



---

# **AZA ELEPHANT TAG/SSP REGIONAL COLLECTION PLAN**

**3<sup>RD</sup> EDITION**

---

**COMPILED BY AZA ELEPHANT TAG/SSP STEERING COMMITTEE  
2011**

**ASSOCIATION  
OF ZOOS &  
AQUARIUMS**

## AZA ELEPHANT TAG/SSP LEADERSHIP

<b>Officers</b>		
TAG Chair and SSP Coordinator/African and Asian Elephants	Martha Fischer Saint Louis Zoo	<a href="mailto:fischer@stlzoo.org">fischer@stlzoo.org</a> 314.646.4610
TAG Vice Chair and SSP Vice Coordinator/African Elephants	David Hagan Indianapolis Zoo	<a href="mailto:dhagan@indyzo.com">dhagan@indyzo.com</a> 317.630.2092
TAG Vice Chair and SSP Vice Coordinator/Asian Elephants	Charlie Gray African Lion Safari	<a href="mailto:cgray@lionsafari.com">cgray@lionsafari.com</a> 519.623.5732
TAG/SSP Secretary	Mike Quick Sedgwick County Zoo	<a href="mailto:mquick@scz.org">mquick@scz.org</a> 316.266.8237
<b>Steering Committee</b>		
Bruce Bohmke Woodland Park Zoo		<a href="mailto:bruce.bohmke@zoo.org">bruce.bohmke@zoo.org</a> 206.548.2500 ext 1123
John Davis Riverbanks Zoo and Garden		<a href="mailto:jdavis@riverbanks.org">jdavis@riverbanks.org</a> 803.978.1062
Stephen Eisele Disney's Animal Kingdom		<a href="mailto:stephen.eisele@disney.com">stephen.eisele@disney.com</a> 407.938.2090
Darryl Hoffman Houston Zoo, Inc.		<a href="mailto:dhoffman@houstonzoo.org">dhoffman@houstonzoo.org</a> 713.533.6615
Dale Leeds Denver Zoo		<a href="mailto:dleeds@denverzoo.org">dleeds@denverzoo.org</a> 303.376.4927
Guy Lichty North Carolina Zoo		<a href="mailto:guy.lichty@nczoo.org">guy.lichty@nczoo.org</a> 336.879.7000 ext 7604
Amos Morris Mesker Park Zoo		<a href="mailto:amorris@meskerparkzoo.com">amorris@meskerparkzoo.com</a> 812.435.6143 ext 401
Harry Peachey Columbus Zoo & Aquarium		<a href="mailto:harry.peachey@columbuszoo.org">harry.peachey@columbuszoo.org</a> 614.724.3688
Randy Rieches Zoological Society of San Diego		<a href="mailto:rrieches@sandiegozoo.org">rrieches@sandiegozoo.org</a> 760.738.5015
Terri Roth Cincinnati Zoo & Botanical Garden		<a href="mailto:terri.roth@cincinnati.org">terri.roth@cincinnati.org</a> 513.569.8220
Brandie Smith Smithsonian's National Zoo		<a href="mailto:smithbr@si.edu">smithbr@si.edu</a> 202.633.3246

