November 23, 2015

Timothy Van Norman, Chief Branch of Permits Division of Management Authority U.S. Fish and Wildlife Service

Via electronic submission

Re: PRT-52849B; Docket No. FWS-HQ-IA-2015-0157

Dear Mr. Van Norman:

On behalf of the Animal Legal Defense Fund (**ALDF**) and its hundreds of thousands of members and supporters, People for the Ethical Treatment of Animals (**PETA**) and its more than 3 million members and supporters, Performing Animal Welfare Society (**PAWS**) and its tens of thousands of supporters, and captive wildlife attorney Deborah Robinson, Esq., enclosed please find comments opposing the issuance of PRT-52849B (**Application**), notice of which was published in 80 F.R. 64008 on October 22, 2015.

The Application submitted by Dallas Zoo Management (**Applicant**) on behalf of the Dallas Zoo, Henry Doorly Zoo, and Sedgwick County Zoo, (collectively, the **Zoos**) for the proposed import of 18 wild-captured African elephants from Big Game Parks (**BGP**) in Swaziland for the purpose of captive breeding and public exhibition is deficient in numerous ways that make permit issuance improper, including, but not limited to:

- 1. It is premature for U.S. Fish and Wildlife Service (**FWS** or **Service**) to even consider the Application under 50 C.F.R. §§ 13.21(b)(2) and 23.33(c) due to deficiencies in the Application, required by 50 C.F.R. parts 13 and 23, that must be met prior to permit issuance;
- 2. All aspects of the intended use of the elephants are predominantly commercial purposes, which renders permit issuance improper pursuant to 50 C.F.R. §§ 23.35 and 23.62;
- 3. The proposed import has extensive and impermissible negative welfare implications for the 18 elephants that impermissibly violate 50 C.F.R. §§ 13.41 and 23.65;
- 4. The Application fails to sufficiently demonstrate the general factors and factors specific to Appendix I species that establish that the proposed import and use of the elephants will not have a detrimental impact on the species, as required by 50 C.F.R. §§ 23.61 and 13.21(b)(4).

Therefore, in accordance with 50 C.F.R. §§ 13.21(g) and 23.33(d), we ask that the FWS deny PRT-52849B.

Very truly yours,

raem

Carney Anne Nasser, Esq. Legislative Counsel ALDF







Rachel Mathews, Esq. Counsel | Captive Animal Law Enforcement PETA Foundation

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Enclosure and Exhibits

Comments in Opposition to PRT-52849B Dallas Zoo Management's Application to Import 18 Elephants From Big Game Parks

I. The Application is Deficient.

Section 13.21 of 50 C.F.R. outlines conditions under which an application for a permit under the Endangered Species Act or CITES *must* be denied. FWS is precluded from issuing such a permit if, *inter alia*, "the applicant has failed to disclose material information required, or has made false statements as to any material fact, in connection with his application;"¹ or "[t]he applicant has failed to demonstrate a valid justification for the permit and a showing of responsibility."² Moreover, the Applicant's "failure to submit timely, accurate, or valid reports as required may disqualify such person from receiving or exercising the privileges of a permit as long as a deficiency exists."³ It is our contention that the Application fails on all of these issues and therefore must be denied.

A. Applicant Has Failed to Disclose Material Information and Made False Statements as to Material Facts.

1. Number and ages of elephants.

The Application provided false and/or incomplete information as to the number and population characteristics of the elephants sought to be imported. The Application filed by the Dallas Zoo in October of 2014 was stated to be for the import of 15 elephants, out of which four were male and eleven female.⁴ The Application is clear that a total number of 15 elephants is expected: "The final number of specimens to be imported will depend on a number of factors but is not anticipated to exceed a total number of 15."⁵

However, the Draft Environmental Assessment (EA) published by the Service on September 25, 2015, references "18 wild African elephants" and goes on to describe "3 adult females, 3 subadult intact males, and 12 subadult females."⁶ According to the Zoos' press release, also dated September 25, 2015, "While these elephants were all born in the wild in Swaziland and their exact ages are unknown, it is confirmed that 15 are sub-adults that are weaned and are estimated to range in age from 6-15 years old. Three others are young, adult females with estimated age ranges from 20-25 years old."⁷

Therefore, the Application either misstated the intended number and composition of the group sought to be imported, or that information changed without adequate explanation, rendering the Application incomplete. The Draft EA references "an email sent to the Service on August 4, 2015, from Dr. Lynn Kramer, Vice President for Animal Operations and Welfare for the Dallas

¹ 50 C.F.R. § 13.2(b)(2).

² *Id.* § 13.2(b)(3).

 $^{^{3}}$ *Id.* § 13.2(c)(4).

⁴ Dallas Zoo's African Elephant Import Permit Application ("Application") at 1.

⁵ Application at 2.

⁶ Draft Environmental Assessment, Dallas Zoo Management, PRT-52849B ("EA") at 2.

⁷ Dallas Zoo Mgmt. Inc., *U.S. Zoos Work to Relocate Elephants, Making Room for Rhinos in Africa,* Business Wire (September 25, 2015), <u>http://www.businesswire.com/news/home/20150925005297/en/U.S.-Zoos-Work-Relocate-Elephants-Making-Room</u>.

Zoo" which reportedly states that "BGP requested that the three juvenile males that were not previously included in the permit application be added so they are not separated from their mothers."⁸ However, there is no such email in the materials provided by the Service in response to a FOIA request for the Application and supporting materials (begging the question of compliance by the Service with FOIA law as well as the question of whether there is other documentation missing from the record). Moreover, the statement makes no sense and raises the question of whether the Service has been misled or has misinterpreted the situation. If the original application included 4 juvenile bull elephants and no adult elephants, and the Draft EA references 15 juvenile elephants (of which 3 are male) and 3 adult female elephants, there has been more of a change in the individuals than simply adding (as stated in the explanation contained in the Draft EA) for the change) three juvenile males.

Further, it is clearly false that, as stated in the application, "No individuals older than 12 years of age will be considered for import under this application. Thus, all were born in the wild in Swaziland following the last import in 1994."⁹ Given that three of the elephants are estimated to be in their 20s, it is highly likely that any or all of the three adults were in fact born in Kruger prior to 1994 and part of that import to Swaziland.

This is material information in that it appears to affect the possibility of relocating the elephants elsewhere in Africa rather than shipping them overseas; the zoos have offered this explanation of why they can't just relocate the elephants: "In South Africa, for example, standards for the management of elephants have been established and *elephants from outside the country are not typically allowed* because of their impact.¹⁰ If, as is apparent now but not disclosed in the Application, some of the elephants are from South Africa, one impediment to their relocation in Africa is gone.

2. Information about zoo staff and facilities.

Section G of the Application requires a "description of the technical expertise of each person" involved with the "justification for requested activity," which in this case would be every person who is expected to work—directly or indirectly—with the elephants, and every "animal caretaker." The Zoos simply failed to provide all of this information, as required. Contrary to the Application statement that "Elephant management technical expertise and experience is provided in Attachment 30-CVs for Elephant Management at Henry Doorly Zoo,"¹¹ there is no information provided for any elephant keepers at the Henry Doorly Zoo – no names, and no description of technical expertise.

While there are detailed descriptions of the facilities as projected, information as called for in Section G is entirely lacking as to when and whether the Henry Doorly Zoo's elephant exhibit will be completed, as well as information as to the status of the facilities at Sedgwick (which aren't expected to be completed until Spring¹²) beyond a broad statement that "Adequate

⁸ EA at 17.

⁹ Application at 2.

¹⁰ Room for Rhinos, A Safe Future, <u>http://www.roomforrhinos.org/a-safe-future/</u> (last visited Nov. 22, 2015) (emphasis added).

¹¹ Application at 20.

¹² Daniel Salazar, *Sedgwick County Zoo plans to add six elephants from Africa*, Wichita Eagle (September 25, 2015), <u>http://www.kansas.com/news/local/article36537549.html</u>.

facilities to house the elephants will be completed prior to the import, although some outdoor exhibits may not be fully completed."¹³ There is some doubt as to whether the "adequate facilities" contemplated are the facilities described by Applicants, or merely some temporary measure; if the latter, there is no description provided as to what holding facilities will in fact be in place should the elephants be brought here.

It should be noted here that, per the EA, "It is possible that, after final review of all three of the zoos' completed facilities, the Division of Scientific Authority determines that the facilities are not suitably equipped to house and care for all 18 elephants and a reduction in numbers at one or all of the institutions is necessary to complete their finding."¹⁴ This is, however, patently inaccurate and impossible as two of the zoos' facilities are not expected to be completed at the time of import, meaning that the Service contemplates issuing the permit without being able to satisfy itself that the facilities are suitable.

Finally, acknowledging the possibility that adequate facilities may not, after all, be completed by the time the elephants arrive, the Application goes on to name the National Elephant Center as a possible housing facility. No detailed description is provided of the facilities or the staff at the Center, as required, despite the possibility that one or more of the zoos will not be ready to house elephants and the Center may be called upon to maintain the elephants temporarily. The Center is described only as follows: "However, in the unlikely event that the facilities are not completed, the elephants can be adequately housed and cared for at the National Elephant Center located in Fellsmere, Florida. The Center is a 225-acre home for elephants that provides short-term and long term care for North American elephants in support of the accredited zoo population and for the welfare of elephants in need. The Center provides flexible habitats for both African and Asian elephant Center have died there between the arrival of its first elephants in 2013 and August of this year, and the Center has recently announced that its last two resident elephants will be moved to other zoos, leaving it vacant and with an uncertain future.¹⁶

3. Specific, identifying information about each elephant, and about removal from the wild.

This raises another issue as to the incompleteness or incorrectness of the Application itself, which again precludes the Service from granting the permit. The application requires identifying information "for EACH animal/specimen involved in the proposed activity."¹⁷ The information sought includes, *inter alia*, in Section E: birthdate (approximate), gender, and any identifying markings.¹⁸ It further requires in Section F, again for each animal, a description of "where, when, and by whom (name and address) the specimen was removed from the wild."¹⁹

¹³ Application at 17.

¹⁴ EA at 16.

¹⁵ Application at 17-18.

¹⁶ Melissa E. Holsman, *Remaining pachyderms leaving National Elephant Center in Fellsmere*, TC Palm (November 10, 2015), <u>http://www.tcpalm.com/news/indian-river-county/exclusive-remaining-pachyderms-leaving-national-elephant-center-in-fellsmere-2432d740-0799-09fe-e053-345114292.html</u>.

¹⁷ FWS Form 3-200-37 (emphasis in original).

¹⁸ Id.

¹⁹ Id.

None of this required information is provided in the Application, which provides only generic reference to 15 African elephants ("4.11"), with nothing about the individuals involved (e.g., birthdate or approximate birthdate, or identifying markings). The Application contains none of the required information concerning of their removal from the wild. No such information is in the supplemental materials, and this information appears not to have been furnished at any time to the Service, despite clear requirements to do so. (*See also* Section III, below.)

In fact, it is claimed on the Application that "Only following approval of all necessary import and export permits will specimens be removed from the wild,"²⁰ which would presumably excuse the absence of the information required by Sections E and F. This, however, is entirely false; in fact, the elephants have already been captured and are being held in bomas. (Henry Doorly Zoo CEO Dennis Pate, in a videotaped interview from September 25, 2015, refers to a trip "last July" to capture the elephants;²¹ presumably that means they were caught in July of 2015.) The detailed information required in the Application has still not been provided to the Service even though presumably it has been available to the zoos since that capture – for which, according to Mr. Pate's statement, all three zoos had representatives present and, presumably, participating.

In sum, the information that has been withheld from the Service renders it impossible to adequately assess the welfare impact of the capture or to determine the environmental impact of the proposed import. The Service has been not been provided with the relationships or ages of the elephants sought to be imported—nor, by extension, the relationships or ages of the elephants remaining in the wild population. It is unclear what the relationships are within the group of elephants designated for importation. According to Dennis Pate, "those three (older elephants) have given birth to **some of** the fifteen (juveniles)."²² Given Applicant's failure to provide the required information to the Service, it is not possible to determine whether some or most of the juvenile elephants have been taken from their mothers, with resultant trauma.

