, urban footprint. It holds unrelated elephants in a small space with almost no natural features. Even if the Zoo possessed the will and vision to

23 Hancocks, D. 2001. *A Different Nature: The Paradoxical World of Zoos and their Uncertain Future.* Los Angeles, CA: University of California Press.

24 Falk, JH, et al. 2007. "Why Zoos and Aquariums Matter: Assessing the Impact of a Visit to a Zoo or Aquarium." Silver Spring: MD. AZA, concluded that visits merely "reinforced" and "supported" pre–existing attitudes and values of zoo guests. See further discussion in Appendix 7.

25 Smith, L., et al. 2008. "A Closer Examination of the Impact of Zoo Visits on Visitor Behavior" *Journal of Sustainable Tourism* 16:544–562; Marino, L., et al. 2010 "Do Zoos and Aquariums Promote Attitude Change in Visitors?" *Society and Animals* 18: 126–138.

Zoo Name	Year Opened	Cost of Exhibit	Size	Number of Elephants
San Diego Zoo	2009	$45 Million	2.5 Acres	7 Elephants
National Zoo (D.C.)	2010	$52 Million	2 Acres	3 Elephants
Los Angeles Zoo	2011	$42.5 Million	3.6 Acres	4 Elephants

do so, it lacks the capacity to give its elephants the range of environmental and social options critical to impart the psychosocial, physical, or cognitive skills that define the species. The Zoo is powerless to alter the climate to one more elephant–friendly. Because the overall numbers of elephants in U.S. zoos is in decline, there is little hope of the Zoo acquiring additional elephants to provide Watoto, Chai, and Bamboo a richer, more natural social environment.[26] Any addition of more elephants would only exacerbate the inadequacies of the Zoo's exhibit, unless the Zoo is prepared to raise and spend tens of millions of dollars to expand and improve it.[27]

Given the zoo industry's own forecast of its elephant population's inexorable extinction, such expenditure would appear foolish. The Zoo has no announced plans to expand or improve their living condition through 2015. Assuming, therefore, that the elephants remain at the Zoo under present conditions of confinement, their future is highly predictable: a steady worsening of their physical and emotional disabilities as they age, all at an annual cost of about $400,000[28]

Two bonded elephants napping in the sun at PAWS ARK 2000, California. In more than 150 observations over four years at Woodland Park Zoo, the elephants have never been observed lying down outdoors or in the barn. *Photo credit: PAWS ARK 2000*

8. Retiring the Zoo's Elephants to Sanctuary makes Economic, Ethical Sense

The City of Seattle is not captive to the Zoo's dated, uninspiring vision. Viable options are within reach to provide our elephants a high quality of life, a life they might enjoy, a life carried out in huge, natural spaces in a warm, elephant–friendly climate in the company of their respective elephant species.

PAWS' ARK 2000 in San Andreas, Calif., and The Elephant Sanctuary in Hohenwald, Tenn., have offered to accept Chai, Bamboo, and Watoto, and provide for their lifetime care at no cost to the Zoo or the taxpayers of Seattle. Both Sanctuaries share important features:

- Both are led by knowledgeable, experienced individuals committed to excellence in animal welfare;
- Both sanctuaries are committed to providing spacious, complex, natural environments where their

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26 Faust, *supra.* And see Brown, J.L. 2000. "Introduction to the Special Issue on Elephant Biology." *Zoo Biology* 19:297–298.

27 The Zoo has no announced plans to expand or improve their living conditions through 2015 to an extent that would positively affect the animals' foot health, a potentially lethal situation for Bamboo and Chai.

28 "Charismatic, impressive and big, elephants are main attractions for many zoo visitors. But few zoos have the space or money to maintain the animals. At Woodland Park Zoo, the cost of caring for each elephant is about $105,000 per year." (1995)

http://www.seattlepi.com/local/article/Sanctuary–sought–for–elephants–1189878.php#ixzz1dz19MSRG

Adjusted for inflation/cost of living at 4% a year and taking into consideration the Zoo's recent switch to organic hay, it is reasonable to estimate WPZ spends approximately $400,000.00 each year on the three elephants.

resident elephants are free to roam and socialize (or not) in the company of other elephants;

- Both sanctuaries are home to social groups of Asian and African elephants;[29]
- Both sanctuaries are located in warm, elephant–friendly climates with a long, extended growing season;
- Both sanctuaries manage their elephants in protected contact;
- Both sanctuaries run programs that exceed core requirements of AZA's Elephant Management Guidelines.[30] Between the two facilities, eight AZA–accredited zoos have retired elephants to them. Circuses and non-AZA accredited zoos have retired elephants to both sanctuaries as well.

The Toronto City Council voted to retire Toronto Zoo's three female elephants to PAWS' ARK 2000 on Oct. 27, 2011.[31] There are no public or otherwise verified reports that U.S. zoos closing their elephant exhibits suffered measurable harm to attendance, donations, or their ability to meet their mission.[32] In other words, the zoos were no worse off without elephants, while the elephants were measurably better off.[33] [34]

9. The City Council and Office of Mayor Have Authority to Act

The Woodland Park Zoological Society operates the Zoo for the benefit of the public within a City park under a long–standing Management Agreement.[35] The City contributed $6.5 million to support Zoo operations in 2010 under the Agreement's terms.[36] For its part under the Agreement, the Zoo must meet a burden of extensive reporting to the City, ensuring the Zoo's accountability and transparency to the City. These burdens and obligations imposed on the Zoo are consistent with the City's vital financial support of the Zoo, the key public role the Zoo plays in the cultural life of the community, the City's ownership of the Zoo's entire capital structure and land, and the City's ongoing funding obligation.

Three bonded elephants heading into a vast terrain to forage, socialize, and explore – the same opportunities that await Bamboo, Chai and Watoto at The Elephant Sanctuary or PAWS ARK 2000.
Photo credit: The Elephant Sanctuary in Tennessee

The Agreement is but one source of authority for elected City officials to act in this matter. A far deeper and permanent source of authority lies in the City Council's and Office of Mayor's roles as repositories for and instruments of community standards and values. As this report details, there is ample evidence to conclude that the elephants lead lives of suffering and misery at the Zoo in

A far deeper and permanent source of authority lies in the City Council and Office of Mayor roles as repositories for and instruments of community standards and values.

29 PAWS ARK 2000 has social groups comprised of three female Asian and three female African elephants; The Elephant Sanctuary has two social groups each comprised of 6 Asian elephants and one social group of 2 African elephants.

30 Please see chart comparing PAWS to AZA standards at Appendix 10.

31 http://archive.constantcontact.com/fs018/1101778242429/archive/1108352032106.html

32 The Detroit Zoo moved its elephants to PAWS in 2005. Attendance in 2005 was 965,765; attendance in 2006 was 1,001,737. Like our Zoo, Toronto Zoo is an AZA–accredited facility.

33 Buckley C. 2009. Sanctuary: a fundamental requirement of wildlife management. *In An elephant in the room: the science and well–being of elephants in captivity.* Eds. Forthman D., Kane L., Hancocks D., and Waldau P. North Grafton MA: Tufts University Center for Animals and Public Policy.

34 Patrick Lampi, Director of Alaska Zoo, wrote to the Toronto Zoo Director, describing that "It took years to get people to come to grips with the fact that it was the right decision to move our elephant.... It was absolutely the correct choice. .... I know you are, and will be, receiving criticism for your decision. I was on the receiving end here during the entire process. I am sure a few close minded people around here still think we were wrong, but 99% of the diehard folds that were against our decision now believe that we did the right thing. So there is light at the end of the tunnel." Lampi's letter, set out in full, can be found in Appendix 17.

35 Further detailed analysis of the governing Management Agreement is set forth in Appendix 18.

36 The Seattle Foundation's report of the Zoo's 2010 finances shows "Government Grants totaling $10,022,523 [out of] Total Revenues of $30,942,782."

our city. This serious conclusion is shared by elephant and zoological experts from around the globe.[37] We are deeply concerned that the Zoo's elephant program violates Seattle's community standards and values. This alone is sufficient cause to call upon the Zoo to take immediate, effective remedial action.

Our concern is shared by renowned primatologist Jane Goodall. Writing in support of the Toronto City Council's and Toronto Zoo's decision to allow its three aging elephants to retire to PAWS ARK 2000, Goodall observed: "While many zoos do an excellent job of caring for wild animals and contributing to their conservation, there are some species, like elephants, which will always be unsuited to zoo environments."[38]

10. Request for Relief

It is an accident of history that elephants fell into human captivity. First they were subjected to our need for labor and, later, our wonder and curiosity. We took elephants into captivity long before we had a clue as to the length and richness of their lives, the complexity of their environments, or their urgent social needs. But we know now. We know that they are "not good candidates for zoo life because their needs for space, environmental complexity, and social interaction are beyond anything that most zoos can provide."[39] Nothing in elephants' evolutionary history, one stretching back 40 million years, has prepared them to face a lifetime of tedium in a small, static space without kin or bonded cohorts. Sadly, this is the only fate the Zoo can offer our elephants. Surely, they and we deserve better. Goodall, again, agrees:

Goodall recently stated, "While many zoos do an excellent job of caring for wild animals and contributing to their conservation, there are some species, like elephants, which will always be unsuited to zoo environments."

Nothing in elephants' evolutionary history, one stretching back 40 million years, has prepared them to face a lifetime of tedium in a small, static space without kin or bonded cohorts. … Jane Goodall agrees: "With their intense social bonds and need for large areas to roam, elephants should remain in the wild or when this is not possible, in a sanctuary that can provide them with adequate care, the chance to form natural bonds with other elephants, and large areas of natural habitat."

"With their intense social bonds and need for large areas to roam, elephants should remain in the wild or when this is not possible, in a sanctuary that can provide them with adequate care, the chance to form natural bonds with other elephants, and large areas of natural habitat."

In light of the foregoing, we respectfully request that the Seattle City Council and Office of Mayor take all steps within their respective areas of authority to encourage the Zoo to re–home Bamboo, Watoto and Chai immediately to PAWS ARK 2000 Sanctuary or The Elephant Sanctuary in Tennessee.

December 6, 2011

Lisa Kane, JD
Alyne Fortgang, Co–Founder
Nancy Pennington, Co–Founder
Friends of Woodland Park Zoo Elephants

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37 David Hancocks, former Director of Woodland Park Zoo, Joyce Poole, Ph.D., internationally recognized elephant expert, Keith Lindsay, Ph.D., of Oxford University, and Dame Daphne Sheldrick, whose Kenyan wildlife conservation charity has successfully returned dozens of African elephant orphans to live natural lives in the wild have each submitted a statement addressing salient aspects of the Zoo's elephant program, elephant biology, elephant ecology and the advantages of sanctuary for Watoto, Chai and Bamboo. Hancocks's Statement is found at Appendix 19; Dr. Poole's Statement is found at Appendix 20; Dr. Lindsay's Statement is found at Appendix 21; and Dame Daphne Sheldrick's Statement is found at Appendix 22.

38 Jane Goodall correspondence to Toronto City Council and Toronto Zoo, November 18, 2011. Goodall's letter, set out in full, can be found in Appendix 23.

39 Hancocks D., supra.

INDEX TO APPENDICES

APPENDIX 1:
Timeline of Zoo's Acquisition of Bamboo, Watoto, and Chai and Their Life Histories

1968 – Bamboo imported from Thailand age 1. Bought by WPZ.

1971 – Watoto, an African elephant, comes to WPZ as baby.

1976 – David Hancocks becomes zoo director. Begins pioneering role of transition to naturalistic exhibits in zoos. Bamboo takes daily walks around zoo grounds with keeper. Nighttime chaining of elephants abolished. Extra keeper time dedicated for elephants' enrichment. Bamboo described as docile, cooperative and friendly by Hancocks during this period[40].

1980 – Chai arrives at WPZ as baby

1981 – Sri arrives at WPZ as baby.

1984 – Hancocks leaves WPZ.

1986 – Circus trainer, Allen Campbell, hired as consultant to re–organize elephant management system at WPZ. Credible allegations of animal abuse and neglect lodged against Campbell by staff at the Denver Zoo[41].

1987 – First known public mention of Bamboo exhibiting aggressive behavior. Broke three ribs of keeper Larry Zolton, after knocking him down three times[42].

1988 – Chaining of elephants for up to 15 hours per day[43].

1989 – Elephant exhibit completed. 1 acre of outdoor area.

1998 – Chai sent to Dickerson Park Zoo for breeding. Chai beaten at Dickerson for an extended period of time. WPZ staff publicly justifies beatings. Chai loses over 1,000 pounds in 51 weeks[44]. USDA fined Dickerson for violating the Animal Welfare Act. WPZ memo warns Chai could bring herpes virus back to WPZ.

1999 – Chai returns to WPZ.

2000 – Chai gives birth to Hansa. Bamboo and Sri placed in solitary confinement for unknown periods of time[45].

2002 – Public outraged when Hansa is seen being beaten with a bullhook. WPZ director defends beating as "appropriate" and "within guidelines"[46].