COVER PHOTO:  
DISNEY'S ANIMAL KINGDOM

RCP EDITED BY MARTHA FISCHER  
SAINT LOUIS ZOO

## AZA ELEPHANT TAG/SSP ADVISORS

Advisors		
<b>Behavior, Enrichment &amp; Training</b>	Jill Mellen Disney's Animal Kingdom	<a href="mailto:jill.mellen@disney.com">jill.mellen@disney.com</a> 407.939.6221
	Bruce Upchurch Woodland Park Zoo	<a href="mailto:bruce.upchurch@zoo.org">bruce.upchurch@zoo.org</a> 206.548.2500 ext 1700
<b>Education</b>	Kathy Lehnhardt Disney's Animal Kingdom	<a href="mailto:kathy.lehnhardt@disney.com">kathy.lehnhardt@disney.com</a> 407.939.7340
<b>Field Conservation</b>	Peter Leimgruber Smithsonian National Zoo	<a href="mailto:leimgruberP@si.edu">leimgruberP@si.edu</a> 540.635.6589
	Debbie Olson International Elephant Foundation	<a href="mailto:dolson@elephantconservation.org">dolson@elephantconservation.org</a> 817.237.9034
<b>Fund Raising</b>	Vacant	Vacant
<b>Nutrition</b>	Jason Williams Indianapolis Zoo	<a href="mailto:jwilliams@indyzoo.com">jwilliams@indyzoo.com</a> 317.630.2053
<b>Pathology</b>	Scott Terrell Disney's Animal Kingdom	<a href="mailto:scott.p.terrell@disney.com">scott.p.terrell@disney.com</a> 407.938.2746
<b>Public Relations</b>	Steve Feldman AZA	<a href="mailto:sfeldman@aza.org">sfeldman@aza.org</a> 301.562.0777 ext 252
<b>Reproduction</b>	Janine Brown Smithsonian National Zoo	<a href="mailto:brownjan@si.edu">brownjan@si.edu</a> 540.635.6586
	Dennis Schmitt Missouri State University/Feld Entertainment	<a href="mailto:dennisSchmitt@MissouriState.edu">dennisSchmitt@MissouriState.edu</a> 417.836.5091
<b>Research</b>	Janine Brown Smithsonian National Zoo	<a href="mailto:brownjan@si.edu">brownjan@si.edu</a> 540.635.6586
<b>Small Population Management</b>	Bob Wiese Zoological Society of San Diego	<a href="mailto:bwiese@sandiegozoo.org">bwiese@sandiegozoo.org</a> 619.744.3315
	Sarah Long, AZA Population Management Center	<a href="mailto:slong@lpzoo.org">slong@lpzoo.org</a> 312.742.3993
<b>Veterinary</b>	Michele Miller Palm Beach Zoo	<a href="mailto:mmiller@palmbeachzoo.org">mmiller@palmbeachzoo.org</a> 561.833.7130 ext 224
<b>TAG/SSP Advisor</b>	Mike Keele, Oregon Zoo	<a href="mailto:mike.keele@oregonzoo.org">mike.keele@oregonzoo.org</a> 503.220.2445

---

## TABLE OF CONTENTS

---

<a href="#">AZA Elephant TAG/SSP Leadership &amp; Advisors</a>	2	
<a href="#">Mission Statement &amp; Goals of the AZA Elephant TAG/SSP</a>	5	
<a href="#">TAG Definition</a>	6	
<a href="#">Table 1. AZA Elephant TAG/SSP Species</a>	6	
<a href="#">Conservation Status of Taxa</a>	6	
<a href="#">Table 2. Conservation Status of Wild Elephants</a>	7	
<a href="#">Table 3. Global Status of Elephants in Human Care</a>	7	
<a href="#">Space Analysis</a>	7	
<a href="#">AZA Elephant TAG/SSP Space Analysis</a>	7	
<a href="#">Table 4. Summary of AZA Elephant TAG/SSP Space Analysis Survey, 2010</a>	8	
<a href="#">Table 5. Comparison of future space projections last three editions of the         Elephant TAG/SSP Space Analysis</a>	8	
<a href="#">Species Evaluation Process</a>	9	
<a href="#">New AZA Animal Management Program Structure</a>	9	
<a href="#">Table 6. New AZA Animal Management Program Categories</a>	10	
<a href="#">Target Population Sizes</a>	11	
<a href="#">Programs Roles and Purposes</a>	11	
<a href="#">Table 7. AZA Elephant TAG/SSP Program Summary Table</a>	12	
<a href="#">AZA and International Elephant Foundation Partnership</a>	12	
<a href="#">AZA Elephant TAG/SSP Operational Structure</a>	13	
<a href="#">AZA Elephant TAG/SSP Listservs and Website</a>	15	
<a href="#">AZA Elephant TAG/SSP Policies and Procedures</a>	15	
<a href="#">Appendix I</a>	Estimated minimum and maximum number of elephant in the wild in Asia, 2010	18
<a href="#">Appendix II</a>	Summary of Elephant Population Estimates on the African Continent, IUCN 2007	19
<a href="#">Appendix III</a>	AZA Elephant TAG/SSP Program Management Assessment Table, 2011	21
<a href="#">Appendix IV</a>	AZA Elephant TAG/SSP Institutional Liaison Assignments, 2011	22
<a href="#">Appendix V</a>	AZA Elephant TAG/SSP Advisory Groups: Advisors, Subcommittees and Steering Committee Liaisons, 2011	23
<a href="#">Appendix VI</a>	AZA Elephant TAG/SSP Advisor Job Descriptions, 2011	25
<a href="#">Appendix VII</a>	AZA Elephant TAG/SSP Program Updates from 2007 RCP	28
<a href="#">Appendix VIII</a>	AZA Elephant TAG/SSP Program Status Table, 2011	29
<a href="#">Appendix IX</a>	AZA Elephant TAG/SSP Leadership, Advisors and Program Leaders Contact Information, 2011	34