Moreover, Applicant has provided no information with respect to the individuals remaining behind, which would allow a window into the role these individuals have played within their herd(s) or the extent to which their removal from the herd will disrupt and endanger the survival of the elephant population in Swaziland.

The failure on the Applicant's part to fully disclose material information, and the false statements of fact are enough to preclude the Service from issuing the permit as a matter of law.

B. Applicant Has Not Demonstrated A Valid Justification for the Permit.

²⁰ Application at 3.

²¹ *RAW:* 6 elephants headed to Omaha's Henry Doorly Zoo, KMTV Action 3 News (Sept. 25, 2015), https://www.youtube.com/watch?v=GDYkqK1DCLU, at 3:06.

 $[\]frac{1}{22}$ Id. at 10:30 (emphasis added).

The Applicant claims that the primary purpose of the import is to "help achieve Swaziland's wild elephant population numbers for optimal management levels,"²³ with the secondary effect of benefiting BGP's rhino plans. There is no reason to believe that BGP will achieve this, based on past performance. In fact, BGP has not proven itself able to manage a very small elephant population to begin with. In 2003, the San Diego Wild Animal Park and the Lowry Park Zoo imported 11 elephants to reduce the number of elephants in Swaziland, with BGP claiming an overabundance of elephants and threatening to cull individuals. In spite of the funding received from the sale of the elephants, BGP again failed to effectively manage a very small population of elephants, and is again claiming the need to reduce elephant numbers, under threat of killing individuals. FWS now calls the 2003 a "short-term remedy,"²⁴ and there is a very good chance that this import will provide yet another short-term remedy. In fact, by providing a "safety net" for BGP—an organization that operates without any oversight—US zoos are abetting poor wildlife management practices that have resulted in undesired population increases and environmental degradation. One of the larger problems with the proposed export is the lack of an independent source to determine if BGP is honestly representing its situation, and not just taking advantage of an opportunity to enrich itself and ignoring other potential solutions, if in fact it must reduce the elephant population.

Granting a permit for this import will not enhance the survival of the species. The applicant states that the "optimal" biodiversity objective (determined by BGP) for the elephants is to maintain only a few specimens—five to eight animals in each of two parks (a decrease of 40 percent)—for the "purposes of tourism to support the park operations and conservation and cultural representation."²⁵ Keeping unnaturally small numbers of elephants does not enhance the wild population or elephant well-being, as elephants naturally live in large, extended social networks. In effect, this is a commercial use of elephants to draw tourists and revenue for BGP.

1. Importing wild elephants will not change the fact that elephants are not thriving or self-sustaining in zoos.

Allowing this import will not make a significant long-term difference in establishing a selfsustaining collection of breeding elephants in zoos. In the Zoos' own research, Faust and Marti state: "Even with drastic changes in management, it will be difficult to maintain the current population size over the next 5-10 years, let alone grow the population to a larger target size quickly."²⁶ They further state that "extreme and unrealistic" import scenarios did not guarantee that zoos would reach their desired target population size.²⁷ Other actions, including lowering infant mortality rates (which had only a small effect on projections) and improbably increasing births *by more than twice the current rate* are required just to sustain the current number of elephants.²⁸

Apparently, the plan by zoos to reach a target population size that would sustain a collection of elephants, while maintaining something close to the number of facilities that currently hold

²³ Dallas Zoo's African Elephant Import Permit Application Addendum at 9.

²⁴ EA at 3.

²⁵ Application at 11.

²⁶ Faust, Lisa and Marti, Katelyn. Technical Report on ZooRisk Modeling of the North American African Elephant Population, Executive Summary. May 16, 2011. Unpublished report.

²⁷ Ibid.

²⁸ Ibid.

elephants, is unrealistic. In fact, the Applicant has not presented a comprehensive view of the poor record that zoos have with breeding African elephants. The following facts bear this out:

- Currently, 33 U.S. zoos accredited by the Association of Zoos and Aquariums (AZA) hold African elephants (out of 60 AZA zoos with elephants).
- Less than a third (12) of those zoos have had births in the last 12 years. At two of those zoos, the calves are no longer living, leaving only 10 zoos with surviving offspring during that time. One zoo that had two births is no longer accredited by the AZA (Pittsburgh Zoo), leaving nine zoos with surviving offspring.
- During the same time period, of the nine zoos currently accredited by the AZA with births and surviving offspring: three zoos had one birth, two zoos had two births, one zoo had three births (one surviving offspring), and three zoos had four or more births.

Zoos are destined to fail in reaching their population goals because these goals are simply unattainable, therefore, zoos will continue to require the importation of wild elephants. The insurmountable problems that zoos face are a declining number of zoos holding elephants (two zoos recently stopped displaying elephants and another zoo will soon relocate its elephants); the sporadic nature of births; a small number of zoos producing a small number of elephants; captivity-caused reproductive disorders, infertility, foot and joint diseases, and infectious disease.

Especially notable is the fact that reproductive acyclicity is a problem in both Asian and African elephants in zoos, but moreso in African elephants.²⁹ Nearly one-third of monitored female African elephants who are hormonally monitored in North America showed no sign of estrous cycle activity, exacerbating the non-sustainability of the captive collection in zoos.³⁰ At the 2014 AZA Conference, Janine Brown reported that 40 percent of African elephants were not cycling, and that cycling ceased after age 40.³¹ Free-living African elephants in the Amboseli National Park are known to reproduce into their 60s.

Contrary to what zoos claim, elephants do not thrive in captive conditions, with more elephants dying than are being born. Decades-long efforts to establish a self-sustaining group have simply failed. A 2012 Seattle Times report found that elephant births in zoos failed to offset deaths, which will lead to the demographic extinction of elephants in U.S. zoos in the next 50 years. The Times analyzed 390 elephant fatalities at accredited zoos in the U.S. over a period of 50 years. Of the 321 deaths studied by the Seattle Times, half the elephants were dead by age 23, about a third of their expected life span of 65-70 years. Most died from injury or disease associated with captive conditions.³²

There is more than enough scientific evidence that lifelong confinement in zoos is not an "appropriate destination" for an elephant. ^{33,34} (See Section III for further discussion of problems

 ²⁹ Elizabeth W. Freeman, Emily Weiss and Janine L. Brown. 2004. Examination of the interrelationships of behavior, dominance status, and ovarian activity in captive Asian and African elephants. *Zoo Biology*: 23, 431-448.
 ³⁰ Elizabeth W. Freeman, Greg Guagnano, Deborah Olson, Mike Keele and Janine L. Brown. 2009. Social factors affect ovarian acyclicity in captive African elephants. *Zoo Biology*: 28, 1-5.

³¹ AZA Conference 2014. Report on ovarian cycle status and acyclicity by Janine Brown.

³² Behrens, Michael. Elephants are dying out in America's zoos. *Seattle Times*. December 1, 2012.

³³ Ros Clubb et al., "Compromised Survivorship in Zoo Elephants." Science 12: 1649.

³⁴ The Welfare, Housing and Husbandry of Elephants in UK Zoos. University of Bristol. 2008. http://www.idausa.org/wp-content/uploads/2013/05/U-of-Bristol-Report.pdf.

related to captivity.) Saragusty et al. state: "[l]eft undisturbed, elephants reproduce well and in approximately even numbers in the wild. This is not so in captivity, where fecundity is low and juvenile mortality is high."³⁵ Further, scientific studies link reproductive problems in captive elephants to conditions related to their captivity, such as stress and obesity.³⁶

Some zoos may be enlarging exhibits and striving to keep larger numbers of elephants, but this is nothing more than another desperate attempt in zoos' ongoing experiment with these animals. Despite the concept of "choice and control," elephants in zoos continue to be intensively managed, including through separations of bonded elephants for transfers to other zoos. The applicant cites a "fundamental change" in zoo philosophy for the confinement of elephants, including feeding protocols. These protocols may have worked for zoos in warm weather areas, such as the San Diego Zoo Safari Park, which has access to browse year-round. However, two of the zoos involved in the permit application, Sedgwick County Zoo in Kansas and Henry Doorly Zoo in Nebraska, experience extended, severe winters and will be unlikely to provide fresh browse. The concept of free foraging should also be questioned as elephants in these zoos will spend their time largely indoors, which could lead to obesity, a problem that is already widespread in zoos due to lack of space. Obesity, of course, is linked to reproductive problems.³⁷ Living indoors for prolonged periods will likely necessitate the separation of at least some elephants at some time. Zoos claims that allowing elephants free access promotes natural development of complex herd dynamics and natural breeding, but the reality of limited space can create dangerous situations. Such was the case when a bull elephant left with the females overnight at the San Diego Zoo Safari Park killed the female elephant, Umoya, who was imported from Swaziland in 2003.

Captive facilities continue to fall far short of meeting elephants' natural needs for movement, space, and extended social networks, with negative effects on health, behavior, and reproduction.^{38, 39}

2. Increasing the number of African elephants in zoos does not help conserve the species.

Clubb and Mason cite various sources in stating that captive breeding does not have a direct conservation role for elephants.⁴⁰ Contrary to the generally accepted measure of ex-situ wildlife

³⁵ Joseph Saragusty et al., Skewed Birth Sex Ratio and Premature Mortality in Elephants, *Animal Reproduction Science*, at 7 (2008).

³⁶ See, e.g., Ros Clubb et al., Fecundity and Population Viability in Female Zoo Elephants: Problems and Possible Solutions, supra note 7, at 237-47.

³⁷ Saragusty et al., *supra*, at 7.

³⁸ Poole, Joyce H., and Petter Granli. "Mind and Movement: Meeting the Interests of Elephants." In *An Elephant in the Room: The Science and Well-Being of Elephants in Captivity*, edited by Debra L. Forthman, Lisa F. Kane, David Hancocks and Paul F. Waldau, 2-21. North Grafton: Tufts Center for Animals and Public Policy, 2009.

³⁹ Lee, Phyllis C. and Moss, Cynthia J. "Welfare and Well-Being of Captive Elephants: Perspectives from Wild Elephant Life Histories." In *An Elephant in the Room: The Science and Well-Being of Elephants in Captivity*, edited by Debra L. Forthman, Lisa F. Kane, David Hancocks and Paul F. Waldau, 22-38. North Grafton: Tufts Center for Animals and Public Policy, 2009.

⁴⁰ Ros Clubb and Georgia Mason, *A Review of the Welfare of Zoo Elephants in Europe*, (Horsham: RSPCA, 2002), p. 25, Balmford et al. 1996; Waithaka et al. 1998; Smith & Hutchins 2000; WCMS and WWF-International 2001a.

conservation, zoos do not reintroduce adults and/or offspring to range States, nor do they intend to.⁴¹ Instead, zoos use elephants for display and for purported "conservation" and "education" efforts. In fact, the most effective conservation breeding programs aim to replenish or re-establish species, and they are most effective when coupled with recovery objectives for wild populations.⁴² Without this objective, zoo breeding programs and their relevancy to elephant conservation are questionable. The distinct possibility also exists that captive breeding programs may harm ex-situ conservation objectives by diverting important resources from habitat protection.⁴³

Even if zoos were successful in breeding elephants, it still would not contribute to the conservation of the species. The International Union for Conservation of Nature (IUCN)/SSC Specialist Group for African elephants has stated that captive breeding makes no effective contribution to conservation, and the group does not endorse the removal of African elephants from the wild for any captive use. Neither of the IUCN Red List of Threatened Species entries for Asian or African elephants lists captive breeding as necessary conservation measures.^{44, 45}

Finally, it has been calculated that maintaining African elephants in zoos is 50 times more expensive than protecting equivalent numbers in the wild.⁴⁶ This is a conservative number, as it is likely far more expensive to keep elephants in zoos today, and that does not take into consideration the millions spent on elephant exhibit construction. Today, it can easily cost a half million dollars annually to maintain six elephants in a zoo. Obviously, the money that is being spent would go much farther if applied directly to *in situ* conservation.