2002 – Sri sent on breeding loan to St. Louis, MO where she gets pregnant. Fetus dies in utero and she still carries it since 2005.

2005 – January – WPZ announces it plans to transfer Bamboo to the Point Defiance Zoo and Aquarium (PDZA) due to unpredictable, aggressive behavior after 37 years at WPZ.

March–August 2005 – Citizens petition WPZ to send Bamboo to The Elephant Sanctuary instead of PDZA, citing therapeutic living environment, conditions and management system at the Sanctuary.

August 2005 – WPZ transfers Bamboo to PDZA. Bamboo returns to WPZ June 2006.

2007– Hansa dies of herpes on June 8, 2007

2008 – May. Watoto tests positive for the same strain of herpes that killed Hansa.

2008 – Dec. 2 – Bruce Upchurch confirms Friends of Woodland Park Zoo Elephants' observations that elephants locked up 16 – 17 hours a day.

2011 – June 9 – Chai artificially inseminated for the 58th time.

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40 "Bamboo should be sent to a place where she can heal," The Seattle Times, September 9, 2005, sec. Editorials/Opinion.

41 "Elephant victim had Denver ties," *The Denver Post,* August 23, 1994, sec. News, p. A–4.

42 "Chaining of Three Zoo Elephants Upsets Some Former Keepers," *Seattle P–I,* March 30, 1988, sec. News, p. B3.

43 "Chaining of Three Zoo Elephants Upsets Some Former Keepers," *Seattle P–I,* March 30, 1988, sec. News, p. B3.

44 "Chai's Baby," *The Seattle Times,* March 4, 2001, Cover.

45 Eric Scigliano, Love, War, and Circuses (Houghton Mifflin, 2002), p. 291

46 "Zoo's treatment of elephants is too harsh, PETA says," *Seattle P–I,* July 3. 2002, sec. Local.

APPENDIX 2

Brief Description of Wild Female Elephant Biology and Ecology

Female elephants are socially gregarious, intelligent, physically vigorous animals who move continuously for approximately 20 out of every 24 hours,[47] engaged in near continuous foraging activity. African and Asian elephant ranges can be thousands of square miles. Such huge spaces allow them to exploit resources, to socialize with other herd members and elephant friends, to explore, to find mates. Their lives are marked by active engagement with a stable social network of herd members and a rich physical environment abundant with novelty and challenge.

These gregarious, intelligent animals enjoy a herd life marked by routine periods of intense socialization. Not surprisingly, female elephants are very much contact animals. Family members and bonded individuals often stand touching while resting or drinking. They lean and rub their bodies together, and often touch one another with their trunks in various contexts. They frequently synchronize activities like "feeding, or walking, or resting, or drinking or mud wallowing."[48]

Social relationships are central to elephant life. Relationships within the family and herd are the core social experiences of all elephants. For female elephants, the herd is their life. Daughters and mothers stay together for life. Their natural history, largely uncovered by scientists only in the past 30 years or so, furnishes strong evidence that the integrity of the social herd is the single most important element of a female elephant's life.[49]

47 Poole, J. and P. Granli. 2009. "Mind and Movement: Meeting the Interests of Elephants," in *An Elephant in the Room: The Science and Welfare of Elephants in Captivity,* eds. Forthman, D., Kane, L. Hancocks, D. and P. Waldau. North Grafton, MA: Tufts University's Center for Animals and Public Policy.

48 Moss C. 1988. *Elephant memories*. New York: William Morrow.

49 Douglas–Hamilton I, Douglas–Hamilton O. 1975 *Among the elephants*. London: Collins; Moss C. 1988. *Elephant memories: thirteen years in the life of an elephant family.* New York: William Morrow; Sukumar R. 2003.

APPENDIX 3

Brief Analysis of Zoo's Elephant Barn and Exhibit Space

The barn's interior is stark and barren, largely functioning as nothing more than a lock up for the animals. The Zoo has no other option for arranging the elephants, due to Bamboo and Watoto's social incompatibility. The barn does not include a large area permitting the animals an opportunity to socialize, move about or seek refuge.[50] The barn fails to provide options allowing the elephants to engage in a variety of vigorous physical behaviors like bathing or wallowing in mud or dust because the barn cannot provide the complexity of a natural environment.

The outdoor exhibit space, principally divided into five paddocks, is equally bleak. Its most glaring shortcoming is its inadequate size: all five paddocks, taken together, total about 1 acre. Only one of the paddocks offers a bathing option, which means only the animal occupying that particular paddock has free access to water. None of the paddocks has a mud or dust wallow. All are predominately characterized by a featureless, hard–packed, monotonous substrate.

Observations over the past several years have not shown the Zoo rotating exhibit furniture (street sweeper brushes, large tires, climbing rocks, scratching posts, sticks, logs, root balls or sunken trees) to engage the elephants physically or mentally. Indeed, all three paddocks contain the same few, uninspired features: logs, some chained in place, and one or two feeding devices. The largest paddock contains a few trees from which the elephants are separated by hot wire.

The most vital ingredient to elephant environmental enrichment, the ample provision of fresh, wet browse,[51] is almost absent from the barn or paddocks. This is particularly troubling as elephant authorities agree that elephants spend approximately 16 hours a day browsing, grazing and foraging. The importance of foraging and feeding to elephants' habitat use, ranging patterns and occupational activity cannot be overstated.

See further discussion of the exhibit space and elephant barn shortcomings in Peter Stroud's Statement in Appendix 9.

The Living Elephants. New York: Oxford University Press.

50 Offering refuge is vital. San Diego Zoo reported that one of its female elephants was killed by another elephant in an outdoors paddock that failed to offer refuge on November 17, 2011. See:

http://latimesblogs.latimes.com/lanow/2011/11/elephant–dies–safari–park.html?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+lanowblog+%28L.A.+Now%29

51 Kinzley, C. 2009. "Applied Behavioral Research: A Tool in Captive Elephant Management" *in An Elephant in the Room: The Science and Welfare of Elephants in Captivity,* eds. Forthman, D., Kane, L. Hancocks, D. and P. Waldau. North Grafton, MA: Tufts University's Center for Animals and Public Policy.

Statement of Dr. Mel Richardson, Veterinarian

November 2, 2011

Statement of Veterinary Opinion concerning the Health and Fitness of the three elephants, Bamboo, Chai, and Watoto at Seattle's Woodland Park Zoo (WPZ), after reviewing Medical Records and Daily Keeper Reports furnished by Friends of Woodland Park Zoo Elephants (FOWPZE).

From zookeeper to veterinarian I have cared for Asian and African elephants in zoos, drive-thru wildlife parks, circuses, and sanctuaries. In fact I was associate veterinarian at Seattle's Woodland Park Zoo from March 1990 until January 1991, so I know Bamboo, Chai, and Watoto personally so to speak. I was asked by FOWPZE to review medical records and daily keeper reports and offer my professional assessment of these three elephants' overall health. Having more than 42 years of experience caring for captive wild animals, including African and Asian Elephants, I feel more than qualified to assess the Medical Records and Keeper Reports. After reviewing more than 9000 pages of records over the last three years, I make the following evaluation. Other than observing the elephants in their exhibit on the occasional trip to Seattle over the years, I have not physically examined them since late 1990. This professional opinion is mine alone and is based upon those records dating from the year 2000 through March, 2011, provided by the zoo. Suffice it to say these three elephants all suffer from zoo induced chronic disease as a direct result of the conditions at Woodland Park Zoo.

Synopsis of WPZ Elephants' Health Status:

Bamboo

Bamboo is a 45 year old female Asian elephant who has been in captivity at WPZ for 44 years. In August 2005 Bamboo was transferred to Point Defiance Zoo in Tacoma, returning to WPZ 10 months later after failing to integrate into the elephant exhibit there. Her general medical condition is poor. She is obese. She suffers from chronic foot disease: cracked nails and pads; abscesses (pus-filled pockets) under her nails and pads; and osteoarthritis in both front legs. The zoo is giving her Cosequin, a medication used to treat arthritis in people and other animals. She endures chronic and painful folliculitis (inflammation of the hair follicles) over her tail. This condition requires daily care with topical medication and manual debridement of infected and/or necrotic tissue. She also endures dorsal (along her back) hyperkeratosis (dry thickened skin), especially during the long winter months in Seattle. She also has periodic bouts of colic – abdominal pain that are either digestive or urinary in origin. Sporadically throughout her records there is mention of blood and/or tissue found in her stall

over night. Photos of her in her exhibit indicate she may be experiencing leiomyomas or fibroids, which can cause urinary and uterine issues.

Chai

Chai is a 32 year old female Asian elephant who came to the WPZ when she was one year old. She has remained there since then, except for the year, 1998-1999 when she was sent to Dickerson Park Zoo in Springfield, MO. Chai, like Bamboo, has suffered with foot disease over the years. Abscesses, draining tracks (fistulas), nail and pad cracks are problematic of zoo induced foot disease contributing to the unnecessary discomfort of Chai's life at WPZ. While Watoto and Bamboo are being given Cosequin for arthritis, Chai is not. There have been no studies with Cosequin during pregnancy, therefore I assume that since the zoo hopes to get Chai pregnant again via Artificial Insemination (AI) and does not want to chance a problem due to Cosequin. Interestingly more recent records in 2010 indicate the zoo is using Ibuprofen, a NSAID (Non-Steroidal Anti-inflammatory Drug) commonly used for the pain associated with elephant foot disease, as a training aid to teach "pill swallowing behavior." It seems odd they would use a bitter active ingredient, which can have pathological and physiological action in Chai, to "teach" her about pill swallowing. Why not use the proverbial sugar pill to teach the behavior. Most zoos with the documented levels of daily pain in their elephants such as these three elephants are using Ibuprofen for pain relief. Chai has been treated for years for hyperkeratosis of the skin on the medial lower legs and foot. This condition is seen in captive elephants who due to years of chaining are forced to urinate or pee on their legs. The urine causes a maceration of the tissue and the skin responds by increasing the growth of skin cells or hyperkeratosis. Wild elephants will go out of their way to NOT pee on their legs. Chai also is plagued by seasonal vesicular eruptions on her skin.

Watoto

Watoto is a 42 year old African elephant. Watoto came from Kenya to the WPZ when she was two years old and has remained there ever since. She is being given Cosequin for arthritis. Periodic limping and lameness of left foreleg or stiffness in left ankle is noted. She suffers from hyperkeratosis over her dorsum—back and ears. Watoto has tested positive for Elephant Endotheliotropic Herpes Virus (EEHV), incidentally the same strain that killed Hansa in 2006. When a severe bout of colic, which historically she experiences, was diagnosed at this time the zoo chose to use an anti-viral drug to treat her…just in case. In September 2010, Watoto had an altercation with the ERD (Elephant Restraint Device)

and when released into the yard, her left tusk fell out…all of it. Since then Watoto has endured daily flushing of the tusk sulcus or socket.

Background & Perspective

In 1989-1991 while I was Associate veterinarian at WPZ; all elephants were chained in the barn from closing time until opening time the next morning—approximately 16 hours. Watoto was chained near the outside door and Bamboo was chained at the other end near the isolation stall. I was told they did not 'get along' together, so must be separated. All of the elephants were 20 years younger then and many of the problems associated with captivity in elephants had not manifested yet. Since the Zoo's own medical records document foot disease and arthritis, I believe it is best to let the Zoo Industry speak for itself concerning foot disease in captive elephants. The following excerpts are taken directly from The Elephant's Foot: Prevention and Care of Foot Conditions in Captive Asian and African Elephants / Blair Csuti, Eva L. Sargent, Ursula S. Bechert—1st ed. 2001. This compilation is based on papers from the First North American Conference on Elephant Foot Care and Pathology, held in Beaverton, Oregon, March 19-21, 1998.

- page vii – Introduction; "Foot problems are seen in 50 percent of captive Asian and African elephants at some time in their lives. Although many problems are treatable, they may result in serious disability or death."
- "There is general consensus that lack of exercise, long hours standing on hard substrates, and contamination resulting from standing in their own excreta are major contributors to elephant foot problems."
- "All contributors also agree that prevention of foot problems is preferable to treatment."
- page 3-5 – Murray E. Fowler; "The following are suggestions of predisposing factors leading to foot problems based on the author's experience:
    - Lack of exercise.
    - Overgrowth of nail and/or sole.
    - Improper enclosure surface.
    - Excessive moisture.
    - Insufficient foot grooming.
    - Insanitary enclosures.
    - Inherited poor foot structure.

    - Malnutrition.
    - Skeletal disorders (arthritis).