---

## **AZA Elephant TAG/SSP Mission Statement** **Adopted January 2005**

The Association of Zoos and Aquariums (AZA) is comprised of caring, trusted experts committed to ensuring that elephants are part of the world's future. Through our conservation, education and research programs, elephants in our care play an essential role in the survival of the species in the wild. AZA advocates on behalf of elephants with a unified and consistent voice and collaborates with others committed to the long-term survival of elephants.

---

An Elephant Management Strategic Planning Workshop was organized in December 2004 to assist the AZA Elephant TAG/SSP with developing a vision for the future of the Association's elephant programs. It included drafting goals, which are a framework for action on how to create the desired future, and a plan for the resources and opportunities that are necessary to meet those goals.

Twenty-three participants, including representatives from the AZA Elephant TAG/SSP, institutional directors, AZA Board members, and AZA staff, gathered in Fort Worth, Texas on 5-7 December 2004. The outcomes of this workshop were: 1) the development of a draft vision for the future of the AZA elephant program; and 2) the development of draft goals and actions for achieving this vision.

In January 2005, Directors of 78 AZA-accredited zoos that care for elephants met to review the draft report from this workshop and enhance the long-range plans for elephant care, management, conservation and research. As a part of this meeting, the group defined the components of an institutional "commitment" to the AZA Elephant TAG/SSP. AZA Institutions that are committed to the AZA Elephant TAG/SSP will:

- Enhance population sustainability through institutional carrying capacity
- Participate in or contribute to *in situ* or *ex situ* elephant conservation
- Participate in and support AZA Elephant TAG/SSP research projects (includes submitting samples, responding to surveys, contributing resources)
- Abide by AZA Elephant TAG/SSP breeding recommendations
- Promote AZA Elephant TAG/SSP educational messages
- Contribute resources to developing conservation centers
- Contribute resources to hiring a full time position for program oversight
- Publicly speak and act with a unified voice
- Participate in a proactive public relations campaign
- Provide support for elephant staff to participate in AZA Elephant TAG/SSP activities
- Abide by [AZA Standards for Elephant Management and Care](#) (with the understanding that they are dynamic and may evolve as our knowledge increases)

---

## TAG DEFINITION

---

The AZA Elephant TAG/SSP includes two species in the family Elephantidae listed in [Table 1](#). The Elephant TAG/SSP manages both Asian and African elephants at the species level. The Asian Elephant SSP and the African Elephant SSP are managed cooperatively under the purview of the AZA Elephant TAG/SSP to synchronize the AZA management of these two important populations in a way that will result in the best utilization of the available resources and promote the establishment of sustainable zoo populations for both species into the future.

The Asian elephant is considered to be a single species, *Elephas maximus*, with three extant subspecies, *E. m. indicus* (Indian elephant), *E. m. maximus* (Sri Lankan elephant) and *E. m. sumatranus* (Sumatran elephant)<sup>1</sup>.