4. There is no evidence to show that increasing the number of African elephants in zoos furthers conservation through education.

The Applicant claims education as justification for elephant the capture and import of wild elephants. However, the concept that zoos meaningfully contribute to the public's conservation understanding, attitudes, and behaviors remains unproven and objectively unmeasured. There is

⁴¹ Michael Hutchins, Brandie Smith, Mike Keele. "Zoos As Responsible Stewards of Elephants." In *Elephants and Ethics: Toward a Morality of Coexistence*, edited by Christen Wemmer and Catherine A. Christen, 287. Baltimore: Johns Hopkins University Press, 2008.

⁴² Noel R. Snyder et al., "Limitations of Captive Breeding in Endangered Species Recovery," *Conservation Biology* 10, no. 2: 339.

⁴³ Dalia A. Conde et al., "Zoos Through the Lens of the IUCN Red List: A Global Metapopulation Approach to Support Conservation Breeding Programs," *PLoS ONE* 8, no. 12 (2013): 1, accessed February 8, 2014, doi:10.1371/journal.pone.0080311.

⁴⁴ Statement and resolutions on the role of captive facilities in in situ African elephant conservation, IUCN SSC African Elephant Specialist Group (<u>http://www.african-elephant.org/tools/pdfs/pos_captiv_en.pdf</u>).

⁴⁵ Statement from the African Elephant Specialist Group of the IUCN Species Survival Commission on the removal of African elephants for captive use, IUCN SSC African Elephant Specialist Group. http://cmsdata.iucn.org/downloads/pos_capvuse_en.pdf.

⁴⁶ Clubb & Mason, p. 25, citing Leader-Williams 1990.

little evidence to demonstrate support for claims that zoo visits produce long-term positive effects on the public's attitudes toward wildlife.^{47, 48, 49, 50}

A study by Falk et al. (2007) claimed to show evidence that zoos and aquariums produce longterm positive effects on people's attitudes toward other animals.⁵¹ However, Marino et al. analyzed the study's methodology and found no evidence to support the claim that zoos promote positive attitude change, increased knowledge and understanding, or interest in conservation in their visitors.⁵² Other studies have found that the general visitor simply does not go to a zoo to be educated.⁵³ For some people, going to a zoo and seeing animals in captive conditions can generate negativistic attitudes.⁵⁴

The Applicant cites a newer study by Falk, et al (2014), which takes a new tact in its claims about education in zoos. Rather than stating that zoos actually educate the public, Falk, et al., propose that zoos can capitalize on those people who come into zoos with some knowledge about animals. This study merely echoes previous studies which found that people who come to zoos with previous knowledge about wildlife leave with about the same level of knowledge. In other words, the Falk, et al., study is nothing new.

The IUCN's African Elephant Specialty Group does not regard education as sufficiently important to justify importing African elephants to zoos from Appendix 1 populations. The group made the point that zoos can still provide information for the public without displaying living elephants.⁵⁵ In fact, all of the educational objectives cited by the Applicant, from teacher conservation workshops to educational presentations for children can be accomplished without this import or the display of elephants.

The question that goes unasked is whether the display of elephants is absolutely necessary to informing people about these animals and their conservation status. Even if one accepts the idea

⁴⁷ Leader-Williams, N. and Balmford, A. and Linkie, M. and Mace, G.M. and Smith, R.J. and Stevenson, M. and Walter, O. and West, C. and Zimmermann, A. (2007) *Beyond the ark: conservation biologists' views of the achievements of zoos in conservation*. In: Zimmermann, A. and Hatchwell, M. and Dickie, L. and West, C., eds. Zoos in the 21st century: Catalysts for conservation. Conservation Biology (15). Cambridge University Press, Cambridge, pp. 236-254.

⁴⁸ Smith, L., Broad, S. and Weiler, B. (2008). A closer examination of the impact of zoo visits on visitor behavior. *Journal of Sustainable Tourism, 16* (5), 544-562.

⁴⁹ Marseille, M., Elands, B., and van den Brink, M. (2012). Experiencing polar bears in the zoo: Feelings and cognitions in relation to a visitor's conservation attitude. Human *Dimensions of Wildlife: An International Journal*, *17*(*1*), 29-43.

⁵⁰ Lori Marino et al., "Do Zoos and Aquariums Promote Attitude Change in Visitors? A Critical Evaluation of the American Zoo and Aquarium Study," *Society and Animals* 18 (2010).

⁵¹ John. H. Falk et al., "Why Zoos and Aquariums Matter: Assessing the Impact of a Visit to a Zoo or Aquarium" (Silver Spring: Association of Zoos and Aquariums, 2007).

⁵² Marino et al., Ibid.

⁵³ Joanne D. Altman, "Animal Activity and Visitor Learning at the Zoo," Anthrozoos 11, no. 1: 12.

⁵⁴ David Hancocks, *A Different Nature: The Paradoxical World of Zoos and Their Uncertain Future* (Berkeley: University of California Press, 2001), 83, citing research by Stephen R. Kellert and Julie Dunlap, "Informal Learning at the Zoo: A Study of Attitude and Knowledge Impacts," *A Report to the Zoological Society of Philadelphia of a Study Funded by the G.R. Dodge Foundation, Philadelphia.*

⁵⁵ Clubb and Georgia Mason, *A Review of the Welfare of Zoo Elephants in Europe*, p. 25, citing Waithaka et al. 1998; Hutchins & Smith 1999, 343.

that zoos are educating the public, and that the display of elephants is necessary to that education, this means that the people visiting the more than 150 AZA accredited facilities without elephants would know nothing about elephants or be interested in helping to conserve them. Obviously, this is not the case, as people receive information from other sources, including those that may more effectively prompt conservation actions.

Clearly, denying the permit will not deny the public of an opportunity for education, as information can and *is* being obtained by the public in a variety of ways. Contrary to what is stated in the Draft Environmental Assessment, zoos are not the only way that the public learns about elephants and their conservation. If we applied the same concept to large cetaceans, such as blue whales, no one would care or know about these animals or their survival, but we know this is not the case.

5. Import of the Swaziland elephants is not necessary for research.

The Applicant cites research as another activity that supports conservation, however, the proposed research proposals/concepts do not do not justify a permit for import. In fact, the proposed research does not apply to the Swaziland elephants, can be conducted with elephants already in captivity, or may already have been done. For example, evaluating drugs for arthritis management is hardly applicable to young elephants, and elephant anesthesia studies can be conducted on elephants already in zoos. A quick review of the literature shows that reproductive physiology studies of wild elephants involving corticosteroid analyses and reproduction already exist. Other studies that incorporate information from wild elephants, such as the proposed research on inflammatory proteins and nutrition, can be done opportunistically in the wild. There is no evidence to show that a comprehensive search was conducted to identify existing or similar research projects.

The Applicant specifically cites the Dallas Zoo's research involving its elephants, however, it should be noted that those studies focus purely on captive elephant behavior and do not benefit elephants in the wild. It is interesting to note that two of the proposed studies involve an examination of the development of problems that affect the welfare of elephants in captivity, including stereotypic behavior. This is a sad statement on the expectations for the Swaziland elephants, should the applicant be granted a permit.

6. The Swaziland elephants will not meaningfully add to the genetic diversity of elephants in zoos.

It is surprising that the Applicant will be genetically testing the elephants it proposes to import only *after* they arrive in the United States, especially as these elephants are most likely related to those from the previous Swaziland import in 2003 (genetic testing is offered as a research proposal, post-import⁵⁶). The Swaziland elephants come from an already limited gene pool, with only 39 elephants held in two enclosures. Comparatively, the Amboseli National Park in Kenya has a population of about 1500 elephants.⁵⁷

The Applicant claims the elephants it wishes to import will genetically diversify the elephant collection in the TAG/SSP, as they are not related to the majority of the TAG/SSP population.

⁵⁶ Dallas Zoo's African Elephant Import Permit Application Addendum, p. 9

⁵⁷ Amboseli Trust for Elephants. "Ecosystem." <u>https://www.elephanttrust.org/index.php/amboseli-us#ecosystem</u>.

However, if elephants are to be brought into the current population, it stands to reason that they should not be related to elephants now in zoos, as recommended by the AZA Elephant SSP Master Plan 2003. Genetic diversity is already an issue in an elephant collection as small as that in AZA zoos, and importing elephants who are both related to one another and to elephants already in zoos will not significantly improve the situation. Furthermore, the Applicant is not even sure of the genetic make-up of the elephants it wishes to import, having done no genetic testing.

The following facts provide a picture of the problem that zoos face with genetic diversity among African elephants:

- In the last 12 years, only 10 zoos have produced African elephant calves who are still alive (2 other zoos lost their calves). Just two zoos (Disney's Animal Kingdom and the San Diego Zoo Safari Park) produced the largest number of births (7 and 12, respectively).
- Of those 10 zoos, only nine continue to be AZA accredited.
- Nearly half of the elephants born in zoos in the last 12 years are the offspring of elephants imported from Swaziland in 2003 (14 of 31 total calves). Twelve of those calves (one of whom became malnourished and died of a MRSA staph infection that she caught from a zookeeper) *were sired by the same bull, Mabhulane.*

The Draft Environmental Assessment suggests that it is not problematic that the 18 elephants may be related to the 11 imported in 2003, because they would be genetically unrelated to the majority of elephants in U.S. zoos. However, most elephants currently in zoos are not breeding. The problem is that the 18 elephants will likely be related to a large number of currently breeding elephants, and also related to future breeding elephants, many of them sired by one bull imported from Swaziland in 2003.

Importing elephants from a small, related population in Swaziland will not create a meaningful change in genetic diversity in US zoos and, therefore, should not be considered justification for this granting the import permit.

7. Alternatives exist that would keep the elephants in Africa.

The proposed import is portrayed as a choice between BGP killing the elephants or exporting the elephants to the U.S., if a permit is not granted. In the Draft Environmental Assessment (p. 12), FWS apparently is taking the word of the Applicant and BGP, both of which have an intense interest in ensuring the import takes place. In fact other humane and reasonable choices exist.

It is clear that the applicant failed to explore, or did not encourage BGP to explore, alternatives for the elephants, if in fact the elephant population must be reduced. These alternatives include:

- Relocate the elephants to a protected park or sanctuary in others parts of Swaziland.
- Relocate the elephants to a protected park or sanctuary elsewhere in Africa.
- Move the fenced areas within the reserves so the elephants would have new vegetation for foraging and give landscape in the former area time to recover.
- Relocate the rhinos to the larger areas of the reserves, separate from the elephants.
- Provide supplementary food for the elephants and the rhinos. (BGP reportedly is already feeding the rhinos.)
- Employ birth control with the female elephants and not just the males.

• Change the timeframe for introduction of rhinos to allow time for exploration of alternatives that would keep the elephants in Africa.

A global non-profit organization based in South Africa that supports work for rhinos and elephants has offered funding to transfer the elephants to another location.⁵⁸ This would provide the most reasonable and humane solution for the elephants, if in fact some individuals must be removed. However, the response of BGP apparently is more focused on commercialism. The marketing manager for BGP, Ann Reilly, has stated: "The zoos will open doors for us internationally and promote Swaziland." In its commercial nature, this statement is matched by that of Sedgwick County Zoo Director Mark Reed who recently stated: "It's not a question of 'if' but a question of 'when' we will have young elephant calves born here….That's going to skyrocket the attendance like nothing ever has here before."⁵⁹

Culling as an approach to the management of elephants has been abandoned or put on hold in all countries in southern Africa for two decades. A ban was instituted in South Africa in 1995, and although the ban was lifted in principle in 2008, it has never been resumed, under the strength of public opinion. Other, non-lethal management alternatives, including water point management, corridor creation and translocation are now accepted as best practice. For Swaziland to kill elephants it has decided are surplus would be a return to practices now considered outmoded by modern wildlife managers. To grant a permit under these circumstances would only service to support and validate BGP's management practices, including those that will likely result in yet more threats to kill elephants in the future in favor of selling them to zoos under the guise of "conservation."