- Page 21-38 – Alan Roocroft and James Oosterhuis; "Adequate exercise is one of the most important aspects of proper elephant husbandry. Healthy feet require exercise of all joints, tendons, and ligaments. Anything less predisposes an elephant to foot problems…"
- "…Unfortunately, most captive elephants spend the majority of their time standing on concrete or asphalt floors. Elephants should be housed for the majority of the day on resilient, interactive, yielding surfaces. Substrates allowing an elephant to dig will exercise and strengthen leg and foot muscles, tendons, and joints. This exercise and activity directly supports healthy feet throughout the elephant's life."
- "It is our opinion that when these factors are combined with abnormal behavioral movement, poor confirmation, or previous injuries, the foot is destined to develop abscesses. Any abnormal pressure on the nails, as is seen on the lateral nails of the stereotypical 'rocking' elephant [All three WPZ elephants demonstrate stereotypical rocking and pacing—HMR] will result in a disruption of the blood supply to the sensitive tissue behind the nail. When this tissue is subject to constant or intermittent abnormal pressure, it will eventually become devitalized like a bad bruise and then form a sterile nail abscess. This abscess then follows the path of least resistance as the body tries to get rid of it. It usually ruptures toward the surface at the cuticle line or at the interface between the bottom of the nail and pad. As soon as it ruptures it becomes an infected abscess."

Conclusion:

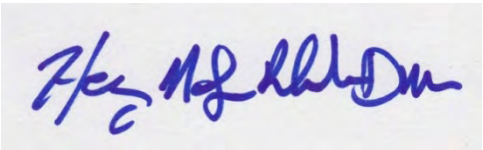
In my professional opinion the zoo industry as indicated by their own experts who gathered for the First North American Conference on Elephant Foot Care and Pathology, held in Beaverton, Oregon, March 19-21, 1998 exposed the truth many of us working in the profession understood for years. Many of our captive elephants were suffering. If you keep elephants on unnaturally hard substrates (concrete or composites), deny them the ability to dig, wallow in the mud, throw dust on their backs and exercise by walking miles per day, they will suffer unnecessarily. The veterinary and keeper staff must be aware of this suffering as seen by their almost daily foot care and administration of arthritis drugs such as Cosequin and ibuprofen. All three elephants at WPZ endure painful skin disease which I believe is caused by the cold wet unnatural climate of the Puget Sound. Elephants evolved to be dirty. After elephants bathe in the wild, they throw dust, dirt or sand all over themselves. At the elephant barn in Seattle after a bath, they stand under a radiant heater which dries their skin unnaturally. The staff must recognize this since according to the records they apply humectants, in an effort to rehydrate their skin.

In essence the zoo's own elephant records document the conditions seen in The Elephant's Foot. The records indicate that even with state-of-the-art veterinary care, these animals are suffering in Seattle. Interestingly there has not been a Second conference on elephant foot care. I believe it is because the underlying truth discovered by the experts who gathered is this—that as long as elephants are living in the unnatural conditions of the modern zoo in northern climates, they will suffer.

A zookeeper friend of mine asked me a while back why I am now speaking up for elephants when I did not as a vet at WPZ. In 1989-91 there were no alternatives for captive elephants. Sending Bamboo, Chai, and Watoto back to their home ranges has never been an option. But in 1999 The Elephant Sanctuary in Tennessee and again in 2000 the Performing Animal Sanctuary in California opened; we have learned that if you give captive elephants grass, dirt, mud, hills, streams, ponds, trees, hills, etc., they will heal.

Since we cannot recreate a more natural environment for these three elephants in Seattle, one that allows their skin and feet to heal, they should be moved to sanctuary where we can.

Sincerely;



Henry Melvyn Richardson, DVM

APPENDIX 5

Brief Analysis of Zoo's Claims to Elephant Conservation

and analysis of a broad swath of issues central to zoo operations and cultural aspirations.
A recent and unusually candid assessment of the claims and limits of the zoo industry's aspirations to in situ conservation appears in *Wild Mammals in Captivity* (2010). This text is the industry's most serious attempt at scholarship and analysis of a broad swath of issues central to zoo operations and cultural aspirations.
This treatise dedicates a chapter to conservation: "The Role of Zoos in Contributing to In Situ Conservation" by Alexandra Zimmerman of Conservation Department, North England Zoological Society, Zoological Gardens Chester and Wildlife Conservation Research Unit, University of Oxford.

Zimmerman's article makes a number of key observations:
(1) Mammals, more than any other taxonomic group, make the limits of conservation value of ex situ captive breeding self evident: "not all threatened species could be kept in genetically viable ex–situ "insurance" populations in the world's zoos"; and second, the cost of captive breeding and ex situ conservation measures is high. (2010, p. 282)
(2) While the notion of rearing endangered animals in zoos and releasing them into the wild is "appealing," the number of such species appropriate for reintroduction is "extremely low." Id.

Zimmerman then goes on to explain why zoos hold elephants even though they are not candidates for re–introduction to the wild nor find rational basis for candidacy for inclusion as genetically viable ex–situ "insurance" populations:

> "Captivating Rationalizations
>
> Those who accept these arguments can then remind us that a zoo without an elephant, a tiger, or a giraffe is to most visitors `not much of a zoo.' The public has expectations, and zoo directors are faced with a suite of demands different from directors of nonprofit, nongovernmental conservation organizations. So zoos may have these `charismatic' animals that bring in visitors, but still do little directly for their conservation. It is the public that pays, and the public that can become enthusiastic about animals and about conservation.
>
> Most zoos, therefore, believe they need the large charismatic species to draw the attention of the public and generate income. Clever zoos were quick to argue that this income, in turn, could be used to fund more direct conservation work. 'Ambassadors,' they called these large species for which pure ex situ conservation arguments are hard to find. The elephants at zoos are not there to breed for eventual reintroduction, nor are they part of insurance populations in the event of a sudden mass extinction where the cheaper option of translocation is not possible. These zoo elephants are the representatives of their kind, the comfortable martyrs flying the ambassadorial flag of their species. See them in the zoo, learn about the fate of our wild brothers, and donate money to conservation field projects–so goes the message.
>
> In brief, there are many means to the end, and various zoos use different combinations of these to fulfill their mission of conservation. If zoos have such missions–and 90% of zoos in one international survey say that they do (Zimmermann and Wilkinson 2007)–then the question becomes one of accountability to mission. A zoo that claims to contribute to conservation should be held accountable to that endeavor (Miller et al. 2004), and in many people's minds this means a serious contribution to conservation work where it matters most: in situ." (2010, p. 283)

As Zimmermann counsels, it is reasonable to follow the money to hold the zoo industry accountable to its claimed mission of supporting conservation.
Again it is important to note, that despite the industry's claim to exhibit elephants for the express purpose of inspiring zoo guests to donate to conservation, there is no evidence that zoo guests, upon returning home, make such donations. Zoos have not conducted the research necessary to determine such basic information, despite their affection for the belief. Thus far, the industry has limited itself to attempting to measure its guests' attitudes and values, not what guests do.

Like so many primordial questions involving elephants in zoos such as- How much room do they need? Is exhibit complexity more important than space? What kind of complexity is necessary for captive well–being? What is the effect of AZA management standards concerning minimal social groupings on elephant well–being and social adjustment (i.e. AZA standards allow 3–year–old calves, including female calves, to be separated from their mothers for any reason zoo management deems sufficient) – there is disturbingly sparse or non–existent evidence.[52]

But, those systemic research weaknesses aside, there is one way mission might be held accountable: follow the money. The International Elephant Foundation, AZA's official partner in identifying and funding elephant conservation projects worldwide, made grants totaling $110,000 out of $1 million of such grants made over the decade prior to 2008. Recent press reports from AZA zoos indicate IEF has modestly stepped up its grants:

> "IEF–supported projects protect elephants from poaching, seek solutions for human–elephant conflict, equip and train community conservationists, increase our knowledge of the treatment and prevention of disease and educate people. In 2011, IEF will provide over $230,000 to support elephant conservation around the world, adding to the $1.8 million total invested in conserving elephants since its inception in 1998."

This means that since 1998, elephant–exhibiting zoos accredited by AZA, through their agent IEF, have made grants totaling approximately $2 million for in situ conservation for elephants worldwide. Over the same period, AZA zoos spent approximately $40 million on maintaining its captive elephants in AZA zoos and publicly announced $300 million in construction plans to expand and remodel elephant exhibits.[53]

Another way of thinking about this gross disparity in how zoos direct money from their turnstiles: The ratio between the U.S. zoo industry's in situ conservation donations ($2 million) and money spent on captive elephant programs ($340 million) over the past 12 or so years is $1 donated for every $170 spent on themselves or one–half of one cent ($.005) of every $1 spent on zoo elephant programs went to elephants in the wild.

Our Zoo's record is even more discouraging. On an annualized basis, the Zoo contributed approximately $20,000 to wild elephant conservation in 2011. At the same time, it reported spending $8 million[54] on fundraising expenses to the Seattle Foundation. In other words, the Zoo spent $400 on itself for every $1 it spent to save elephants in the wild.

Like the U.S. zoo industry as a whole, our Zoo's commitment of such paltry funds to help elephants in the wild would be laughable if their plight weren't so desperate. In any event, such parsimonious financial support eviscerates the Zoo's claims to exhibit elephants for purposes of species' conservation.

52 Mason, G. and J. Veasey. 2009. "How Should the Psychological Welfare of Zoo Elephants Be Investigated?" in *An Elephant in the Room: The Science and Welfare of Elephants in Captivity,* eds. Forthman, D., Kane, L. Hancocks, D. and P. Waldau. North Grafton, MA: Tufts University's Center for Animals and Public Policy.

53 Sadly, none of the announced plans for expansion exceed a few acres, although the price tags for such expansions in US zoos run from $8M to $60M. The dilemma that zoos face due to their location on a small footprint inside a densely populated urban landscape is inescapable: most zoos are incapable of meaningful expansion, no matter how much money or scientific knowledge about elephants is available to them.

54 Seattle Foundation website: http://www.seattlefoundation.org/npos/Pages/WoodlandParkZoo.aspx?bv=nposearch. Accessed by Author on November 13, 2011

APPENDIX 6

Brief Discussion of Elephants' Social Needs

The elephants at the Zoo comprise a group of asocial or socially isolated individuals, each of whom has been denied the central social feature of natural elephant life: lifelong membership in its maternal family and the lifelong affection and support such membership bestows.[55] Sadly, Chai, Bamboo and Watoto do not comprise a natural elephant family, nor can they. Each elephant's experience of social deprivation and their response from such deprivation is unique. Watoto lives in utter social isolation, having never been offered the chance to meet, much less bond with another female African elephant. Bamboo has not bonded with either of her companions. In fact, the zoo labeled Bamboo anti–social and relocated her to Point Defiance Zoo and Aquarium where she failed to integrate into that zoo's social group and was returned to Seattle. Chai is tolerated by both Watoto and Bamboo, but little more.

The elephants are not bonded with one another. We know this because bonding between elephants is exhibited by their routinely seeking close physical contact or proximity with one another.[56] Four years of observations reveal no routine touching between the elephants, nor other routine positive affiliative behavior showing supportive, social attachment. Our elephants do not seek each other out and then explore one another's faces with their trunks, nor lay their trunks on one another's backs, nor lean into one another as they nap or rest, nor drink from the pool in a synchronized manner, nor engage in any of the other small but telling gestures of animals who share a social bond. This extreme social impoverishment cannot be remedied by the Zoo.

55 Females remain in the family herds into which they are born. The depth and fidelity of their familial attachment is unparalleled by most of the animal kingdom. It certainly surpasses human attachment customs. Whyte I. Scientist of South Africa in May 9, 2003 correspondence to Michael Kreger, United States Department of the Interior's Fish and Wildlife Service.

56 Bonding is defined as both positive conduct seeking proximity and physical contact (like touching, entwining trunks, laying their trunks on one another's back, or resting or standing together with their sides touching) as well as low levels of agonistic behavior to the other (Seidensticker J., Doherty JG. 1996. Integrating animal behavior and exhibit design. In Kleiman DG, Allen ME, Thompson KV, Lumpkin S eds. *Wild mammals in captivity: principles and techniques.* Chicago, IL: University of Chicago Press.

APPENDIX 7

Brief Analysis of Zoo's Claims to Conservation Education

The most salient features of natural elephant life – their physical vigor and socially gregarious lives – are absent from the Zoo. The smallness, the sameness, the tedium of the zoo environment deprives Zoo elephants of the opportunity to use and enjoy their great brains and their great bodies. Perhaps that explains why informally timed observations of zoo guests briefly stopping at various viewing points at the Zoo's elephant exhibit during the summer and fall of 2011 ranged from about 9 to 90 seconds. The animals appear mostly bored, i.e., Chai swaying for minutes on end in front of a gate, Bamboo pressing her forehead into a post, or Watoto standing like a statue, eyes half–closed. It is no surprise viewing them is a mostly boring experience as well.

The truth of the matter is that the Zoo cannot provide Watoto, Chai and Bamboo a single day in which they might move with an elephant friend through a natural, complex environment filled with the sights and sounds of other animals, a variety of plants, shrubs and trees, changing substrates and topography, meetings with or refuge from other elephants, a long wallow in mud, or dip in a natural pond. And because our elephants will never experience the sights and sounds of such a day in their exhibit, the Zoo will never succeed in transmitting accurately and comprehensively the richness and complexity of elephant life with color and importance that might inspire its guests.

APPENDIX 8

Gay Bradshaw, Ph.D., Ph.D.'s Statement: Psychological Assessment of WPZ Elephants

Psychological Assessment of Chai, Watoto, and Bamboo
Prepared by G.A. Bradshaw Ph.D., Ph.D.