The Draft Environmental Assessment cites habitat competition between elephants and black rhinos (p. 17) as cause for granting a permit, however, BGP is making the choice to introduce rhinos into a park where the rhinos do not currently live. The EA also considers the plight of vultures, however, these birds are able to move to other, much larger areas of the parks, unlike the elephants.

At the very least, FWS should delay the permitting process to allow for the various alternatives to play out. By doing so, this would send a message to BGP that its insistence on culling as the only option to exporting the elephants to U.S. zoos – just as the organization did in 2003 – is no longer acceptable.

II. CITES Article III: The Import is Plainly for "Primarily Commercial Purposes."

CITES provides that "[a]n import permit [for Appendix I species] shall only be granted when . . . [*inter alia*,] a Management Authority of the State of import is satisfied that the specimen is not to be used for primarily commercial purposes."⁶⁰ Special rules found in the ESA concerning African elephants allow the import of live African elephants into the United States provided that the general permit requirements in the ESA, found in 50 C.F.R. part 13, and the CITES

⁵⁸ Ibid.

⁵⁹ Salazar, Daniel. "Why do people love elephants so much?" *The Wichita Eagle*. October 17, 2015, <u>http://www.kansas.com/news/local/article39625875.html</u>.

⁶⁰ CITES, Art. III, (3)(c).

implementing regulations, found in 50 C.F.R. part 23, have been met.⁶¹ Among the requirements, the CITES implementing regulations require that the import of an Appendix I specimen "will not be used for primarily commercial purposes."⁶²

Applicable CITES regulations define "commercial" as follows:

Commercial means related to an activity, including actual or intended import, export, reexport, sale, offer for sale, purchase, transfer, donation, exchange, or provision of a service, that is reasonably likely to result in economic use, gain, or benefit, including, but not limited to, profit (whether in cash or in kind).⁶³

The specific criteria used to evaluate whether an applicant's proposed use of an Appendix I species is for "primarily commercial purposes" include the following considerations by FWS:

- All aspects of the intended use of the specimen. If the noncommercial aspects do not clearly predominate, [FWS] will consider the import . . . to be for primarily commercial purposes.
- While the nature of the transaction between the owner in the country of export and the recipient in the country of import . . . may have some commercial aspects, such as the exchange of money to cover the costs of shipment and care of specimens during transport, it is the intended use of the specimen, including the purpose of the export, that must not be for primarily commercial purposes.
- All net profits generated in the United States from activities associated with the import of an Appendix–I species must be used for conservation of that species.⁶⁴

A. The Proposed Import is for Primarily Commercial Purposes by the Zoos' Own Admissions.

According to the Dallas Zoo, "the primary justification for the import is captive propagation [of African elephants]."⁶⁵ Applicable CITES regulations unequivocally state that captive breeding programs constitute "primarily commercial purposes." Indeed, the regulations state that:

The import of an Appendix–I specimen for purposes of establishing a commercial operation for breeding or artificial propagation is considered to be for primarily commercial purposes. As a general rule, import or introduction from the sea of an Appendix–I specimen for a captive-breeding or artificial propagation program must have as a priority the long-term protection and recovery of the species in the wild. The captive-breeding or artificial propagation program must be part of a program aimed at the recovery of the species in the wild and be undertaken with the support of a country within the

⁶¹ See 50 C.F.R. § 17.40(e)(3)(i).

⁶² *Id.* § 23.35(c); *see also* EA at 10.

⁶³ *Id.* § 23.5.

⁶⁴ See Id. § 23.62(b) (emphases added).

⁶⁵ See Dallas Zoo's African Elephant Import Permit Application Addendum, p. 11.

species' native range. Any profit gained must be used to support this recovery program.⁶⁶

It is the "*intended use of the specimen*" that must not be for primarily commercial purposes, but the above requirement makes clear that the applicant's primary intended use of the elephants (i.e., captive breeding) unquestionably constitutes "primarily commercial purposes." The intended use of these eighteen elephants is to further the captive breeding programs that have proven not to be self-sustaining in U.S. zoos. The underlying captive breeding program is not being undertaken with the intent of "recovery" of the species in the wild—indeed it is to proliferate captive populations that have no conceivable likelihood of ever being reintroduced to the wild. The beneficiary zoos have publicly acknowledged the role that these elephants will play in captive breeding, and the spike in zoo attendance they can expect with the births of baby elephants. Sedgwick County Zoo Director Mark Reed recently stated:

It's not a question of 'if' but a question of 'when' we will have young elephant calves born here...**That's going to skyrocket the attendance like nothing ever has here before.**⁶⁷

Reed's confidence is not misplaced. AZA-accredited zoos are actually quite forthcoming about the reliance they place on elephant births to boost zoo attendance.⁶⁸ Indeed, Seattle Times journalist Michael Berens discussed that zoos have relied on the birth of elephant calves to improve ticket sales for over fifty years in his multi-part investigative report about captive elephant welfare:

[A]ttendance at the Oregon Zoo soared as visitors from all over the world waited in half-mile-long lines to see [Packy, the baby elephant]. Cash receipts skyrocketed, and so did donations.

It was clear that elephants, the world's largest land mammals, were indeed "glamour beasts," box-office stars that would help America's zoos through the 20th century and into the 21st. Across the country, the race to produce baby elephants was on.⁶⁹

It is clear that the primary purpose of the proposed import is for commercial activity. The applicant zoos have failed to add anything to the administrative record that suggests that the purpose of the import is for anything *other* than the commercial purpose of captive breeding. Courts have found that, concerning the import of CITES Appendix I species, "when an agency is required to make a finding, it may not do so implicitly, but must provide, in the record, 'some explanation of its decision sufficient to properly allow [courts] to carry out [their] review."⁷⁰ The Application, such as it is, falls into the specific category identified in the CITES

^{66 50} C.F.R. § 23.62(c)(5) (emphases added).

⁶⁷ Daniel Salazar, Why Do People Love Elephants So Much?, The Wichita Eagle (October 17, 2015).

⁶⁸ See, e.g., Zoo Hopes Baby Elephant Will Boost Attendance, Salt Lake Tribune (Jan. 23, 2009) ("The zoo hopes the birth could increase visits.").

⁶⁹ Michael Berens, *Elephants are Dying Out in American Zoos*, Seattle Times (Dec. 1, 2012).

⁷⁰ World Wildlife Fund, et al. v. Hodel, et al., 1988 WL 66193, *4 (D.C. Cir.1988) (citing Getty v. Federal Saving and Loan Ins. Corp., 805 F.2d 1050, 1055 (D.C. Cir. 1986).

implementing regulations concerning impermissible use of an Appendix I species for "primarily commercial purposes." There is nothing in the record to support an agency determination that the "intended use" of these elephants is for anything other than a commercial purpose. There is insufficient information in the record for FWS to shoehorn or reverse engineer the applicant's intended result.

B. The Exchange of Money Between BGP and the Applicant Zoos Constitutes Further Commercial Activity and Reveals an Inherent Conflict of Interest.

The process by which the Applicant and BGP are undertaking this proposed import defies the purpose of CITES, which provides that the trade in Appendix I species "must only be authorized in *exceptional* circumstances."⁷¹ "Exceptional circumstances" are not defined to include captive breeding programs that have no relationship to habitat reintroduction, nor are they defined to include capitulation to threats of culling by the Swazi game park. As stated above, the "non-commercial aspects" must "**clearly predominate**,"⁷² but the dominant purpose of the import is for captive breeding—which FWS has interpreted as a primarily commercial purpose.

Furthermore, this impermissible underlying use of the elephants that constitutes commercial activity comes with a price tag that *also* constitutes commercial activity. Indeed, the \$450,000 that the applicants have committed to contribute over five years to the National Rhino Foundation in exchange for import of the elephants for captive breeding is tantamount to an installment plan to purchase the elephants from BGP.⁷³ The pricetag goes way above and beyond the "exchange of money to cover the costs of shipment and care of specimens during transport."⁷⁴

The proposed transfer and exchange of money for elephants unquestionably meets the definition of commercial activity as defined by CITES implementing regulations.⁷⁵ Moreover, the deal is structured in such a way that BGP has an incentive to "sell" the elephants to U.S. zoos rather than rehome the elephants to preserves in Africa. Indeed, BGP cannot be the beneficiary of the half a million dollar pay-to-display scenario if it were to send the elephants anywhere other than to the U.S. for captive breeding programs. BGP's failure to research and explore alternative options for rehoming the elephants within Africa in the face of a huge pay-day from U.S. zoos underscores the extent to which this transaction is primarily for commercial purposes from the outset and on both ends.

III. Animal Welfare Impacts

Under CITES, Swaziland may not export African elephants unless its Management Authority is "satisfied that any living specimen will be so prepared and shipped as to minimize the risk of injury, damage to health or cruel treatment."⁷⁶ Likewise, the zoos in the United States may not

⁷¹ CITES, Article II: Fundamental Principles (emphasis added).

⁷² 50 C.F.R. § 23.62(b) (emphases added).

⁷³ See African Elephant Conservation Project, Memorandum of Understanding, p. 2.

⁷⁴ See 50 C.F.R. § 23.62(b).

⁷⁵ See id. § 23.5.

⁷⁶ CITES, art. III, Mar. 3, 1973, 27 U.S.T 1087, 993 U.N.T.S. 243.

import African elephants unless the FWS is "satisfied that the proposed recipient of a living specimen is suitably equipped to house and care for it."⁷⁷ The Application does not contain sufficient information for *either* Management Authority to make these findings. On the contrary, the scientific literature suggests that **these elephants will** *inevitably* **face "injury, damage to health, and cruel treatment," and no zoo is "suitably equipped" to house and care for them.**

This section will discuss the complex social systems of elephants in the wild; the severe and long-term traumas of capture and transport; the suffering of elephants in captivity; and the specific deficiencies at each facility that is requesting to import elephants.

A. Wild Elephants Live in a Complex Society.

African elephant society is made up of an extensive and complex social network.⁷⁸ The "nuclear family" usually consists of 4-12 individuals led by an experienced matriarch, and is stable over time, rarely splitting.⁷⁹ Family groups associate with larger kin groups, and even congregate in clans of hundreds of individuals.⁸⁰

Calves depend on their mothers' milk for the first two years of their lives, and will continue to suckle up to age six.⁸¹ Mothers and calves bond closely, and female "aunties" or "allomothers" help with calf-rearing and behave affectionately and protectively towards the calves in their family group.⁸² A female calf will remain with her mother and natal herd for her entire life, and a male calf will remain with his family until he is 10 to 15 years old.⁸³ Once they have dispersed, male elephants develop their own social web, and form "strong associations" with others, often traveling with bachelor groups.⁸⁴

Elephants spend their days exploring vast and complex habitats, wallowing in mud holes, socializing, playing, sparring, and foraging. They are self-aware. They use tools. They retaliate for past wrongs. They work together to solve problems, and rely on the wisdom, judgment, and experience of their eldest relatives. Elephants are capable of grief, joy, fear, and love, and can develop post-traumatic stress disorder in response to trauma.

B. Splitting Up Elephant Families Is Traumatic.

Dr. Joyce Poole, a renowned elephant biologist and ethologist, has described the capture of youngsters as "highly stressful" for *all* members of an elephant family.⁸⁵ "To violently tear a

⁸³ Id.

⁷⁷ Id.

 ⁷⁸ Ros Clubb & Georgia Mason, A Review of the Welfare of Zoo Elephants in Europe 59-60 (2002) (citing Joyce Poole, *Signals and Assessment in African Elephants: Evidence From Playback Experiments*, 58 Animal Behavior 185 (1999)); Gay Bradshaw, *Inside Looking Out: Neuroethological Compromise Effects in Elephants in Captivity, in* An Elephant in the Room: The Science and Well-Being of Elephants in Captivity (Debra L. Forthman, et al, eds.).
 ⁷⁹ Clubb & Mason, *supra*, at 59.

⁸⁰ Id.

⁸¹ *Id.* at 60.

⁸² *Id*.

⁸⁴ Id. at 61; see generally Caitlin O'Connell, Elephant Don: The Politics of a Pachyderm Posse (2015).

⁸⁵ Joyce Poole, Affidavit Concerning the Capture and Treatment of Elephant Calves 2 (2001).

family apart," she writes, "by capturing live calves would cause immediate and long-term suffering. **It is cruel and should not be condoned on any grounds**."⁸⁶

The case Dr. Poole was describing involved the removal of a group of "subadult" elephants aged 4 to 10—from the wild in order to ship them to zoos and circuses.⁸⁷ During capture, the baby elephants were "immobilized" as their mothers, aunts, and relatives were chased away by helicopters.⁸⁸ During transport to the holding facility, the animals were reportedly "trembling and screaming," and making "intense distress calls" that are evidence of suffering and extreme trauma.⁸⁹After reviewing footage of the calves prior to their export, Dr. Poole noted that the animals kept their eyes wide and ears at the alert, with their temporal glands secreting fluid in response to stress.⁹⁰ She concluded that *all* of the animals showed "considerable signs of distress and trauma," and that the youngest calves in particular displayed signs of "deep trauma," such as sunken eyes, dull skin, and an expression of "grief" on their faces.⁹¹

A severely disruptive event—such as capture, translocation, or culling—can lead to persistent fear, hyper-aggression, and infant abandonment.⁹² One expert who studied the behavior of several groups of juvenile African elephants after they were placed in bomas during translocation warns that:

- "[H]igh frequencies of aggressive behavior can be expected."
- Weak and small elephants "will most likely be bullied."
- "Older" individuals (i.e., six or seven year-olds) "react badly" and should not be subjected to prolonged confinement.
- "[N]ewly captured juvenile elephants develop extreme signs of stress when confined within walls."⁹³

Across all groups studied, the vast majority of behaviors—ranging from 56.1 percent to 90.9 percent—were considered aggressive.⁹⁴ Play behavior was either non-existent or extremely rare.⁹⁵ In one group, a female elephant was bullied by "all others."⁹⁶ In another group, the older elephants "were extremely nervous throughout the boma stay," exhibiting "much aggression among individuals" and even aggression toward humans.⁹⁷ A very young calf in that group repeatedly attempted to suckle the ears of another elephant, and would scream in frustration when rebuffed.⁹⁸ That calf died after three months, while his "suckling partner" picked up the

⁸⁶ Id.

⁸⁷ *Id.* at 1.

⁸⁸ Id.

⁸⁹ *Id.* at 1, 5.

 $^{^{90}}$ *Id.* at 4.

⁹¹ Id.

⁹² Geaeme Shannon, et al., *Effects of Social Disruption in Elephants Persist Decades After Culling*, 10 Frontiers in Zoology 62, 63 (2013).

⁹³ Marion Garaï, *The Effects of Boma Design on Stress-Related Behaviour in Juvenile Translocated African Elephants*, 18 Pachyderm 55 (1994) (emphasis added).

⁹⁴ *Id.* at 56-57.

⁹⁵ *Id.* at 57.

⁹⁶ *Id*. at 56.

⁹⁷ *Id.* at 57-58.

⁹⁸ Id. at 57.

abnormal behavior.⁹⁹ In yet another group, the elephants "showed extreme aggression and nervousness when confined in the pen," from which one elephant broke free.¹⁰⁰ Once released, the elephants in this group continued to be nervous around humans and chose to stay in the most secluded area of the reserve.¹⁰¹

Notably, the researcher who reported these devastating findings has strongly criticized the proposed import, stating that the elephants are currently "confined to areas that are clearly too small," and "[t]o make matters worse they intend splitting the family groups between three zoos which will cause the animals' life-long trauma."¹⁰²

In sum, splitting up elephant families causes "serious disruption of the intricate social networks that underpin social structure in these species, with *severe* impacts on *each* individual's close social bonds and opportunities for learning from older group members."¹⁰³ Wild capture—which involves the direct personal experience of actual or threatened death or serious injury—is an "extreme traumatic stressor" that elephants respond to with "intense fear, helplessness, or horror."¹⁰⁴ Yet the acute trauma of capture is only the first in a barrage of subsequent stressors that can provoke abnormal, violent behavior, including: "shock trauma from the capture/cull experience, relational trauma from the premature weaning and compromised rearing, loss of primary attachment [maternal] structures and processes with separation from his/her mother and natal herd, stress from transport and translocation, and hardship from environmental deprivation and confinement."¹⁰⁵

The *only* way to prevent this trauma is a total "cessation of elephant capture."¹⁰⁶

C. Transport Causes Severe Distress.

Transport of wild animals is also an acute stressor that can have long-lasting effects. As discussed above, Dr. Poole described baby elephants "trembling and screaming" during transport, and making "intense distress calls."¹⁰⁷ One study that examined the capture and transport of a group of African elephants found that stress hormone production spiked to more than *11 times* its normal levels during transport, and remained drastically high for days thereafter.¹⁰⁸ Similarly, during the relocation of a captive Asian elephant, researchers

⁹⁹ Id.

¹⁰⁰ *Id.* at 58.

¹⁰¹ *Id.* at 59.

¹⁰² Mike Cadman, *Other Options for Swaziland Elephants*, ConservationAction.co.za (Nov. 9, 2015), <u>http://conservationaction.co.za/media-articles/other-options-for-swaziland-elephants/</u>.

¹⁰³ Shannon, et al., *supra*, at 65-66 (emphasis added).

¹⁰⁴ Bradshaw, *supra*, at 61.

 $^{^{105}}$ *Id.* at 60.

 $^{^{106}}$ *Id.* at 63.

¹⁰⁷ Aff. Of Joyce Poole, *supra*, at 1, 5.

¹⁰⁸ Josua Viljoen, et al., *Translocation Stress and Faecal Glucocorticoid Metabolite Levels in Free-Ranging African Savanna Elephants*, 38 S. Af. J. Wildlife Resarch 146, 149 (2008); *see also* Joshua Millspaugh, et al., *Stress Response of Working African Elephants to Transportation and Safari Adventures*, 71 J. Wildlife Mgmt. 1257 (2007).

documented a 389 percent increase in stress hormone production and a 400 percent increase in stereotypic behavior after relocation, as well as a disruption of the animal's sleep patterns.¹⁰⁹

African elephants may also be susceptible to capture myopathy (CM) as a result of capture and translocation.¹¹⁰ CM occurs in wild mammals and birds and is caused by stress, especially as the result of predator-avoidance efforts of the wild animal. This pathological condition occurs as a consequence of extreme muscle fatigue and sympathetic nervous system activation, leading to the subsequent rupture of muscle cells after being subjected to the extreme fear and exertion of pursuit and/or capture. When the animal's sympathetic nervous system is activated for a prolonged period of time or with extreme intensity, the blood vessels become excessively dilated leading to tissue hypoxia (oxygen deprivation) and lactic acid buildup as the animal enters a state of shock. As a result of being starved of oxygen and energy, the animal's muscle cells die—including cells in both the heart and skeletal muscles. Animals may also experience severe electrolyte and pH imbalances, as well as kidney disease.¹¹¹ Although there is little data on capture myopathy in elephants, emotional distress, anxiety, and sympathetic overdrive are likely to be just as harmful to elephants as they are to other mammals.

Indeed, the International Air Transport Association's (IATA) *Live Animal Regulations*—with which the zoos must comply—acknowledge that "[a]nimals instinctively fear the strange environment encountered during transportation."¹¹² Likewise, the CITES *Guidelines for The Non-Air Transport of Live Wild Animals and Plants*¹¹³ warn that "[t]he transport of an animal constitutes an unnatural situation for the animal and is most likely to cause it some degree of stress. High levels of stress may increase metabolic rates, hazardous behaviour, chances of injuries and susceptibility to diseases."¹¹⁴

D. Elephants Suffer in Captivity.

Zoos are inherently unnatural environments where animals who are meant to roam over vast territories are forced to exist in worlds measured in square feet rather than square miles. Animals who shun human contact have no way to escape daily interactions. Elephants are held in artificially small social groupings, often with unrelated individuals and an unnatural age structure. They lack choice and agency. Their lives are dictated by the schedules of their human keepers, who can offer little variety and enrichment when compared to what elephants encounter

¹⁰⁹ Nicole Laws, et al., A Case Study: Fecal Corticosteroid and Behavior as Indicators of Welfare During Relocation of an Asian Elephant, 10 J. App. Animal Welfare Sci. 349 (2007).

¹¹⁰ See Susan Mitoka, *Hemolymphatic System*, *in* Biology, Medicine, and Surgery of Elephants 325, 341 (Murray E. Fowler and Susan Mikota, eds. 2006) (discussing capture myopathy documented in a wild Asian bull elephant following capture and translocation); *see also* Murray Fowler, *Multisystem Disorders*, *in* Biology, Medicine, and Surgery of Elephants 325, 341 (Murray E. Fowler and Susan Mikota, eds. 2006) (discussing psychological and physical consequences of stress in elephants).

¹¹¹ Information on capture myopathy in this paragraph is attributed to personal communications with Dr. Heather Rally, PETA Foundation Wildlife Veterinarian; *see also, generally* Terry Spraker, *Stress and Capture Myopathy in Artiodactylids, in* Zoo and Wild Animal Medicine: Current Therapy 481 (Murray Fowler, ed., 3rd ed., 1993). ¹¹² IATA Live Animal Regs. § 5.1.

¹¹³ See 50 C.F.R. §§ 23.35(d), 23.56(a)(2).

¹¹⁴ CITES Transport Guidelines § 2.1.

in the wild.¹¹⁵ Without the power of self-determination, elephants develop "robot-like behavior and numbing," including the loss of appetite, depression, stereotypy, and apathy.¹¹⁶

Perhaps the clearest indicator of poor welfare and suffering is the prevalence of stereotypic behaviors among captive elephants, which are abnormal, repetitive movements likely caused by a lack of sensory stimulation.¹¹⁷ According to Georgia Mason, a behavioral biologist and expert in captive animal welfare:

[S]tereotypies should warn us that the animal has probably been in an unchanging and frustrating environment, and that its welfare has probably been unsatisfactory. Much evidence does indeed link the development of stereotypies with specific sub-optimal environments. The development of a stereotypy in an individual is therefore the sign of an animal that has probably been suffering, and whose well-being may be poor still.¹¹⁸

In U.S. zoos, 40 to 61 percent of African elephants exhibit stereotypies.¹¹⁹ There is *no* evidence of stereotypic behaviors among elephants in the wild.¹²⁰

When examined from a population level, captive African elephants do poorly on every single indicator of animal welfare:

- They have low life expectancies. The median lifespan of captive African elephants is just 16.9 years, compared to 56 years for wild elephants.¹²¹
- They suffer from high rates of painful and chronic diseases, such as nail cracks, abscesses, obesity, and arthritis.¹²²
- They are infertile. Thirty-two percent of African elephants in U.S. zoos are unable to conceive, whereas 95 percent of wild elephants are either pregnant or lactating at any given time.¹²³
- They rarely breed.¹²⁴

¹¹⁵ Bradshaw, *supra*, at 61.

¹¹⁶ *Id*.

¹¹⁷ Georgia Mason, *Stereotypies and Suffering*, 25 Behavioural Processes 103, 103-04 (1991); R.R. Swaisgood & D. J. Shepherdson, *Scientific Approaches to Enrichment and Stereotypies in Zoo Animals: What's Been Done and Where Should We Go Next*? 24 Zoo Biology 499, 500 (2005).

¹¹⁸ Mason, *supra*, at 111.

¹¹⁹ Georgia Mason & Jake Veasey, *What Do Population-Level Welfare Indices Suggest About the Well-Being of Zoo Elephants*?, 29 Zoo Biol. 1, 10-11 (2010).

¹²⁰ *Id.*; Bradshaw, *supra*, at 62.