The first step in approaching psychological study, diagnosis, and treatment is to fully grasp an understanding of what constitutes normative psychological states and associated behaviour in terms of the representative population and environmental conditions to which the client belongs. Normative, in the cases of Chai, Watoto, and Bamboo, is evaluated relative to what has been well–established and scientifically documented over decades for free–living elephants.

By definition, captivity is a condition that exceeds normative standards of free–ranging elephants. The degree to which captivity affects elephant well–being can be estimated by evaluating the differential between wild and captive conditions. This environmental differential translates to stress in the elephant.

Formally, stress is defined as "the non–specific response of the body to any demand." It is not considered detrimental until the individual is pushed beyond his or her physical or psychological limit. Every species, and individual, has a particular evolutionary and ecological shaped "envelope" of tolerance within which they can live more or less comfortably. However, if this threshold is breached, there is the potential for psychological and physiological damage.

Traumatic stress is defined as physically or emotionally inflicted injury that is perceived as life threatening. By definition, trauma and chronic stress exceed the mind and body's abilities to adapt successfully to environmental change. This affects brain function and can lead to lifetime vulnerabilities to disease, a predisposition to injury, and species–aberrant psychological states. These may express as a fearful temperament, asociality, diminished memory, stereotypy (e.g., excessive and repetitive pacing, swaying, chewing, grooming), depression, anorexia or other eating disorders, self–mutilation, increased aggression, infanticide, and violent outbursts. Asociality may exhibit as intra– and inter–species conflict or avoidance. The development of these symptoms associated with severely adverse conditions is generally diagnosed as Post–Traumatic Stress Disorder (PTSD). Early or chronic experience of abuse and physical and emotional deprivation are insults to the developing self that lead to a suite of psychophysiological disorders, affect and stress dysregulation, and violent and asocial behaviors.

Individuals who have experienced severe enduring hardships; prolonged or multiple highly painful events; and/or who are unable to escape their circumstances typically develop more complicated and enduring symptoms referred to as Complex PTSD. Complex PTSD is characteristic of individuals confined through physical force,

intimidation, coercion, enticement, or emotional control. In humans, this diagnosis is made often in the case of political prisoners, children who are victims of abuse, and torture survivors. The inability to exercise free will to eat, drink, move, socialize, or engage in other activities (or not) according to one's desired needs, and being subjected to forcible domination and brutality, undermine core psychobiological well–being. This is the very reason that physical force and captivity are employed. Such frustrated abilities and deprivation result in unnatural and unhealthy levels of suffering and overall deterioration.

As documented by videos and other documents, these elephants have sustained a series of traumatic events including capture, confinement, and forced compliance, and in the case of Chai, being subjected to multiple artificial inseminations, all of which are brutal, and perceived and experienced as life threatening experiences that cause severe pain and fear. Their symptoms and history qualify for a diagnosis of Complex PTSD. It is recommended that they be sent to PAWS Sanctuary.

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APPENDIX 9

Peter Stroud's Statement: Analysis of WPZ Elephant Conditions

From 1998 to 2003, as Senior Curator at the Melbourne Zoo in Australia, I was deeply involved in the creation of a new exhibit for Asian elephants. The designers of this exhibit were from the Seattle based architectural firm Jones and Jones, the same people who had designed Woodland Park Zoo's elephant exhibit. It is not surprising therefore that the Melbourne Zoo and Woodland Park elephant exhibits have much in common. They share virtues and faults but both suffer from the problems afflicting all urban zoo elephant exhibits.

I must say at the outset that I have not visited Woodland Park Zoo for over 20 years and so I have no first hand experience of its elephant exhibit. I am however very familiar with the exhibit through past discussions with its designers, plans and recent photographs. As an independent zoological consultant specializing in elephant welfare, I have followed the controversies around Woodland Park Zoo's elephant management for several years.

Like all urban zoo elephant exhibits, the WPZ elephant exhibit is too small. Laid out as a series of roughly linear paddocks it necessarily lacks variation in landscape and presents an impoverished environment to captive elephants. The alignment of fencing means that elephants have few options in terms of where they go and what they do. They travel in one of two directions, to and from the central barn that forms the controlling hub of the facility and the center of their limited lives.

Photographic evidence suggests that the exhibit surfaces are worn and largely barren. This is characteristic of nearly all urban zoo elephant exhibits. There is simply not enough space to support vegetation growth of any significance. The presence of a few scattered well–worn old logs and branches suggests that not only do the elephants take little interest in their surroundings, neither do keepers and zoo managers. This not an inspiring picture and zoo Board members and city councilors should be concerned. It suggests less than professional standards of care.

The Zoo may argue that the elephants are offered "enrichment", but I would challenge that this involves relatively few activities and devices for the elephants to fiddle and play with, usually in pursuit of food items. Such things entertain elephants for only a relatively short period of time in each 24–hour cycle. We will be told that in any case elephants spend most of their time browsing. But in the wild they do this in the company of other elephants often while moving across vast tracts of land. They enjoy an extraordinarily rich social life in conditions that simply cannot be offered within the confines of an urban zoo.

The bathing pool in the WPZ elephant exhibit is an essential element but I am informed that elephants rarely if ever use it. Again this invites comparisons with wild elephant life, where elephants bathe frequently when water is available. If zoo elephants do not use a bathing pool we must ask, why not? There can be a number of answers: the water may be too cold, too chlorinated, too contaminated. The weather may be too cold for comfortable bathing. Or it may be that the elephants simply have been so deprived of the experience of bathing at a young age, that they have never been able to develop the confidence to enter water. This confidence would normally be developed in a highly social environment: bathing is a communal activity for elephant families, rather than any sort of solitary activity.

We can see here that elephant welfare is far from being just about the hardware offered. There is no scientific way to define welfare other than in terms of what elephants do in the wild.

This brings us to consider the Woodland Park Zoo elephant barn. Elephant barns are almost entirely a western zoo concept – while elephants have been held captive for thousands of years in Asia, they have rarely been confined to barns. The business of confining elephants singly in stalls for up to 16 hours a day, or for weeks or months at a time in cold climates, can in no way be compared with anything observed in wild elephant life. This confinement is totally unnatural.

The Woodland Park Zoo elephant barn is particularly poorly designed. There are four elephant "rooms" laid out in a line. Elephants can only move between rooms by passing directly from one to another. There is no elephant corridor or passageway allowing an elephant to bypass one room in moving to another. This is a major problem that requires explanation.

Two elephants, Bamboo and Watoto, don't get along and this means one or the other must be confined alone, in the "shower room" with possible access to an "isolation room", for a majority of the time, for days and weeks on end. To confine an elephant in a barn, for anything longer than an hour or two, is a highly questionable practice. But to confine an elephant in conditions as patently unsuitable as this, is unconscionable.

Many zoos have made sure barns are designed to allow elephants to come and go at will, even in bad weather, with configurations that allow elephants access to separate outside areas if they don't get along. The design of the WPZ barn makes this impossible.

The Woodland Park Zoo elephant exhibit has all the hallmarks of a typical urban zoo elephant facility. The exhibit's design reflects a "command and control" mentality based on the conceit that with sufficient degree of intensive manipulation animal welfare can always be guaranteed in an urban zoo. Elephant life can be intensively managed – we can make them live well. But as the history of elephants at Woodland Park Zoo, and in many other zoos, shows so clearly, this simply is not so.

We might ask why it is, if urban zoos spend millions of dollars on elephant exhibits, they often fail so spectacularly to meet the needs of elephants. The answer of course, is in the question. Urban zoos by their nature have limited space and persist in trying to keep elephants in conditions where their needs can never be adequately met because there just isn't sufficient room.

Recently some zoos, including Woodland park Zoo, have begun to misrepresent science, arguing that elephants in the wild only really move over large areas when compelled to do so in search of food and water. It is presumed that since food and water is provided, elephants don't have to move about much and so there is no need to ensure that they have large spaces in which to wander.

This reasoning is specious to the point of dishonesty. It ignores the fact that elephants are adapted,

physiologically and mentally, to move over large areas of landscape and even where they have least reason to do so in the wild, where food and water are locally plentiful, they enjoy an environment richer, and more varied than any urban zoo exhibit could ever provide. Indeed it is unlikely that an area of landscape like the that of the Woodland Park Zoo elephant exhibit, would ever detain a wild family of elephants for more than a few minutes each day.

Elephants need social life, and a rich expansive environment in which they can learn and develop their very considerable capabilities. Woodland Park Zoo's elephants lead diminished, impoverished, oppressed and largely solitary lives.

Woodland Park Zoo has demonstrated clearly that it is no place for elephants. So why are they still there?

The zoo argues that zoo elephants are essential in raising awareness and understanding of the plight of elephants in the wild. But there is no evidence, beyond a simple shared belief, that such "education" is effective in achieving anything. Most disturbingly the zoo has used this belief as a justification for repeated attempts to breed the elephant Chai.

Denied any kind of naturalistic social life, Chai has been the subject to 58 artificial breeding procedures, having lost her first and only calf Hansa, to herpes virus infection. This presents a deeply disturbing picture, and one possibly unique in the whole world: a female elephant deprived of any normal social life, living in largely impoverished conditions and repeatedly subjected to invasive procedures over years, in an attempt to make her pregnant. This situation is probably without precedent. Where and when will it end, for Chai?

Woodland Park Zoo's elephants should be retired to conditions in which they can live in comfort, with opportunities to enjoy an expansive environment and the society of other elephants, for the remainder of their lives. The two elephant Sanctuaries, the Performing Animals Welfare Society (PAWS) and The Elephant Sanctuary (TES), offer just such conditions. I believe that both sanctuaries have offered to accept the WPZ elephants. I have visited TES and I am very familiar with the work of PAWS. These facilities are designed and operate to higher standards than most accredited zoos. They are dedicated to the care of elephants as individuals.

Whatever services they are deemed to have provided to the cause of elephant conservation, it is surely time that the elephants Chai, Bamboo and Watoto were allowed to find some quality of life that restores to them their dignity as intelligent social animals.

Peter Stroud
Melbourne, Australia
November 2011

APPENDIX 10
Chart Comparing AZA Elephant Management Guidelines and PAWS Elephant Management Practices

The following is a comparative analysis of the AZA standards of care for elephants to the facilities at the PAWS sanctuary:

	AZA Standard	PAWS Sanctuary
Indoor space	400 ft² (37 m²) per elephant	PAWS currently has 3 elephant barns all of which far exceed zoo industry standards for elephants as follows: 12,000 ft² (1,114 m²) for African females; 9,000 ft² (836 m²) for Asian females; and 3 bull barns 5,000 ft² (464 m²), 8,000 ft² (743 m²) and 9,000 ft² (836 m²). Each building has a minimum ceiling height of 22'.
Outdoor space	–1,800 ft² (167 m²) for 1 elephant –900 ft² (83 m²) for each additional elephant –0.8 acres for 3 elephants	All of elephant enclosures at PAWS far exceed the AZA standards for elephants. With more than 80 acres (3,500,000 ft² / 325,160 m²) for female African elephants and 40+ acres (1,742,397 ft² / 161,874 m²) for Asian elephants and another 15+ acres (653,390 ft² / 60,702 m²) for bulls. The bull area is currently being expanded and PAWS has space for future expansion if necessary.
Climate control	AZA requires that indoor housing must be maintained at a minimum of 12.8° C (55° F) and that provisions must be made to protect animals from adverse weather, including intense sunlight, chilling rain, sleet, etc. They also note that elephants must be monitored closely when temperature drops below 4.4° C (40° F)	PAWS is located in a warm climate. Only on very rare occasions does the temperature drop down as low as 4.4° C (40° F) in California. The barns are temperature controlled and, when they are not being cleaned, are always available to the elephants day and night. PAWS has staffing shifts set up to ensure that elephants are monitored 24 hours a day regardless of the temperature.
Substrate	No requirement for natural substrate indoors. Outdoor yard surfaces must consist primarily of natural substrates (e.g., soil, sand, grass) that provide good drainage and have a cleanable, dry area for feeding	Heated, rubberized flooring in the African elephant barn. Sandy loam flooring in Asian elephant barn. Bulls have natural substrate flooring. Each barn has a supplementary cement substrate area used for bathing, medical procedures, foot care, etc. Outdoor enclosures feature a variety of natural substrate types, including pasture, and varied terrain including hills, meadows, ponds, lakes and living trees. The large size of the enclosures facilitates the growth of natural vegetation without being constantly trampled and provides adequate drainage.

Enrichment	No requirement for enrichment. However they encourage facilities to provide furnishings, such as rocks and stumps, for elephants to rub against. They require that while outdoors, elephants must have access to sand or soil at all times for dust bathing.	Inherently complex natural terrain, includes stumps, trees, rocks, viewing points, sand pits, mud wallows, ponds and lakes. The African elephants spend their time socializing and grazing as well as browsing over the diverse terrain, which includes lakes and ponds, mud holes and steep hills. There is a 200' difference in elevation within the African habitat, which promotes climbing. Sand is provided in the barns to allow dust bathing indoors. The African barn also has an 8 ft (2.44 m) deep therapeutic pool.
Social requirements	AZA defines an appropriate social group as a minimum of 3 females, noting that males can be housed separately.	PAWS currently has 3 female African elephants, 3 female Asian elephants and 2 male Asian elephants (an additional bull is scheduled to arrive very soon). While males are currently housed separately, visual, auditory and olfactory contact with other elephants is maintained.
Food & Water	No specific standards for elephant diet. However, there is a general requirement that a nutritive diet and fresh water be provided daily.	Diet formulations, developed on advice of veterinarians and animal nutritionists, include: natural browse including grass, brush, and trees supplemented with Mazuri Elephant pellets, bran, oats, Omolene, Red Cell, Vitamin E and Lubricon. They are also given hay and fresh fruit and vegetables. There is fresh running water inside the barns and in the outdoor habitats.
Cleaning	Elephant enclosures must be cleaned of excrement daily. Frequent daily manure removal is recommended and may be necessary for the maintenance of both sanitary and esthetic conditions	Barns and small yards adjacent to the barns are cleaned daily and outer areas of the habitat are cleaned monthly, or more often if deemed necessary.

Staff training and attendance	A minimum of two qualified elephant keepers must be present during any contact with elephants. A qualified keeper is a person the institution acknowledges as a trained, responsible individual, capable of and specifically experienced in the training and care of elephants. AZA has no requirement for 24 hour monitoring of elephants. Note: Some zoos have had incidents where elephants have been found dead in the morning when keepers arrive which highlights the need for round–the–clock staffing.	PAWS has highly trained elephant caretakers and consultants on 24 hour shifts and sanctuary directors, Pat Derby and Ed Stewart live on the property and therefore are on call 24 hours per day. Protocols are strictly enforced to ensure at least 2 trained staff are present when working with elephants. The PAWS elephant caretaking staff has globally recognized expertise and are consulted by zoological facilities around the world to assist in training staff in elephant care and management.
Vet Care	AZA requires that a qualified veterinarian in large mammal medicine be on call at all times as needed.	PAWS accepts elderly and ailing animals, so, in addition to their own veterinarians, they utilize the services of the world's leading elephant veterinarians, many of whom are also provide services to numerous AZA zoos. Vet care is available 24 hours per day as needed.
Time locked in	No requirement for how long an elephant must be allowed to be outdoors. No maximum amount of time specified for how long elephants can be kept indoors.	The climate at PAWS is more appropriate for warm climate species, therefore the elephants are outside 365 days/year and can make choices about how and where they spend their time, as well as which elephants to socialize with. The barns are left open (except during daily cleaning and sanitizing) and the elephants have a choice of indoor or outdoor accommodation. Elephants are encouraged to come indoors at night but have the autonomy to make their own choice and are monitored regularly regardless. Elephants are only kept indoors when temperatures drop below 4.4° C (40° F), typically a small number of nights each year.

Disease & isolation facilities	No requirements for disease control. Many AZA zoos have disease in their elephant herds including TB and Herpes. AZA does require that all facilities must have the ability to separate and isolate animals to address behavioral concerns or allow veterinary procedures to occur.	As a rescue facility PAWS has taken in elephants from both zoos and circuses that have come in with diseases. For this reason they have specialized quarantine areas to ensure there is no spread of disease from new animals arriving at the facility and to ensure animals arriving are not subject to the spread of disease. Quarantine protocols are set up for each elephant individually by the veterinarians and are rigidly enforced. As noted above USDA and AZA zoos both send elephants to PAWS, without concern of spread of disease.
Elephant management	Allows the use of bullhooks (a handheld tool with a sharp point and hook on one end) for controlling/ managing elephants. Allows the leg chaining of elephants for management purposes. Some AZA zoos have moved to the Protected Contact management system instead, where bullhooks and chains are not used. Protected Contact is practiced at Toronto Zoo.	PAWS does not allow the use of bullhooks or threats of any kind towards their elephants and after their arrival at PAWS elephants are never chained. Protected contact is the only form of training used in order to treat animals for medical procedures, foot care, etc.
Barriers	AZA requires facilities to have barriers that are a sufficient strength to safely contain elephants and that they be maintained properly.	PAWS has barriers appropriate to safely contain elephants (California has additional laws to ensure safety, whereas Ontario and some other places in North America do not). The barriers at PAWS are checked regularly to ensure good maintenance and security. PAWS is a rescue facility that is not open to the public, so there is no need for secondary barriers to keep visitors away from primary enclosure barriers however they do maintain an 8' perimeter fence with locked gates which keeps the public off the sanctuary grounds.

APPENDIX 11
PAWS' Offer to Accept the Zoo's Elephants and Overview of Facilities, Staff and Programming

The Nation's First Elephant Sanctuary
PAWS
PERFORMING ANIMAL WELFARE SOCIETY
Founded in 1984
PROTECTION
EDUCATION
ADVOCACY
SANCTUARY
pawsweb.org

The Honorable Richard Conlin
Seattle City Council
PO Box 34025
Seattle, WA 98124–4025

Dear Council Member Conlin,
On behalf of the Performing Animal Welfare Society (PAWS) I am writing regarding the future of Bamboo, Watoto and Chai, the elephants at the Woodland Park Zoo.

This letter is intended to represent PAWS' formal offer to commit to life–time care for Bamboo, Watoto and Chai – providing them permanent, life–time sanctuary. In addition to presenting our formal offer, I am including an overview of background information on our organization and facilities.

PAWS is a nonprofit organization founded in 1984. PAWS' founders and directors have over 75 years of combined experience in caring for elephants, as well as other captive wildlife.

Should the decision be made to send Bamboo, Watoto and Chai to PAWS, we want to assure you that we would work cooperatively with representatives of the Woodland Park Zoo to ensure their safe transport to, and transition into, our 2,300 acre Northern California sanctuary.

We understand that because each elephant's background is different, there will be many factors to consider in their relocation. Upon arrival to PAWS, Bamboo, Watoto and Chai will be carefully evaluated for any necessary treatments each may require, their diets will be assessed, and progress reports and updates will be available upon request.

PAWS is also world–renowned for our progressive foot and joint treatments and our excellent care for arthritic elephants. We routinely host veterinary and behavior workshops and conferences for elephant caregivers from facilities around the globe.

At PAWS, Bamboo and Chai would be housed in our 20,000 square foot female Asian elephant barn. Watoto would be housed in the 20,000 female African elephant barn. After periods of observed introduction, and when it is determined that each elephant can independently and safely join the other female elephants, each will have liberty to roam the vast hillsides of ARK 2000 as they please – exploring trees, grasses, ponds and the sunny slopes.

PAWS currently houses three female African elephants and three female Asian elephants:

- Mara, an African elephant who had been in a baby petting zoo and then sold to a Mexican circus, then rescued and relocated to PAWS.
- Lulu, an African elephant retired from the San Francisco Zoo.
- Maggie, an African elephant retired from the Alaska Zoo.
- Wanda, an Asian elephant retired from the Detroit Zoo.
- Annie, an Asian elephant who retired from the Milwaukee Zoo.
- Gypsy, an older Asian elephant from the Hawthorn Corporation.

PAWS is also the only sanctuary to be able to house bull elephants.

- Nicholas, an adolescent Asian bull elephant from a circus broker.
- Sabu, an Asian bull elephant retired from the circus.
- Prince, an Asian bull elephant retired from the circus.

The following is an overview of our organization and our sanctuaries:

The Performing Animal Welfare Society (PAWS) was founded in 1984.

PAWS provides sanctuary for abandoned, abused or retired performing animals and victims of the exotic animal trade. At our sanctuaries, animals live in peace.

PAWS has developed and maintained its animal sanctuaries with no incidents and has earned an excellent reputation from local neighbors, regional communities, and international governments and wildlife facilities around the world.

PAWS maintains three sanctuaries for captive wildlife in Northern California, USA. Herald, California. Our largest sanctuary, ARK 2000, is 2,300 acres of pristine, natural habitat.

PAWS has coordinated the safe transport of numerous elephants from around the country to our facility.

PAWS has been at the forefront of international efforts to rescue and provide appropriate, humane sanctuary. PAWS is internationally recognized as a leader in captive elephant welfare.

All of PAWS' sanctuary enclosures are designed to provide natural and enriching habitats. Each includes natural grasses, trees and special enrichments for individual animals with consideration for any health or psychological complications which might preclude their ability to engage in normal activities.

Enclosures for healthy animals are designed to replicate, as closely as possible, wild habitats for that species; specially designed environments are constructed for older, arthritic or injured individuals.

PAWS has been featured on many international media programs: *PBS specials, HBO documentaries, Animal Planet, Discovery Network, Public Broadcasting Programs, Entertainment Tonight, The Crusaders, Inside Edition, Nightline, Inside America's Courts, Dateline, 20/20, Animal Planet, The Leeza Show, Montel Williams, The Today Show, CBS Evening News, The Fine Living Network* and others. Each news program was dedicated to educating the public on the need to protect performing animals, the importance of providing sanctuary for rescued and retired animals, the urgent need to preserve wildlife habitat and the need to control captive breeding of exotic animal species.

PAWS protects wild species and their habitat with international programs established in India, Mexico, Africa and Cambodia to diminish human/animal conflicts and to establish protected areas for wildlife.

At PAWS' sanctuaries, rescued animals live in peaceful and natural habitats, free from fear, chains, and harsh confinement. They are at complete liberty to act out natural behaviors in the comfort of their individually designed enclosures and live in peace and dignity for the remainder of their lives.

PAWS' animals are not bred, traded, sold, rented or forced to perform in any way.

PAWS educates the entertainment industry, public officials and the general public in humane care and treatment of captive wildlife.

PAWS animals are cared for by a team of knowledgeable, well trained, and compassionate keepers, wildlife specialists, and veterinarians, who together provide round–the–clock care.

PAWS has an excellent track record of animal health maintenance, disease prevention, behavior enrichment and constant monitoring of all of the animals – promoting the best quality of life.

PAWS respects the integrity of individual animals, providing safe, healthy and secure refuge and enclosures specifically designed for the unique animal which it supports. Individually designed enclosures encourage natural behavior and dedicated keeping staff monitor diets and health 24/7.

With the exception of a strict, limited number of planned educational events annually, PAWS' facilities are not open to the public.

We look forward to hearing from you regarding future care for Bamboo, Watoto and Chai. If you have any further questions about PAWS or our offer, please do not hesitate to contact me directly at (209) 747–4886.

In closing, we thank you for the opportunity to provide a peaceful, permanent home for these elephants.

Pat Derby
President and Founder

PAWS' ARK 2000

PAWS' ARK 2000 operates a 2,300 acre wildlife sanctuary in the foothills of the Sierra Mountains. It is open to the public approximately one weekend a month. It provides separate huge parcels of land on which its female Asian and African elephants are managed. Each parcel has a significant natural water feature: either a large pond on the Asian habitat, or a lake on the African. A variety of substrates, gentle slopes, natural vegetation, and wide expanses in both habitats provide abundant opportunity for the sanctuary's elephants to engage in natural behavior. Due to its favorable climate, PAWS' elephants forage and graze year round.

PAWS has three African elephants, four female Asian elephants and three Asian bulls. Three female African elephants, newly retired from Toronto Zoo, will soon join their ranks. The elephants range freely over their habitat and exercise social autonomy.

The female elephants enjoy two huge barns, each 20,000 square feet.[57] Each is equipped with restraint chutes and other equipment specially designed to handle foreseeable health and husbandry needs. PAWS also designed and installed "an indoor Jacuzzi pool especially designed for elephants with arthritis and joint disease." One barn has a dirt floor, rigorously maintained, to provide a soft sleeping surface the elephants are free to arrange and rearrange into berms and other sleeping structures.

PAWS delivers superb veterinary care. An exotic animals veterinarian is on call at all times. In addition, PAWS opens its doors and operations to the expertise of faculty at nearby UC–Davis School of Veterinary Medicine. PAWS is financially sound and has received the highest rating possible from Charity Navigator for the past five years.

57 These barns are each 10 times the size of the Zoo's barn.

APPENDIX 12

Chart Comparing Woodland Park Zoo's Elephant Facilities and Program with The Elephant Sanctuary's Facilities and Program

Elephant Facility Comparisons

	Woodland Park Zoo	The Elephant Sanctuary
Space	Less than 1 acre	2,200 acres
Water features	Tub–sized	25 acre lake, streams, creeks, and washes
Land features	Flat, compact dirt yard	Steep and rolling hills, meadows, forests
Trees	None within yard	Trees and forested areas
24–Hour outdoor access	No	Yes
Natural foraging	No	Yes
Herd size	3, but 2 are incompatible	14
Physical punishment	No	No
Accreditation	Association of Zoos and Aquariums	Global Federation of Animal Sanctuaries
On–site vet care	Yes	Yes
24 Hour on–site animal care staff	No	Yes
Education and conservation programs	Yes	Yes

The Elephant Sanctuary's Offer to Accept the Zoo's Elephants and Overview of Facilities, Staff and Programming

December 14, 2011

The Honorable Richard Conlin
Seattle City Council
PO Box 34025
Seattle, WA 98124-4025

Dear Council Member Conlin,

I am writing on behalf of The Elephant Sanctuary in Tennessee in regard to providing a permanent home for the three elephants currently housed at the Woodland Park Zoo.