¹²¹ Ros Clubb, et al., *Compromised Survivorship in Zoo Elephants*, 322 Science 1649 (2008); Mason & Veasey, *supra*, at 8-10; *see also* PETA, Elephant Deaths at Facilities Accredited by the Association of Zoos and Aquariums (AZA), <u>http://www.peta.org/issues/animals-in-entertainment/zoos/elephant-deaths/</u> (last visited Nov. 20, 2015).

¹²² See generally The Elephant's Foot: Prevention and Care of Foot Conditions in Captive Asian and African Elephants (Blair Csuti, et al., eds, 2001); Gary West, *Musculoskeletal System*, *in* Biology, Medicine, and Surgery of Elephants 263, 266 (Murray E. Fowler and Susan Mikota, eds. 2006).

¹²³ Mason & Veasey, *supra*, at 4.

¹²⁴ *Id.* at 3.

• They have high rates of stillbirths and infant mortality.¹²⁵ In U.S. zoos, 44.9 percent of elephants die before they reach age 5.¹²⁶ A zoo-born calf has a 10 to 30 percent chance of dying in his or her first year of life, and a 10 percent chance of being killed or rejected by his or her own mother.¹²⁷

These indices have led experts to conclude that elephants in zoos "generally experience poor welfare, stemming from stress and/or poor physical health,"¹²⁸ and "bringing elephants into zoos profoundly impairs their viability."¹²⁹

Despite the fact that breeding elephants in captivity is fraught with complications, zoos continue their efforts to stock their collections with new elephant babies. The inevitable shuffle of animals from zoo to zoo has grave animal welfare consequences. Breaking maternal and social bonds among elephants in captivity is just as traumatic as it is in the wild. A captive elephant will vocalize and search for a companion who has been removed, and exhibit signs of depression or prolonged grief, such as altered feeding and sleeping, and even a cessation of play.¹³⁰ Very few transfers between zoos involve more than a single elephant, which is a particularly unnatural experience for females, who rarely experience the permanent absence of a herd member or leave their own herds to join new groups.¹³¹

Moreover, the introduction of a strange individual to an established group usually causes a "disruption" in the social order, resulting in stress and aggression.¹³² Hence, shifting elephants from zoo to zoo "is a rather questionable practice for captive propagation of a highly social species with an extreme matrilinear reproduction pattern."¹³³ Indeed, the use of captive breeding as a tool for so-called conservation is "contraindicated from both a scientific and ethical standpoint."¹³⁴

Given the overwhelming evidence that elephants suffer in zoos and that the "significant welfare costs to the animals involved . . . are not offset by any real benefits," "adding any more elephants to the zoo population, either through importation or captive breeding now looks very hard to justify."¹³⁵ For this reason, "**no more elephants should be brought into the zoo system**."¹³⁶ Because "**captivity itself is the formative source of trauma and ill-health**" for elephants, the capture and captive breeding of elephants must cease, and maintaining elephants in close confinement captivity must come to an end.¹³⁷

- ¹³² *Id.* at 85.
- ¹³³ Id. (quoting Fred Kurt, The Preservation of Asian Elephants in Human Care A Comparison Between the Different Keeping Systems in South Asia and Europe, 41 Animal Research & Development 38 (1995)).
 ¹³⁴ Bradshaw, supra, at 64.

 $^{^{125}}$ *Id.* at 6-8.

 $^{^{126}}$ *Id.* at 6.

¹²⁷ Clubb & Mason, *supra*, at 249.

¹²⁸ *Id.* at 248.

¹²⁹ Ros Clubb, et al., *supra*, at 1649.

¹³⁰ *Id.* at 83.

¹³¹ *Id.* at 85- 86, 83.

¹³⁵ Clubb & Mason, *supra*, at 249.

¹³⁶ Id.

¹³⁷ Bradshaw, *supra*, at 63.

E. Elephants Are Not Adapted to Cold Climates

Elephants are not adapted for the prolonged frigid conditions encountered in America's temperate climates.¹³⁸ Although they may experience occasional cold weather in the wild, they never experience snow or ice.¹³⁹ Their ability to acclimate to extreme temperatures is "quite limited," and they are unable to insulate their bodies from the cold.¹⁴⁰ Indeed, "cold, wet weather can be fatal to elephants."¹⁴¹

Elephants exposed to frigid temperatures are susceptible to hypothermia and frostbite.¹⁴² For example, in 2014 an elephant at a Massachusetts zoo suffered both conditions after she escaped from a barn and spent less than 90 minutes outdoors in wintry weather.¹⁴³ The elephant suffered severe frostbite, which turned her tail "dark purple," and multiple incisions had to be made into her ears to help drain fluid that accumulated as a result of the frostbite.¹⁴⁴ The animal refused food and drink, and was not allowed to lie down for several days for fear that she was too weak to stand up again.¹⁴⁵

When animals who are adapted to tropical or subtropical climates are exposed to cold temperatures, "the blood supply to the extremities is reduced in order to maintain body core temperature."¹⁴⁶ Likewise, an unheated substrate such as the frozen outdoor ground "will necessarily be cold to stand on and will cause reduced blood flow to [the] feet as [the] body attempts to maintain [its] core temperature."¹⁴⁷ This "natural physiological response worsens [an elephant's] ability to fend off foot infections."¹⁴⁸

To protect captive elephants from the ill-effects of cold weather, zoos in coldclimates keep the animals indoors. One researcher estimated that zoos in temperate climates confine animals indoors for 70 to 80 percent of days from November to April, in addition to keeping them indoors for 12 to 16 hours each night.¹⁴⁹ Hence, in temperate climates, animals may only be allowed outdoors for 20 to 30 percent of the entire year.¹⁵⁰

Such prolonged indoor confinement contributes to a host of physical and psychological problems for elephants. Because indoor confinement "greatly limits" the amount of time that elephants can

¹³⁸ Aff. of Dr. Joyce Poole, ¶ 93, *Reece v. City of Edmonton*, 2011 ABCA 238 ("I know of no place where wild elephants live in cold climates").

¹³⁹ Clubb & Mason, *supra*, at 40.

¹⁴⁰ Fowler, *supra*, at 245-46.

¹⁴¹ Clubb & Mason, *supra*, at 40.

¹⁴² Fowler, *supra*, at 248.

¹⁴³ Simon Rios, *Buttonwood Park zookeepers disciplined for Ruth's blizzard escape*, South Coast Today (Jan. 25, 2014), <u>http://www.southcoasttoday.com/apps/pbcs.dll/article?AID=/20140125/NEWS/401250326</u>; *see also* USDA, Citation and Notification of Penalty, Buttonwood Park Zoo (Sept. 19, 2014).

¹⁴⁴ Rios, *supra*.

¹⁴⁵ *Id*.

¹⁴⁶ Aff. of Dr. Mel Richardson, ¶ 27, *Reece v. City of Edmonton*, 2011 ABCA 238.

¹⁴⁷ Id.

¹⁴⁸ *Id.*; Clubb & Mason, *supra*, at 40.

¹⁴⁹ Donald Lindburg, Editorial, *Coming Out of the Cold: Animal Keeping in Temperate Zone Zoos*, 17 Zoo Bio. 51, 52 (1998).

 $^{^{150}}$ *Id*.

be active, it decreases life expectancy while increasing the risk of obesity, arthritis, and joint problems.¹⁵¹ Likewise, "the stress of unrelieved closeness to each other and to caregivers while overwintering" likely "impose[s] a cost in terms of disease susceptibility or lowered reproduction."¹⁵² Stereotypies and learned helplessness are both "symptom[s] of the understimulation that goes with long hours in simplified environments."¹⁵³

The immense toll that cold temperatures and prolonged indoor confinement take on elephants has led experts to call for a reexamination of the practices and motives behind keeping elephants in cold climates.¹⁵⁴ In this vein, several North American zoos—including the Alaska Zoo, the Detroit Zoo, and the Toronto Zoo—have already elected to close their elephant exhibits and place the animals in warmer climates.¹⁵⁵ At the very least, elephants should not be confined indoors for more than a few hours each day "unless the space available indoors per elephant meets the minimum requirements for outdoor enclosures."¹⁵⁶

F. Capturing, Transporting, and Holding the Swazi Elephants Captive Will Cause Acute and Long-Term Suffering.

The Application materials indicate that the zoos are well aware that their proposed activities will cause the Swazi elephants psychological and physiological harm. For example, proposals for research that the zoos intend to carry out on the elephants acknowledge that the capture, transport, and subsequent captivity will harm animal welfare. One proposal seeks to study stress hormone production during capture and transport, in an acknowledgement that this process is inherently stressful and may influence the fact that "elephants held long-term in captivity have a tendency to become sub- or infertile."¹⁵⁷ Another proposal will track the development of "stereotypical behaviors commonly seen in captive elephants," and intends to look at the impact of prolonged indoor confinement that the elephants will undergo in Omaha and Kansas.¹⁵⁸ Yet a third proposal will "evaluate new drugs for arthritis management in elephants," acknowledging that "[o]steo-arthritis is a significant problem in aged captive elephants."¹⁵⁹ (Notably, this proposal fails to explain why the research cannot be carried out using existing captive elephants.)

Even with this knowledge, there is no evidence that the Zoos or BGP have made any attempt to avoid or mitigate the trauma of capture, transport, confinement, and captive breeding of the 18 Swazi elephants.

¹⁵¹ Clubb & Mason, *supra*, at 51.

¹⁵² Lindburg, *supra*, at 52.

¹⁵³ Id.

¹⁵⁴ *Id.* at 53.

¹⁵⁵ See generally Elephant-Free Zoos, PETA.org, <u>http://www.peta.org/issues/animals-in-entertainment/zoos/elephant-free-zoos/</u> (last visited Nov. 21, 2015).

Clubb & Mason, supra, at 252.

¹⁵⁷ Application at 527.

¹⁵⁸ *Id.* at 530.

¹⁵⁹ *Id.* at 526.

1. The Application excludes critical information that is necessary to an assessment of the animal welfare impacts.

Despite the Application's acknowledgement that the proposed activities will be harmful to the elephants, the Zoos have failed to provide critical information that would allow the FWS to make a reasoned assessment of the animal welfare impacts. This information includes, but is not limited to:

- <u>The identities, ages, and familial relations of each individual elephant to be taken, as well as</u> <u>the relationships to and ages of the elephants remaining in the wild population.</u> This information is critical to determining whether and how close bonds will be ruptured, and would help gauge how the elephants' removal from the herd will disrupt and endanger the survival of the remaining elephants in Swaziland.
- Information as to whether any elephants are unweaned, whether any of the juvenile elephants will be separated from their mothers, and whether any of the adult females will be separated from their babies. According to the EA, the Zoos intend to import "3 adult females, 3 subadult intact males, and 12 subadult females."¹⁶⁰ The three juvenile males were purportedly added to the request "so that they are not separated from their mothers."¹⁶¹ This strongly suggests that the youngest elephants slated for transport have not yet naturally weaned, despite the claims by the Zoos that the imported elephants would be weaned at the time of capture. Likewise, the Application suggests that the elephants will range from 4 to 12 years of age. ¹⁶² Because elephants may continue to depend on their mothers' milk for up to six years of age, and youngsters of both genders are still very much dependent on their mothers at age 12, the proposed import is likely to rupture strong social bonds and have a severe impact on welfare.
- <u>The method of capture and separation of elephants from their herd.</u> Historically, wild capture of elephants has been a terrifying and violent process, requiring some animals to be drugged and immobilized while helicopters chase away unwanted elephants. There is no information in the Application to indicate that BGP and the Zoos used a novel or less traumatic method of capture.
- <u>The procedure for transferring or transporting elephants from the wild to the bomas.</u> Likewise, there is no information in the Application to describe how the elephants were transferred to the bomas, or what precautions were taken to minimize fear and distress.
- <u>Training methods to acclimate the elephants to shipping crates.</u> There is no information in the Application about the methods that will be used to train the elephants to enter and accept being enclosed in a shipping crate. Nor does the Application discuss who will be carrying out the training. This information is imperative to ensuring that the training will avoid cruel and painful punishment and minimize distress.
- Details on how the elephants will be shipped to the Zoos, such as whether babies and mothers will be separated during transit. The only information related to the transport of the elephants suggests that they will be shipped in individual crates and that comply with IATA standards for shipping elephants. Given that at least three of the elephants have been deemed too young to be separated from their mothers, shipping these animals in separate crates will be especially distressing. There is no evidence that, for example, mothers with nursing young will be shipped in the same primary enclosure, as authorized under 50 C.F.R. § 14.142(b).