I am the Chief Executive Officer at The Elephant Sanctuary in Tennessee. Prior to my arrival in November 2010, I was for eleven years Head of Wildlife at the Royal Society for the Prevention of Cruelty to Animals in the UK, the world's largest animal protection organization. Before that I was Head of the Animal Department at Woburn Safari Park, a BIAZA and EAZA-accredited zoo. I obtained my doctorate in behavioral ecology from Oxford University.

As the new CEO of The Elephant Sanctuary I would like to reaffirm the offer of my predecessor to take all three elephants at no cost to Woodland Park Zoo or the City of Seattle. At the Sanctuary, Chai, Watoto and Bamboo would join our 14 current residents, many of whom were retired from zoos, with free access to hundreds of acres of woods and pastures over which to roam, and lakes and ponds to swim in. Our barns are spacious and state of the art, with heated floors and natural light. We have a team of sixteen Caregiver and veterinary staff. Our Director of Veterinary Care is Dr. Susan Mikota, one of the world's foremost elephant veterinarians.

The Elephant Sanctuary employs only positive reinforcement-based management—dominance, bullhooks, hotshots, and physical punishment are strictly forbidden. We handle our elephants only through Protected Contact.

In short, we can offer Bamboo, Watoto and Chai a peaceful, natural life in a spacious, enriching, complex natural habitat, where they would be free to roam, explore, forage, and socialize with other elephants of their species in an elephant-friendly climate. Simultaneously, we would offer them behavioral, veterinary, and dietary care and support to enhance their psychological and physical fitness.

I would be delighted to provide further information or assist in whatever way I can.

Sincerely yours,
Rob Atkinson, Ph.D. Chief Executive Officer

APPENDIX 14
The Challenges of Rehoming the Elephants are Manageable

Change is difficult for any animal, including elephants. Rehoming Watoto, Chai, and Bamboo would involve their transport, their learning what it means to be an elephant, and their integration into a new social group. These challenges present short–term difficulties with which both Sanctuaries are highly experienced. All these challenges can be overcome with planned, patient, experienced management. None presents a legitimate reason for rejecting the option of relocation and retirement. The Zoo transported Chai to Missouri and back without incident.

1. Transporting Watoto, Chai, and Bamboo

Both Sanctuaries have ample experience planning and executing successful transportation of elephants. The Elephant Sanctuary has transported over 20 elephants, including an Asian elephant from Vancouver, British Columbia, to Hohenwald. PAWS has equal depth of staff experience and specialized trailers for elephant transport. It is presently preparing the transfer of three African female elephants from Toronto Zoo to its facility in San Andreas. In 2007, PAWS airlifted a female African elephant from Alaska Zoo in Anchorage with no problem. Staff at both institutions are skilled in behavioral management techniques to train, desensitize and smoothly transport elephants.

2.Watoto, Chai and Bamboo can learn what it means to be an elephant

Elephant life at the Sanctuaries is very different from life at the Zoo. Sanctuary staff manage the elephants with an eye to maximizing their autonomy and dignity, all the while keeping an educated and watchful eye on their well being and physical fitness. Life at the Sanctuaries is centered on what the elephants need and desire for themselves. They are free to roam as they wish, socialize with others or avoid others, again, as they wish. This self–directed life is played out in an elephant–friendly climate over huge, complex natural spaces in the company of other elephants of the same species.

3. Watoto, Chai and Bamboo can be successfully integrated into new social group

The third challenge Watoto, Chai and Bamboo will face is successfully integrating into a new social group. A number of factors are predictably important when integrating an elephant into a new social group. They are:

- Careful consideration of potential compatibility of the elephants, taking into account their prior social experience, temperament, current role in social hierarchy, age, personality and the like;
- Relative experience and expertise of staff in implementing introductions, carrying our social integrations, and successfully managing elephants in existing social groups;
- Appropriate facilities to permit incremental introductions and areas of refuge while dominance relationships are established; and
- Staff expertise in progressive, complex behavior management, i.e., shaping behavior by desensitization using positive reinforcement to overcome fear or discomfort.

Both Sanctuaries have the facilities and experienced staff and outside experts to assist them in meeting each of these challenges and assisting each elephant in making a smooth and successful transition into a new social group.

APPENDIX 15
The Seattle Community Supports Retiring the Zoo's Elephants to Sanctuary

The Public Supports Allowing Bamboo, Chai and Watoto to Retire

Thousands of residents of Seattle and surrounding communities support allowing Bamboo, Chai and Watoto to retire to one of these two elite Sanctuaries. Their support is evident by their willingness by the thousands to sign petitions calling on the zoo to provide their elephants a new home. At the time of this report, more than 10,000 residents signed their names. More sign every day. It is remarkable to note how easily most people – including Zoo members – grasp the urgency of our elephants' plight. They readily agree that the Zoo elephants deserve a more natural life with plenty of room in which to roam and bond with others of their own species in a warm, elephant–friendly climate.

APPENDIX 16
Many North American Zoos Have Retired Their Elephants to Sanctuary

Many zoos in the United States have given up exhibiting elephants, in recognition that they simply could not give the planet's largest land mammal the space, environmental complexity or rich social network that marks their natural lives. Zoos publicly announcing the end of their elephant programs include the Toronto Zoo, Point Defiance Zoo and Aquarium in Tacoma, Bronx Zoo, Philadelphia Zoo, Detroit Zoo, San Francisco Zoo, Gladys Porter Zoo (Texas), Lion Country Safari (Florida), Alaska Zoo, Santa Barbara Zoo, Chehaw Wild Animal Park (Georgia), Henry Vilas Zoo (Wisconsin), Louisiana Purchase Gardens and Zoo (Louisiana), Mesker Zoo (Indiana), Frank Buck Zoo (Texas), and Sacramento Zoo. Lincoln Park Zoo in Chicago is also an elephant–free zoo.

The trend is unmistakable in foreign countries as well. India's Central Zoo Authority mandated the removal of all 140 elephants from the country's 26 zoos and their re–homing in wildlife parks and sanctuaries. Flagship zoos in the United Kingdom, including London Zoo, Bristol Zoo, Edinburgh Zoo and Dudley Zoo have closed their exhibits. Paris announced plans to spend $181 million on a new zoo that will not include elephants.[58]

58 http://latimesblogs.latimes.com/unleashed/2010/02/paris–zoo.html.

APPENDIX 17
Patrick Lampi, Director of Alaska Zoo, Correspondence to Toronto Zoo Director

Dear Mr. Tracogna,

My name is Patrick Lampi and I am the Executive Director of the Alaska Zoo.

I spent 7 years as a Keeper (several as an elephant keeper), 13 years as the General Curator and the past six as the Director. I personally went through all of the heart ache in wrestling with the decision of discontinuing exhibiting elephants, the selection of a new home and the transportation.

It took years to get people to come to grips with the fact that it was the right decision to move our elephant. The PAWS facility was selected after a long vetting process. It was absolutely the correct choice.

Pat Derby and Ed Stewart were excellent to work with and completely respectful of our facility, others feelings and emotions. The planning and training for the transport was a joint effort and I could not imagine it turning out any better. I have been back to PAWS since we moved Maggie down there and I will be going again.

I know you are, and will be, receiving criticism for your decision. I was on the receiving end here during the entire process. I am sure a few close minded people around here still think we were wrong, but 99% of the dichard folks that were against our decision now believe that we did the right thing. So there is light at the end of the tunnel.

If you have questions about our experiences or would like more information on my recommendation of the PAWS facility I would be happy to answer them.

Sincerely,

Patrick S. Lampi

THIS LETTER WAS WRITTEN TO THE TORONTO ZOO DIRECTOR
Thank you Director Lampi for your kind words of support.
Pat Derby and Ed Stewart

APPENDIX 18
Contractual and Inherent Authority of City Council and Office of Mayor to Act in this Matter

1. Contractual Basis of Oversight Authority

The Woodland Park Zoological Society operates the Zoo pursuant to a management agreement it entered into with the City of Seattle in 2002 for a term of 20 years. The history of the Zoo and the terms of the Agreement require the Society to perform a quasi–governmental activity over which the City is obligated to exercise meaningful oversight.

The Society performs a government activity by providing a zoo within a public park open to the public that was historically initiated and operated by the City. The Zoo was founded and operated by the City for the benefit of the public. It was in every facet a function of the City. The City continues to holds title to all buildings and the land. The Society provides certain zoological programming, "in accordance with the [City/Zoo Management] Agreement and the Long–Range Plan, and for no other purpose."

The level of City funding, decisive to the Zoo's ability to keep its doors open, strongly suggest that the Society is performing a governmental activity. The Zoo's operating budget for 2011 was approximately $32.9 million. Of that, government grants totaled more than $10 million. The City's share of the grant amount was approximately $6.5 million. The zoo simply could not operate without the city's contribution and levies. In fact, the Agreement spells out the Society's option to terminate the Agreement unless the City continually renews a zoo levy or, absent voter approval, provides "replacement funding."[59] Such language demonstrates the Society's express understanding of the importance of City financial support.

The Agreement spells out a number of tools ensuring close governmental oversight of the Zoo. The Agreement requires the Society to provide annual reports to the Superintendent of Seattle Parks, including a "complete financial accounting," an annual plan to the Superintendent, including a one–year capital improvement plan, a description of all major programmatic changes, and any change to fees. The Agreement also requires supplementary reports to the Parks Board on a quarterly basis, reports to Oversight Committee regarding expenditure of levy funds, a monthly finance report to the Superintendent that gives a summary of revenue from various sources and accounting of costs, and an annual independent audit signed and delivered to the Superintendent.[60] Furthermore, the Society's books must be open to review by the City, and its animal records must be available to the Superintendent and the public.[61]

The scope and depth of the Society's reporting responsibilities as well as the accountability and transparency built into the Agreement all point to the conclusion that the Society operates the Zoo as a public and not private entity.

The Agreement goes on to require the public's participation on the Society's Board of Directors via appointment of public members, one each by the Mayor, the Superintendent, and the council committee that generally oversees Parks functions.[62]

The Agreement requires the Society to involve the public in all major capital projects and specifically calls for a neighborhood liaison with Phinney Ridge, Wallingford, Fremont and Green Lake neighborhoods. The Society's Board meetings are subject to notice and public participation as well.

The scope and depth of the Society's reporting responsibilities as well as the accountability and transparency built into the Agreement all point to the conclusion that the Society operates the Zoo as a public and not private entity. Were the Zoo a private enterprise, none of these conditions and burdens would apply. Such accountability

59 Agreement 7. City Financing.

60 Agreement 20. Reporting Obligations and Public Involvement

61 Agreement. 20.4 Books and Records.

62 Agreement. 20.6 Public Involvement.

makes sense given the City's vital financial support of the Zoo, the key public role the Zoo plays in the cultural life of the City, the City's ownership of the Zoo's entire capital structure and its obligation to provide substantial yearly funding for its operations.

The City has 6.5 million good reasons to care about how the Zoo operates. Of course those 6.5 million reasons represent the substantial and ongoing financial support of the Zoo by City tax dollars. It is evident that the Society could not keep the Zoo's doors open without the City's support. When the City voluntarily undertook this significant financial obligation, it did so only because it recognized the historic and central role the Zoo plays in our community's cultural life. The City embraced the Zoo and by agreeing to lavishly support its operations, gave it favored status within the community. There are, of course, any number of reasons that this was well justified. We take no issue whatever with the City's exercise of discretion in taking this decision. However, when the City bestowed such privilege upon the Zoo, the City by necessity simultaneously undertook the responsibility to safeguard our community's interest in the Zoo. A vital aspect of the community interest is its concern that the Zoo exercise a standard of care for its captive wildlife consistent with community standards of decency, reason and science.

The Seattle City Council and Office of Mayor are the repositories for and instruments of community standards and values. We are deeply concerned that the Zoo's elephant program violates Seattle's community standards and values. As this report details, there is ample evidence from which to conclude our elephants lead lives of suffering and misery at the Zoo. This alarming conclusion is shared by elephant and zoological experts from around the globe. We further believe that the City cannot stand idly by and refuse to act when unnecessary suffering is occurring in a publicly funded community institution. Our elected officials can act. We believe there is more than sufficient cause to do so.

The Seattle City Council and Office of Mayor are the repositories for and instruments of community standards and values. We are deeply concerned that the Zoo's elephant program violates Seattle's community standards and values. As this report details, there is ample evidence from which to conclude our elephants lead lives of suffering and misery at the Zoo. This alarming conclusion is shared by elephant and zoological experts from around the globe. We further believe that the City cannot stand idly by and refuse to act when unnecessary suffering is occurring in a publicly funded community institution. Our elected officials can act. We believe there is more than sufficient cause to do so.