¹⁶⁰ EA at 2.

¹⁶¹ *Id.* at 17.

¹⁶² Application at 15, 8.

- <u>The duration of transport and an itinerary.</u> The Application states that the Zoos will contract for a direct flight from Swaziland to Dallas, offload some of the elephants, proceed to Wichita, offload more of the elephants, and finally proceed to Omaha and offload the final elephants. Each zoo will then have to arrange for transport between the airports and the zoos. A direct flight from Swaziland to Dallas is likely to exceed 19 hours, and the subsequent stops and starts will add on many more. This is an extremely long period of time that will cause the animals acute stress.
- <u>Details on which elephants will be shipped to each Zoo.</u> The EA is confident that the Zoos will maintain elephants in "natural family groups" once they arrive in the United States, yet there is no information in the Application that allows the FWS to draw this conclusion. As mentioned above, the Application is devoid of information about the familial and social relationships of the elephants, and the composition of the groups that are going to each zoo.

For all of these reasons, the FWS must be critical of Ted Reilly's finding that the elephants will be "prepared and shipped" to "minimize the risk of injury, damage to health or cruel treatment," as required by CITES. There is simply not enough information available in the Application for *any* Management Authority to draw this conclusion, particularly given the well-established fact that capture and transport of wild elephants causes fear, trauma, and distress. Moreover, the FWS must consider that Reilly has an inherent conflict of interest. He is Swaziland's Management Authority; he is CEO of BGP, and therefore determines its "conservation priorities"; *and* he is the administrator of the trust that will receive \$450,000 in exchange for the elephants. The FWS cannot simply accept Reilly's unsupported conclusion that the animals will be "prepared and shipped" so as to minimize harm.

2. The zoos are not suitably equipped to house and care for elephants.

It is indisputable that elephants suffer in captivity. At a time when zoos across the country are shutting down their elephant exhibits because of the inherent ethical and welfare problems associated with confining intelligent, social, long-lived, and long-ranging animals in a zoo environment, there is simply no justification for taking more elephants from the wild. The FWS cannot be satisfied that the Zoos are "suitably equipped to house and care for" the elephants.¹⁶³

It's telling that the enclosure sizes listed in the Application for each zoo is given in square feet. When the square footage is converted to acres, it's clear that the enclosures are incredibly small. Dallas will offer its elephants three primary outdoor enclosures, measuring 2.46 acres, 1.12 acres, and 0.37 acres.¹⁶⁴ At Sedgwick, the elephants will have two primary outdoor enclosures, measuring 3.58 acres and 1.19 acres.¹⁶⁵ And Omaha will hold the elephants in a 3.33 acre outdoor exhibit, with a 0.76 acre secondary enclosure for a male elephant or incompatible animals.¹⁶⁶ When compared to the expansive habitats that the elephants have in Swaziland (12,108 acres in Hlane, and 2,941 in Mkhaya, according to the EA¹⁶⁷)—which the Zoos claim

¹⁶³ Id.

¹⁶⁴ Application at 24 (listing a 107,000 ft² primary habitat, with 49,000 ft² additional habitat for "mixed" species exhibit, and a 16,000 ft² "secondary space").

¹⁶⁵ *Id.* at 28 (listing a 156,000 ft² yard and 52,000 ft² yard).

¹⁶⁶ *Id.* at 26 (listing a 145,000 ft² outdoor exhibit and a 33,000 ft² secondary exhibit).

¹⁶⁷ EA at 8 (listing 4,900 ha in Hlane and 1,190 ha in Mkhaya).

the elephants have outgrown¹⁶⁸—there's no question that even with the best "features" and "enrichment," the Zoos can hardly approximate the variety of stimuli and complexity of habitat to which the elephants are adapted and accustomed.

The FWS should also be concerned that Sedgwick and Omaha are temperate climates with long, cold winters, and the 12 elephants to be held at those zoos will be forced to live indoors for much of the year. The Application fully acknowledges this fact, and even states that the elephants in Omaha will not be allowed outdoors throughout the winter.¹⁶⁹ This means that for months out of every year, Omaha will confine six elephants to a barn with a "herd room" of only 0.26 acre.¹⁷⁰ Similarly, during cold weather in Wichita, Sedgwick will confine seven elephants to a 0.41 acre barn with a "herd room" of just 0.08 acre.¹⁷¹

Even more concerning is the fact that if the zoos import the elephants this fall as they have been pushing to do, the animals would arrive in the midst of winter. Indeed, the elephants in Omaha would not be allowed outdoors for *months* until spring,¹⁷² and Sedgwick's elephant exhibit isn't slated to open until May 2016. Given that these animals are adapted to tropical climates and are accustomed to living in an expansive, warm habitat, these conditions will be detrimental to the elephants' physical and psychological health. Although there is no justification to import *any* elephants, Sedgwick and Omaha are particularly poor destinations because of their climates and the FWS should at the very least deny the import of the 12 elephants to these two zoos. In the event that the FWS authorizes the import of all elephants (which it should not), it must only do so on the condition that the import is delayed so at the very least the elephants will arrive to warm weather conditions and have access to the outdoors.

Finally, it is erroneous for the FWS to assume in the EA that the animals will be maintained in "natural family groups." There is nothing "natural" about tearing elephants away from their herds and placing them in captivity. The elephants are to be held in artificially small groups cherry-picked by the zoos using unknown criteria, without access to the wider social network that they would encounter in the wild. Moreover, the Zoos make clear that they intend to breed the Swazi elephants, yet they do not have sufficient space to significantly expand their "collections." It is therefore highly likely that if the elephants breed, their herds will be further split up, which will create further trauma and stress by breaking social bonds, subjecting elephants to unnecessary transport, and placing the animals in unfamiliar surroundings surrounded by strange elephants.

For all of these reasons, the FWS must deny the import permit.

¹⁶⁸ *The Real Story About Our Elephant Project*, DallasZoo.com, <u>http://zoohoo.dallaszoo.com/2015/11/17/the-real-story-about-our-elephant-project/</u> (last visited Nov. 23, 2015).

¹⁶⁹ Application at 26 (animals will have "in/out choice . . . during spring, summer, and fall months"); *id.* at ¹⁷⁰ *Id.* at 26 (herd room is 11,500 ft²).

¹⁷¹ *Id.* at 28 (barn is 18,000 ft2², herd room is 3,600 ft²).

¹⁷² Chris Peters, *Elephants could be at Omaha zoo by year's end*, Omaha.com (Nov. 13, 2015), <u>http://www.omaha.com/living/elephants-could-be-at-omaha-zoo-by-year-s-end/article_34ec8293-74bd-58e5-9518-79f55932a6de.html</u>.

G. Neither Capture Nor Culling Are Necessary.

The Application threatens to cull the 18 elephants if BGP is not allowed to export them. There is no question that removing the elephants from their herd—either through capture or culling—will have profoundly negative animal welfare consequences on both the captured elephants and their herdmates who left in the wild. Yet in the words of Dr. Poole, "To argue, as some have, that this is a 'mercy mission' because these individuals will be culled eventually does not in any way justify the level of cruelty involved" in capturing elephants and sending them to zoos.¹⁷³ The FWS cannot assume that culling is *more* inhumane than capturing elephants and placing them in captivity. It is possible to humanely euthanize an elephant, but it is *impossible* to humanely keep an elephant in a zoo.

Reilly has failed to prove that removing *any* elephants from BGP is necessary or justified. He has unilaterally decided that he would prefer to use BGP's land for rhinos. There is no evidence that any rhinos are being "crowded out" of the parks; rather, Reilly wants to bring additional rhinos in. Nor does it make any sense to remove elephants because of drought while simultaneously planning to add additional rhinos to the park. With the \$450,000 that BGP stands to make off of the MOU—and it *will* make this money whether or not the elephant import is allowed, despite the FWS's erroneous conclusions in the EA¹⁷⁴—BGP could invest in additional fencing to expand the habitat available to elephants, or it could vasectomize additional individuals. And even if removal of elephants were necessary, Reilly has simply written off the potential to place the elephants in protected wild areas elsewhere in Africa, without actually exploring the options.

Simply put, Reilly is using brinksmanship to force the FWS into a decision favorable to him. This tactic worked in 2003 when he threatened to kill 11 elephants if the FWS didn't allow US zoos to import them,¹⁷⁵ so he has every reason to believe that it will work again. The FWS must not give in to BGP's brinkmanship.

IV. Ecological Impacts and Protected Species Impacts

The Service is required to deny the Application if "the authorization requested *potentially* threatens a wildlife . . . population."¹⁷⁶ There is no question that the proposed capture of nearly half of Swaziland's elephants has the potential to threaten that population and that anthropogenic disturbances impact wild elephants' viability and fitness. Additionally, authorizing this import sends a dangerous signal to other zoos and countries that there is an open market for live elephants, and has the potential to set a precedent for further capture and sales. Finally, research shows that keeping animals in zoos is a detriment to conservation.

¹⁷³ Aff. of Joyce Poole, *supra*, at 2.

¹⁷⁴ See Application at 32.

¹⁷⁵ See Lisa Kane, A case Study of African Elephants' Journey from Swaziland to US Zoos in 2003: A Question of Commerce and a Tale of Brinksmanship, 6 J. Animal L. 51 (2010); see also Born Free USA v. Norton, 278 F. Supp. 2d 5 (D.D.C. 2003) ("the Court does not appreciate brinksmanship").

¹⁷⁶ 9 C.F.R. § 13.21(b)(4) (emphasis added).

A. The Proposed Import Threatens the Viability of the Remaining Elephants in Swaziland.

As discussed in detail in above, the Applicant's failure to provide required information on the elephants captured means, too, that there is no information on the elephants *not* captured, who will remain in the wild in Swaziland. Given that the entire elephant population of the two parks is only 39, it is virtually certain that the elephants who have been captured are directly related to those remaining. Since there were five juveniles captured for every adult, it may be assumed that there are juveniles that were taken from their mothers during the capture, and both mothers and juveniles left behind without their closest kin. Clearly family bonds have been ruptured, and many if not all of the remaining elephants have suffered the trauma of this disruption.

Splitting up elephant families causes "serious disruption of the intricate social networks that underpin social structure in these species, with *severe* impacts on each individual's close social bonds and opportunities for learning from older group members."¹⁷⁷ It follows that familial disruption impedes social learning and "may have very significant effects on physiological development and adult behavior patterns."¹⁷⁸ For example, in one study, elephants who had been split from their families during culls were unable to distinguish the calls of unfamiliar older elephants from younger ones, and were therefore unable to assess the threat level that the stranger posed.¹⁷⁹

Other studies have found *sustained* aberrant behavior and hyper-aggression among elephants whose families are disrupted, including violence towards other elephants, other species, and even humans.¹⁸⁰ Male elephants in South Africa have killed 107 rhinoceroses, even attempting to copulate with them, and have been known to attack tourist vehicles.¹⁸¹ The aberrant behavior is attributed to the absence of adult male role models, who are essential to establishing a social order, modeling appropriate behavior, and keeping young elephants' hormones in check.¹⁸²

The following table briefly summarizes the abnormal behaviors observed among multiple elephant populations that have experienced social disturbances:

¹⁷⁷ Shannon, et al., *supra*, at 65-66 (emphasis added); *see also* Delia Owens & Mark Owens, *Comeback Kids*, 114 Nat. Hist. (2005) (discussing the broad impacts that anthropogenic disruption had on elephant social structure and mothering skills).

¹⁷⁸ Shannon, et al., *supra*, at 63.