APPENDIX 19
David Hancocks's Statement: Inaccuracy of WPZ's Knowledge and Logic for Keeping Elephants

I would like to support and applaud the Toronto City Council for making the difficult but perfectly correct decision to send their elephants to the PAWS Sanctuary. If I were still director at Woodland Park Zoo I would be lobbying for a similar decision in Seattle.

Over the past ten years I have come to the firm conclusion that urban zoos cannot satisfactorily meet the needs of elephants, and that restricting them to a one–acre paddock, as at Woodland Park, is cruel. I have arrived at this decision after close research of their natural lives in the wild. Conversely I find too many zoo people – and most notably here the staff responsible for the elephants at Woodland Park – rely for their views upon outdated zoo attitudes and disturbing traditions.

Woodland Park Zoo's COO, Bruce Bohmke was quoted in the *Seattle Times* within the past several months as saying, "We think that by having elephants here, we can tell their story. Somebody needs to tell their story. And we believe strongly that seeing an animal in captivity has a huge impact."

This statement is highly revealing. It is the central basis for their justification in keeping elephants. Yet it is absent of any factual support. In total it is just illogical, poor and shoddy thinking.

First, one does not need to have live elephants to tell the story of elephants. Hardly anyone here in Australia, where I live, has ever seen a blue whale, except on film, but almost all Australians strongly support the conservation of blue whales, and expect their government to protect these animals from hunters.

Today we have fabulous technologies that could be creatively employed to provide dramatic and beautiful images, both stunningly huge and closely intimate, direct from protected savannas of Africa and jungles of Asia, enabling zoo visitors to make interactive connections with wild elephants living naturally. This would surely be a far more effective and useful means of storytelling.

The very restricted story that Woodland Park can tell when its principal players are presented on such a pitiful stage, are not behaving naturally, suffer all manner of physical and psychological miseries, and have a completely inadequate social life, is a story that has no validity, and carries little more than messages of human dominance and control.

Second, somebody also needs to tell the story of all those fascinating small mammal species that were removed from the zoo when the officials closed the Nocturnal House. The Zoo could have resolved its budget deficits by sending the elephants to a place with greater space (2,699 more acres than at Woodland Park) plus unimaginably better social conditions than exist at the Zoo, and kept the Nocturnal House open. Many more species would have remained for visitors to observe, providing a much better representation of biodiversity. Moreover, they were species far better suited to captive conditions. Win, win, and win. One needs to question why the Zoo is so very desperate

to hold on to elephants. Their logic is surely based on vested interests. More puzzling is why they are so content, even proud, to keep the elephants in such bad conditions. Those vested interests must be very powerful.

Third, there is no valid justification for Bohmke's claims. It does not matter how strongly he believes that seeing an animal in captivity has a huge impact (he no doubt assumes a *positive* impact but many people must leave the zoo *negatively* impacted by their Woodland Park Zoo elephant experience), it remains just a belief, and one with no credence. It is just a false hope. A faith without substance.

In the zoo industry, his words are a mindlessly and perpetually proclaimed dogma. The American Zoo Association (AZA) has paid researchers to find support for their persistent assertion that they change attitudes and increase support for conservation. They have searched diligently for years, and found nothing of substance, but the AZA keeps repeating the mantra. They catch small glimpses of weak possibilities, wildly inflate them, and use them to justify the loud beating of their empty drums.

Non–zoo funded research papers bare the lie about these baseless claims. Here are details from just two of these independent academic research studies. One, from Monash University, in Australia, (*A Closer Examination of the Impact of Zoo Visits on Visitor Behavior*, by Liam Smith et al, 2008) revealed that after engaging in one of the world's best and most focused zoo wildlife activities, at Melbourne's Healesville Sanctuary, which is presented in tandem with strong and direct conservation messages, more than half of the 175 visitors in the study declared an intent to start or increase their commitment to specific conservation actions. But in a follow–up six months later, only three individuals had started such an action, and it was one they were aware of any way before going to the zoo. Another study, from Emory University, GA, (*Do Zoos and Aquariums Promote Attitude Change in Visitors*? by Lori Marino et al, 2010) examined a study by the AZA on zoo visitors, which has been "widely heralded as direct evidence that zoo visits produce long–term positive effect on people's attitudes towards other animals." The Emory University study concluded that the AZA methodology was faulty, and that "there remains no compelling evidence" to support zoos' claims of making a positive difference.

Meanwhile, the elephants suffer.

David Hancocks
Melbourne, Australia
Director Woodland Park Zoo, 1976–1984.

APPENDIX 20
Dr. Joyce Poole's Statement For Relocation of WPZ Elephants to PAWS Sanctuary

I join my colleagues from around the world in calling on Woodland Park Zoo to send its elephants, Watoto, Bamboo, and Chai to the Performing Animal Welfare Society's sanctuary in San Andreas, California.

I have spent 33 years studying elephants and working for their conservation and welfare. As Director of Research and Conservation for ElephantVoices and as a member of the Amboseli Elephant Research Project, the longest study of elephants in the world, I can speak with some authority on the natural behavior of elephants and their interests.

I have visited many zoos in the United States and observed the behavior of elephants in these institutions. I have reviewed the statements submitted by Mel Richardson, DVM and Peter Stroud concerning Woodland Park Zoo's elephants. I have also visited the PAWS sanctuary in California. As an elephant expert I was given the opportunity to observe the elephants up closely at PAWS. In my opinion, the behavior of elephants at PAWS most closely approaches natural behavior because the elephants have space to roam, autonomy over their daily lives and the peace within which to make choices.

Joyce Poole, PhD
9 November 2011

APPENDIX 21
Dr. Keith Lindsay's Statement

Amboseli Trust for Elephants
P.O. Box 15135, Langata 00509
Nairobi, Kenya/
Oxford, United Kingdom

AMBOSELI TRUST FOR ELEPHANTS

17 November 2011
Seattle City Council/
Mayor's Office

I am writing to support the proposition that Woodland Park Zoo should retire its three elephants (two Asians and one African) to a suitable sanctuary, such as PAWS in San Andreas, California. I write in my capacity as an elephant ecologist, having worked in research and conservation with the Amboseli Elephant Research Project/ Amboseli Trust for Elephants (Kenya) since 1977, where I currently sit on their Scientific Advisory Committee. I have also been involved in elephant management in southern Africa and in the well–being of captive elephants in Europe and North America during the past ten years. My background is that of a Canadian field biologist, with both BSc and MSc in ecology from the University of British Columbia. I obtained a PhD from the University of Cambridge, UK, for my studies in Amboseli and am now based in Oxford, where I work for a small consultancy firm specializing in international development and natural resource management.

I understand that the Woodland Park Zoo has said that its limited facilities (with a compound of a mere one acre) are sufficient for elephants, since all their needs are met by the zoo staff. They also contend that the elephant exhibit plays an important role in educating the public about the plight of elephants in the wild. It appears that they feel their views on this subject should count for more because they are the only true experts on the needs of elephant husbandry. I would suggest that zoo keepers are not, in fact, the only "experts" on elephants' biological needs, and that a broader view from other sources, particularly from people who have studied the behaviour of wild elephants in their natural ecosystems, is at least as relevant, and arguably more so.

On best practice in elephant husbandry, it is important to have a bit of perspective; some idea of where current practices have come from, where they stand now and what they might aspire towards. I think we would all agree that old role of zoo collections – as menageries of exotic animals on display in cages simply for the amusement of urban populations – is outmoded. This old–fashioned idea of zoos has evolved, both in practice and its perceived role, from entertainment (with no thought for the animals' needs) towards education and even conservation, and along with it, a greater concern to meet basic biological requirements. The questions should be: what is the goal for meeting those requirements, what are reasonable conditions for elephants, what do they need to live healthy and productive lives? And how close do the conditions in a given zoo come to providing what elephants really need to thrive?

Modern zoo–keeping has (or should have) recognised that, since wild animals evolved in nature, an under-

standing of their needs has to come from knowledge of their ecology; this understanding from source is even more pertinent for tropical species kept in northern temperate climates. There are two simple facts about elephants that determine much of their physical and social needs: they are very large and they are very intelligent.

Because of their great size, elephants must search, every day, for a large quantity – hundreds of pounds – of sufficiently nutritious food from the vegetation patches in their ecosystems, which are generally variable in space and through time. This search requires them to be on the move constantly, making decisions about where to go and what to choose from the wide range of plant material on offer. They must also be able to remember where they went in the past, to inform their choices about future prospects. To achieve these foraging goals, they have evolved the long limbs that allow them to move large distances, and the large mental capacity for storing spatial memories of their large home ranges (covering tens of thousands of acres) and making correct choices about what to eat and how to get it. Interestingly, home ranges and distances covered may be smaller in rich habitats (although still many thousands of acres), but they also tend to increase during seasonal periods of food abundance, as animals range more widely to exploit ephemeral, rewarding food sources.

Those adaptations of long limbs and large brains to solve ecosystem challenge clearly work in the other direction; they shape the needs of elephants for enough space to exercise and to provide the stimulation of variety and puzzles to solve in getting food.

The size of elephants and their intelligence have also combined in shaping their social behaviour. With a long period of brain development and of social learning by juveniles, elephants have social groups of related females and offspring, where there is considerable cooperation in the care of young animals. These female–bonded groups are very stable, but there is also flexibility, with large aggregations of families forming during periods of food abundance and splitting up during resource scarcity, when competition is most intense. Males which tend to live separately from females in their own, looser social groups, but join them periodically to maintain familiarity and to seek mating opportunities. Friendships between unrelated females and between males are known to develop, while incompatible animals avoid each other. All this social complexity and variability requires space to allow elephants to choose their own social partners. None of this is available at Woodland Park.

Supplying these resources would be a huge challenge for any zoo. As an elephant ecologist, I cannot see these needs can be met in any way by a compound of a single acre in size. In a North American city with hard winters, the elephants are confined indoors during cold periods when the outdoor compound gets little use. It's pretty clear that zoos need to aim higher, to be thinking about how to provide space on the order tens or hundreds of acres of varied habitat, in warm climates, if they are going to give elephants anything remotely approaching their biological needs. A small zoo compound in a northern climate is clearly completely unsuitable for elephant keeping; the choice then should be: should we be trying to keep elephants at all?

I am sure that the elephant keepers at Woodland Park Zoo have a great deal of experience with elephant husbandry, and that they are very dedicated and caring people. However, their approach has been inward looking, and has been focussed on dealing with the problems of captivity, including the interventions of foot care,

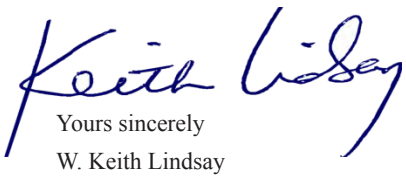
treatment of wounds and other injuries sustained in relation to zoo "furniture", monitoring for and treating disease and infection, managing social relations between dominant and subordinate elephants, and providing sufficient stimulation so that there is less stereotypic, repetitive behaviour. A lot of these problems would be greatly reduced, without intervention, in sufficiently large habitats that allow elephants to exercise, and to make their own choices about foraging and social partners.

The only places in North America where I see something approaching these conditions at the moment are the sanctuaries. If there were zoos with similar conditions, they could be equally suitable. So, for me, it's not a choice of zoos vs. sanctuaries, but inadequate vs. adequate conditions. I struggle to understand zoos which don't want these same, essential things for the elephants they have worked with. PAWS clearly provides these things (along with full–time care by highly qualified staff including veterinarians), while no zoos, accredited or otherwise, do at the moment. As an aside, "accreditation" is something that the AZA confers only on its member zoos, and specifically withholds from sanctuaries – to complain that sanctuaries are not accredited is thus more of a matter of definition than of judgement on the quality of elephants' livelihoods in sanctuaries.

The claim is often made that zoos provide important educational opportunities for the public to learn about elephants and their needs for conservation in the wild. Recent reviews have concluded, however, that there is very little objective evidence supporting this claim. Such studies that have been done suggest that any learning obtained from the experience of a zoo visit is very short–lived and has very little impact on attitudes towards the conservation of wild elephants. The message presented by zoos is, at best, mixed: on the one hand it is suggested that zoos play an important role in assisting conservation, while on the zoos are presented as the last hope for species whose plight in the wild is hopeless. The evidence of the mainstream NGOs and government programmes is that fund–raising for conservation does not depend on the keeping of captive "ambassadors". Neither does genuine education about elephants benefit from the exhibition of socially deprived, unhealthy animals in highly unnatural surroundings.

There is a small but growing number of zoos around North America that have looked at the needs of elephants and their ability to meet them properly, and have concluded that they should no longer keep them. In these examples of elephants being moved from cold, cramped zoos to sanctuaries, the process has been managed to the satisfaction of the zoo keepers, as well as the animal welfare advocates.

Seattle's Woodland Park Zoo could join that select, progressive group, making a positive decision to keep only animals that are appropriate to their resources (financial, spatial, climatic), and to provide a genuine educational experience for their patrons, rather than to persist with backward and, to be honest, inhumane practices.



Yours sincerely
W. Keith Lindsay

APPENDIX 22
Dame Daphne Sheldrick's Statement on Woodland Park Zoo Elephants

I have been working with orphaned African Elephants for the past 50 years, and through The David Sheldrick Wildlife Trust, established in memory of my late husband, the Founder Warden of Kenya's Tsavo National Park, the Trust has hand–reared under my supervision over 130 orphaned newborn elephant calves, two from the day of birth. All our elephants, once grown, gradually make their way back into the wild herds of Tsavo as and when they are sufficiently confident to make that transition, some now having wild born babies of their own, which they have brought back to proudly show the human family of Keepers that replaced their lost elephant family in early infancy, and steered them into adulthood and a normal and natural wild life again when grown. With elephants, one reaps what one sows, and the greatest gift of all, is freedom. All our orphans, without exception, eventually lead perfectly normal wild lives again back where they rightly belong.

You may perhaps have seen either the BBC series "Elephant Diaries", or the 3D IMAX film "Born to be Wild" which featured our orphaned elephants, both those still Keeper dependent and also those now living wild. I would urge you to see this film for Elephants truly are born to be wild, sharing with us humans the same sense of family and sense of death, endowed with all the emotions of the human species and a few more attributes besides as well as a phenomenal memory and genetic instinct that compels them to fulfill the function within Nature for which they have evolved. There is no worse punishment that we humans give our own wrong–doers than life imprisonment, and to force elephants into life imprisonment in a Zoo situation, irrespective of how fancy the facilities may appear to ourselves, is a cruel and unjust punishment for such a sensitive and intelligent animal. Elephants need much more space than any captive situation can provide in order to enjoy a quality of life and, after all, it is a quality of life that we humans rate above all else.

I am sure you love elephants Chai, Bamboo and Watoto, and assuming this is so, as a recognized world authority on Elephants, I appeal to you to release them from the constrictions of a Zoo situation by affording them greater freedom, which I believe has been offered by the Tennessee Elephant Sanctuary. There they would at least have the companionship of others and the blessing of more freedom. Speaking of space, in elephant terms, l00 miles is simply a little stroll for an elephant, something our l0 year old bull "Imenti" did it in a day looking for his favourite Keeper. His story, and further details of our work can be found on our website www.sheldrickwildlifetrust.org

Yours faithfully,

Dr. Dame Daphne Sheldrick DBE MBE MBS DVMS, UNEP Global 500 Laureate

APPENDIX 23

Dr. Jane Goodall's Correspondence Concerning the Unsuitability of Zoo Environments for Elephants

November 18, 2011

To the Mayor and Members of Council, City of Toronto and Toronto Zoo Board of Management,

I am writing to you today to express my appreciation and support for the City of Toronto's decision to send the Toronto Zoo's three elephants, Toka, Thika and Iringa, to the PAWS sanctuary in California.

I understand several people have expressed concern that Toronto's elephants will be placed in a sanctuary, instead of a zoo. While many zoos do an excellent job of caring for wild animals and contributing to their conservation, there are some species, like elephants, which will always be unsuited to zoo environments.

With their intense social bonds and need for large areas to roam, elephants should remain in the wild or when this is not possible, in a sanctuary that can provide them with adequate care, the chance to form natural bonds with other elephants, and large areas of natural habitat.

As someone who has visited a wide variety of sanctuaries throughout the world, I can assure you that many offer the highest standard of housing and care possible. The Jane Goodall Institute's own Tchimpounga Sanctuary in the Republic of Congo is one example, but there are many others.

My colleagues, elephant biologists Cynthia Moss and Joyce Poole, who rank among the leading elephant experts in the world, have visited the PAWS sanctuary and call its elephant housing and care exemplary, among the best found anywhere. Perhaps more importantly, they say that the elephants at PAWS actually act like their wild counterparts, something that is very rare in captivity.

Toronto City Council has shown great compassion and leadership in this decision. I believe you have made the right choice for Toronto's elephants and I sincerely hope you have an opportunity to see the elephants after they've had a chance to settle into the PAWS sanctuary. I have no doubt the experience will change them for the better.

Jane Goodall

Dr. Jane Goodall, D.B.E.
Founder of the Jane Goodall Institute and UN Messenger of Peace

APPENDIX 24
AZA-accredited Detroit Zoo's Reasons for Letting Their Elephants Go

August 2005

A fundamental requirement for keeping animals in captivity is that we provide an excellent quality of life. In order to do that we must meet a species' and an individual's physical, social and psychological needs. We feel that we can accomplish this for all the animals at the Detroit Zoo, but can't for elephants. Elephants in general in captivity live shorter lives than in the wild, do not reproduce well, show numerous physical problems and often display psychological problems.

(1) Why was the decision made to no longer have elephants in Detroit?

a.) The more we learn about animals the more our practices change. For decades, elephants at this and every other zoo were "cared for" by putting chains around their legs, restricting their movement for hours at a time, and training them, at times using physical punishment with an "ankus," a rod with a metal hook on the end. Elephants actually have sensitive skin areas and the hooks hurt them. They learn to fear the ankus. This type of management is still practiced in a number of zoos and all circuses. Eight years ago we switched to a type of management called "protected contact." Protected contact eliminates punishment and almost all danger and stress to the animals and the keepers by requiring that the keepers work with the elephants from behind a protective barrier. In addition to being safer for staff, this type of management allows the elephants to choose whether they'd like to engage in husbandry sessions instead of requiring that they comply with "commands" (and physically disciplining them when they don't). Protected contact uses positive reinforcement to encourage the elephants to interact with staff. This allows keepers to administer preventive care, something elephants obviously wouldn't need in the wild.

b.) We used to believe that preventive foot care and enriching the relatively small amount of space the elephants have with objects and "toys" might be enough. Now we understand how much more is needed to be able to adequately meet the physical and psychological needs of elephants in captivity, especially in a cold climate. We no longer think that we can provide the necessary social and physical environment for elephants.

c.) Since 2000, we had been working on a new physical master plan for the Detroit Zoo. It included a concept for an elephant habitat that is 4–5 times larger than the existing 1 acre enclosure. The master plan process allows us to look at the entire zoo site and make decisions on the allocation of physical space to animals, exhibits and facilities. The development of exhibits identified in the master plan is an intensive process that includes a great deal of information gathering before actual design of a building or habitat begins.

d.) In January 2001 we began a series of meetings and workshops with DZI elephant staff, architects and experts in elephant care and management to begin the information–gathering process for the expanded elephant habitat conceptually identified in the master plan. These meetings and workshops convened participants including:

- DZI elephant care staff, curators, veterinarians and Director
- Jones and Jones Architects and Landscape Architects
- Alan Roocroft, former elephant manager at the San Diego Zoo and Wild Animal Park, now a consultant on elephant management around the world
- Gail Laule, an expert and consultant on animal training, and one of the developers of protected contact management of elephants
- Ed Stewart, manager of PAWS (Performing Animal Welfare Society) a sanctuary in San Andreas, Calif., and the principal designer of its elephant habitat

e.) A two–day workshop with DZI staff and Jones and Jones architects in November 2002 focused on potential physical elements of a major expansion. A subsequent workshop, in December 2003, was conducted in conjunction with a consultation by elephant care expert Alan Roocroft. Our conclusions following the various workshops and consultations were that Asian elephants need not only much more space, but also a milder climate that would allow normal activity year round. Elephants require an appropriate (semi–tropical) climate that is more consistent throughout the year than a northern U.S.

temperate climate. Michigan winters are too cold for the elephants to be outside. They spent the majority of their time inside the building, which both prevented them from traveling as much as they should and required that they spend long periods of time standing on concrete. They need to walk a great deal (miles every day) and be on soft, natural substrate like dirt to maintain the health of their feet and joints. In addition, captive elephants need to have complex social environments that include many other elephants of different ages.

f.) The North American elephant population is not currently self–sustaining, so it will, in the future, be necessary to bring wild elephants into captivity to fill zoo exhibits. There are situations in which the rescue of wild animals is necessary, both to save individuals and to save entire species. Rescue requires the ability to properly care for the animals in captivity, which is possible for many, especially smaller, species. It is unclear if the capture of wild elephants for exhibition in zoos is in fact a "rescue" if the elephants' needs cannot be met by the captive facility.

(2) Did something specific happen?

No. This decision was the result of years of deliberation as well as information about many other zoo elephants and their physical and psychological problems. Our knowledge of the needs of elephants is constantly growing, especially knowledge about the effects of a captive environment on their health and well–being. Elephants can live for 60 or more years, but many captive elephants have been euthanized at much younger ages because of foot problems, which are found only in captive elephants, not in wild ones.

(3) What does the public think?

We understand that for many people a zoo visit includes seeing lions, tigers, bears, and elephants, among other animals. At the same time, we believe that our guests' expectations are that they will only find animals in the zoo that the zoo can properly care for. Polar bears shouldn't be in the tropics, elephants shouldn't be in small Arctic environments.

(4) Were the elephants' health poor?

Wanda has arthritis in her front legs and she received treatment for it for a number of years at the Detroit Zoo, including ibuprofen and cosequin (joint supplement) in her food daily, and also anti–inflammatory and pain medication, ketoprofen and an oral joint supplement, Glycoflex. She continues to receive anti–inflammatory and pain medications at PAWS ARK 2000 sanctuary. Winky has a couple of foot problems that are probably related to her not lying down, even to sleep, while at the Detroit Zoo. She lies down to sleep every night at the sanctuary, so we expect that her foot problems will eventually resolve. Preventive foot care takes place regularly at the sanctuary, but in time will probably be needed much less frequently now that the elephants are on natural substrates. Preventive care involves trimming their footpads, filing their nails, and cleaning and disinfecting the bottoms of their feet. These types of problems are common in captive elephants – not in the wild.

(5) Why not get younger elephants that won't have these problems?

There are far fewer young elephants than older ones in captivity at this time. We feel that the conditions of captivity, especially in cold climates like Michigan's, will lead to the development of these same problems, so it is likely that elephants who don't currently have arthritis or other problems would develop them here.

(6) Can't the elephants be taken to warm climates in the winter and returned to the zoo for the summer seasons?

Traveling is a risky and stressful activity for elephants. We believe that the practice of moving elephants on a regular basis, like circuses do, significantly compromises the elephants' welfare.

(7) Has research been done about elephants and their welfare in captivity?

There is a publication on the welfare of captive elephants in Europe, by two researchers from Oxford University, which was commissioned by the Royal Society for the Prevention of Cruelty to Animals. It is available at the RSPCA website, www.rspca.org.uk. Nevertheless, our decision is based primarily on our own expertise and experience.

(8) Was this proactive or reactive – and why now?

This decision was proactive and cumulative in the sense that we continually learn more about animals and their needs. The discussions at our workshops in 2002 and 2003 and the severity of winters affected our perspective on how elephants fare in cold captive environments. Previously we hoped that the foot care, along with incremental exhibit expansion and enhancement, might

be enough. Now we understand how much more is needed to be able to properly care for Asian elephants in captivity.

(9) Are other Zoos in similar climates considering such actions?
We don't know.

(10) Are you considering this for other animals at the zoo?
As far as we can determine, elephants are the only animals at the zoo for which there is a great disparity between what they need and what we can provide. For other animals at the Detroit Zoo, we provide complex, engaging, appropriate and sizable environments. We don't believe that we can provide the space, environmental and social conditions that elephants need. Other large exotic animals at the Detroit Zoo (for instance giraffe and rhino) that are found in similar wild habitats don't show the damage that elephants did.

(11) What are others in the zoo community saying about this action by the Detroit Zoo?
We hope our decision to place our elephants in an accredited sanctuary in a warmer climate with many acres, many other elephants, and no physical discipline is supported by caring professionals in the zoo community. We know some did not view it as a good business decision or something needed for the animals' well–being.

(12) What do you think other zoos' current thinking is on captive elephants?
It seems that most zoos think that they can provide suitable care for elephants.

(13) How much investment would be needed to provide the elephants with an environment that meets their physical, social and psychological needs?
Perhaps at a minimum, 10–20 acres in a warm climate with a number of other elephants. Zoo environments generally cost $2 million–$4 million per acre.

(14) Where did the elephants go?
Both elephants now live at the PAWS ARK 2000 Sanctuary in California. They have over 30 acres and currently three other elephants to live with. They have a new barn with natural substrate floors (instead of concrete), and the elephants even have access outside all night for most of the year. We considered accredited zoos in warmer climates and two elephant sanctuaries. Our criteria included a warm climate for much if not all the year, sufficient space (many acres), the ability to provide excellent care, the use of protected contact management (no physical discipline), and a sufficient number of other elephants to provide appropriate social opportunities. We felt that it was important to place Winky and Wanda together in a new home because they had been together at the Detroit Zoo for nearly 10 years.

(15) What do visitors see instead of elephants at the Detroit Zoo?
Two white rhinos now live where the elephants once did. We feel we can provide an appropriate habitat for rhinos, both in terms of size and environmental conditions. Rhinos do not have the same social and physical requirements in captivity as elephants, and do not require the same amount of space and environmental complexity. Rhinos have thrived here for decades.

Front and back cover photo credit: The Elephant Sanctuary in Tennessee

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