¹⁷⁹ See *id.*; see also Karen McComb, et al., *Leadership in Elephants: The Adaptive Value of Age*, Proc. R. Soc. B (2011) (finding that families led by older—and therefore more knowledgeable—matriarchs were superior at detecting the level of threat posed by lions).

 ¹⁸⁰ See generally Caroline Williams, *Elephants on the Edge*, New Scientist, Feb. 18, 2006, at 39; see also Maron Garaï, et al., *Elephant reintroductions to small fenced reserves in South Africa*, 37 Pachyderm 28, 34 (2004).
 ¹⁸¹ Shannon, et al., *supra*, at 63; Gay Bradshaw & Allan Schore, *How Elephants Are Opening Doors:*

Developmental Neuroethology, Attachment and Social Context, 113 Ethology 436, 431 (2007); Rob Slotow & G. Van Dyk, Role of delinquent young "orphan" male elephants in high mortality of white rhinoceros in Pilanesberg National Park, South Africa, 44 Koedoe 85 (2001); Rob Slotow, et al., Killing of black and white rhinoceroses by African elephants in Hluhluwe-Umfolozi Park, South Africa, 31 Pachyderm 14 (2001); Rob Slotow, et al., Older bull elephants control young males, 408 Nature 425 (2000); The Delinquents: A Spate of Rhino Killings, CBSnews.com (60 Minutes) (Aug. 22, 2000), http://www.cbsnews.com/news/the-delinquents/.

¹⁸² Gay Bradshaw & Allan Schore, *supra*, at 431; *The Delinquents: A Spate of Rhino Killings*, CBSnews.com (60 Minutes) (Aug. 22, 2000), <u>http://www.cbsnews.com/news/the-delinquents/</u>.

Location	Behaviour	Altered developmental context alteration and associated stressor	Reference
Pilanesberg National Park (PNP), SA	Interspecies hyper-aggression, non-consensual interspecies sex, and mortality; decreased affiliative behaviour	Cull, translocation, inadequate herd structure, premature weaning	Slotow et al. (2000), Slotow & van Dyk (2001), Garaï et al. (2004)
Hluhluwe-Umfolowzi National Park (HUP), SA	Interspecies hyper-aggression, non-consensual interspecies sex, and mortality	Cull, translocation, inadequate herd structure, premature weaning	Slotow et al. (2000), Slotow et al. (2001)
Venetia Limpopo Nature Reserve, SA	Intraspecific aggression, decreased affiliative behaviour in a confined group of juveniles, nervousness	Cull, translocation, confinement, loss of family, absence of mother figure	Garaï (1997), EMOA (2006)
Addo National Park, SA	Intraspecific hyper-aggression and mortality	Extreme population density, patterns of irregular herd structure	Whitehouse & Hall-Martin (2000), Whitehouse & Kerley (2002)
Zambia	Poor mothering and infant neglect, intraspecific hyper-aggression	Severe poaching, single mother-infant, herd structure breakdown	Owens & Owens (2005, in press), Poole (1989)
QENP Uganda	Poor mothering and infant neglect, intraspecific hyper-aggression	Severe poaching, herd structure breakdown	Abe (1994), Nyakaana et al. (2001), Poole (1989)
Kenya	Apathy, diminished social skills, diminished mothering capabilities	Poaching, culls, accidental separations	D. Sheldrick, pers. comm.
Pongola Game Reserve, SA	Less vigilance towards offspring, no birth helping	Orphans, absence of experienced adult females	EMOA (2006)

Source: Gay Bradshaw & Allan Schore, *How Elephants Are Opening Doors: Developmental Neuroethology, Attachment and Social Context*, 113 Ethology 436, 430 (2007).

In *all* cases above, the elephants exhibiting abnormal behaviors were translocated cull orphans, progeny of cull survivors, or reared under highly irregular herd structures.¹⁸³ In other words, the elephants had experienced multiple severe traumas, such as the loss their mothers and allomothers, dissolution of family groups, translocation, and witnessing the deaths of family members.¹⁸⁴

Such traumatic events are "predicted to have more subtle effects on learning, in particular interfering with abilities to gauge appropriate responses to social and environmental stimuli."¹⁸⁵ Shannon, et al found that elephant populations that experience disruption—as the Swaziland population has, with about half its number captured—are affected in ways that are likely to impact their social functioning and the health of the herd unit as a whole in terms of survivorship and reproduction.¹⁸⁶ These expert opinions lead to the necessary conclusion that taking these 18 elephants out of 39 potentially threatens the remaining population of elephants in Swaziland.

B. The Proposed Import Will Open the Floodgates to Future Capture.

Authorizing this import would reward BGP's mismanagement of wildlife populations and further entrench the precedent that the FWS established 12 years ago when it allowed two zoos to import

¹⁸³ Gay Bradshaw & Allan Schore, *supra*, at 431.

¹⁸⁴ Id.

¹⁸⁵ Shannon, et al., *supra*, at 2.

¹⁸⁶ Id.

elephants from BGP in exchange for a large sum of money. Since that import, BGP has failed to adequately manage the elephant populations, which—predictably—grew to so-called unsustainable levels. Now, BGP and the zoos are seeking to repeat history using the same arguments and brinksmanship tactics that worked in the past.

Granting a permit to the Applicant creates a dangerous example for other countries that hold far more elephants than Swaziland. These countries can easily claim an excess number of elephants, without the science to back up their claims. For example, Zimbabwe is using the proposed US import to justify its own export of elephants to 100 Chinese zoos, which earned \$1 million in sales.¹⁸⁷ Environment, Water and Climate Minister Oppah Muchinguri recently claimed that Zimbabwe has too many elephants, and stated: "We exported elephants to China and there was backlash from America. But we are glad that they are also importing. They imported elephants from Swaziland as we speak. So now we can challenge them that they are denying us from exporting to China yet they are importing."¹⁸⁸

FWS halted the import of trophies from sport hunted elephants in Zimbabwe based on the finding that it would not enhance the survival of the species due to an unknown population status, among other concerns.¹⁸⁹ In another example, studies have shown that CITES' allowance of just two one-time *legal* sales of ivory opened up the market to *illegal* sales and therefore drove poaching forward.¹⁹⁰ Granting a permit to the applicant will only reinforce the idea that the sale of elephants to zoos is acceptable and this action may lead other countries to seek out this potentially lucrative trade to enrich their own coffers.

Namibia provides another example of an African country selling its elephants to zoos. In 2012, the AZA-accredited Africam Safari in Mexico imported nine elephant calves from Namibia, calling it a "rescue" and claiming the "orphaned" elephants would otherwise be killed. The government of Namibia strongly refuted the claim, stating that the elephants were not orphans and would not have been killed, and that Africam Safari had purchased the calves.¹⁹¹ And in 2011, the Pittsburgh Zoo imported three female African elephants from Botswana. The zoo claimed to rescue the elephants, as one of them killed a person and therefore was going to be destroyed. (There was no explanation as to why the other two elephants had to be "rescued" as well.) The elephants currently are confined at the zoo's breeding facility in Somerset County, Pennsylvania.

The applicant's request to import elephants from Swaziland follows a similar pattern in portraying the import as a "rescue." This ploy is used as an attempt to gain public support for the

¹⁹⁰ Brian Christy, *Blood Ivory*, Nat. Geo. (Oct. 2012), <u>http://ngm.nationalgeographic.com/2012/10/ivory/christy-text</u>;
 Envt'l Invest. Agency, *Blood Ivory: Exposing the Myth of a Regulated Market* (2012).
 ¹⁹¹ "Namibia: No orphan elephants exported to Mexico." June 11, 2012.
 http://allafrica.com/stories/201206111695.html

¹⁸⁷ Zimbabwe earns US\$1m from elephant sales, StarAfrica (Nov. 5, 2015),

http://en.starafrica.com/news/zimbabwe-earns-us1m-from-elephant-sales-report.html. ¹⁸⁸ Muchinguri Blurts: We Have Too Many Elephants in Zimbabwe, ZimEye (Nov. 9, 2015), http://www.zimeye.com/muchinguri-vomits-we-have-too-many-elephants-in-zimbabwe.

¹⁸⁹ "Importation of Elephant Hunting Trophies Taken in Tanzania and Zimbabwe in 2015 and Beyond. Questions and Answers." July 10, 2015. <u>http://www.fws.gov/international/pdf/questions-and-answers-suspension-of-elephant-sport-hunted-trophies.pdf</u>.

import, and it is being used again by the applicant. U.S. zoos should be models for the rest of the world, but instead they are providing a terrible example for other African countries to follow, to the detriment of the species.

C. Displaying Threatened Species in Zoos Will Negatively Impact Conservation Attitudes.

Not only do animal exhibits fail to educate the public and fail to enhance the propagation or survival of species, studies have shown that public display and commercial use of endangered species may operate to the *detriment* of wild populations of such species. This research not only undermines any contention that the capture and importation of these elephants benefits the species, but provides additional grounds for rejecting the permit application.

Often, the presence of endangered species in exhibition leads to erroneous public perceptions that such species are not in fact endangered. Per Nyhus et al.:

[Z]oos may actually undermine the continued existence of what they purport to celebrate. People watch the films, they visit the zoos, and by the mesmeric power of these vicarious experiences, they come carelessly to believe that the [animal] . . . is alive and well because they have seen it.¹⁹²

According to Dr. Lori Marino, neuroscientist and Executive Director of The Kimmela Center for Animal Advocacy:

There is no convincing evidence that visits to zoos and circuses are educational or contribute, in any meaningful way, to the conservation of the animals held in these facilities. Moreover, the danger of zoos and circuses marketing themselves as conservation-oriented is that they send the message that natural habitats are irrelevant. And if the animals' natural context is implicitly presented as unimportant, then these institutions are actually contradicting the message they claim to affirm. Moreover, these types of efforts palliate people's concerns about a vanishing natural world, instead of forcing us to confront the imminent dangers to animals. In this way they create a false sense of security about the survival and welfare of other animals. Visitors are made to feel that by patronizing the zoo or circus they are contributing to the conservation of the animals they come to see. They leave with a sense of self-satisfaction that they have "done their part." The opportunity loss for real grass-roots conservation efforts is obvious.¹⁹³

These incorrect perceptions undermine "the scientific, welfare, and conservation goals" of those who seek to protect them.¹⁹⁴

¹⁹² Philip J. Nyhus, Ronald Tilson & Michael Hutchins, *Thirteen Thousand and Counting: How Growing Captive Tiger Populations Threatens Wild Tigers, in* Tigers of the World: The Science, Politics and Conservation of Panthera Tigris 223, 233 (Philip J. Nyhus & Ronald Tilson eds., 2nd ed. 2010).

¹⁹³ Personal communication (Nov. 22, 2015).

¹⁹⁴ Stephen R. Ross et al., *Inappropriate Use and Portrayal of Chimpanzees*, 319 Science 1487 (Mar. 14, 2008); see also Stephen R. Ross et al., *Specific Image Characteristics Influence Attitudes about Chimpanzee Conservation and*

Additionally, the increasing "commoditization" of wild animals harms the species in the wild by diverting resources—"both human and financial"—from in-situ conservation efforts.¹⁹⁵ Rather than spending scarce resources on addressing the crisis facing the world's *wild* endangered species, governments, private individuals, and animal protection organizations are forced to put money and energy into regulating and addressing the needs of *captive* elephants who will never be released into the wild.¹⁹⁶

V. Conclusion

For all of the reasons detailed above, we urge the FWS to deny the Application for the requested permit to import eighteen wild elephants to US zoos. Should the agency decide to issue the permits despite these objections, we hereby request notice of that decision prior to the issuance of the permits via e-mail to <u>RMathews@petaf.org</u> or telephone to 202-680-8276.

Use as Pets, 6(7) PLoS ONE (2011); Kara Schroepfer et al., *Use of "Entertainment" Chimpanzees in Commercials Distorts Public Perception Regarding their Conservation Status*, 6(10) PLoS ONE (2011). ¹⁹⁵ Nyhus, et al, "Thirteen Thousand and Counting," *supra*, at 237. ¹⁹⁶ *Id*.