The African elephant is considered to be a single species, *Loxodonta africana*, with two extant sub-species, *L. a. cyclotis* (forest elephant) and *L. a. africana* (savanna elephant)<sup>2</sup>. Some preliminary genetic research has suggested that the forest elephants of West Africa, *L. a. cyclotis*, are genetically different from the savanna elephant, *L. a. africana*, and represent a separate species of elephant. In the Statement on the Taxonomy of Extant *Loxodonta* published in February 2002, the International Union for Conservation of Nature/Species Survival Commission (IUCN/SSC) African Elephant Specialist Group recommends that further genetic and morphological research be conducted before dividing elephants from Africa into two separate species.

**Table 1: AZA Elephant TAG/SSP Species**

COMMON NAME	SCIENTIFIC NAME
<b>Asian elephant</b>	<b><i>Elephas maximus</i></b>
Indian elephant	<i>E. m. indicus</i>
Sri Lankan elephant	<i>E. m. maximus</i>
Sumatran elephant	<i>E. m. sumatranus</i>
<b>African Elephant</b>	<b><i>Loxodonta africana</i></b>
Savanna elephant	<i>L. a. africana</i>
Forest elephant	<i>L. a. cyclotis</i>

### **Conservation Status of Taxa**

The conservation status of each elephant species was determined by consulting the current IUCN Red Data List, US Fish and Wildlife Department (USFWS) listings and Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Appendices. Wild population status was gathered from the most recent IUCN/SSC African Elephant Specialist Group and Asian Elephant Specialist Group information. Zoo population status for each species was determined by reviewing the most current [Asian Elephant Regional Studbook](#) and [African Elephant Regional Studbook](#) data, by reviewing the most current SSP databases and/or by consulting current ISIS data. The wild and zoo status of each AZA Elephant TAG/SSP species are summarized in [Table 2](#) and [Table 3](#). Wild elephant population estimates for Asia and Africa are listed by country in [Appendix I](#) and [Appendix II](#).

---

<sup>1</sup> Choudhury, A., Lahiri Choudhury, D.K., Desai, A., Duckworth, J.W., Easa, P.S., Johnsingh, A.J.T., Fernando, P., Hedges, S., Gunawardena, M., Kurt, F., Karanth, U., Lister, A., Menon, V., Riddle, H., Rübél, A. & Wikramanayake, E. 2008. *Elephas maximus*. In: IUCN 2010. IUCN Red List of Threatened Species. Version 2010.1. [www.iucnredlist.org](http://www.iucnredlist.org). Downloaded on **20 June 2010**.

<sup>2</sup> Blanc, J. 2008. *Loxodonta africana*. In: IUCN 2010. IUCN Red List of Threatened Species. Version 2010.1. <[www.iucnredlist.org](http://www.iucnredlist.org)>. Downloaded on **20 June 2010**.

**Table 2. Conservation Status of Wild Elephants**

SPECIES	IUCN RED DATA LIST	USFWS <sup>3</sup>	CITES <sup>4</sup>	WILD POPULATION ESTIMATES
<b>Asian elephant</b> <i>Elephas maximus</i> All subspecies	EN A2c ver. 3.1 (2008)	Endangered	Appendix I	Between 41,410-52,345
<b>African elephant</b> <i>Loxodonta africana</i> All subspecies	VU A2a ver. 3.1 (2008)	Threatened	Appendix I (except in Botswana, Namibia, South Africa and Zimbabwe which are Appendix II)	Between 472,269-689,671

**Table 3: Global Status of Elephants in Human Care**

SPECIES	NORTH AMERICAN POPULATION (SSP AND NON-SSP FACILITIES) <sup>5,6</sup>	AZA SSP POPULATION <sup>7,8</sup>	INTERNATIONAL POPULATION <sup>9</sup>	
<b>Asian elephant</b> <i>Elephas maximus</i> All subspecies	269 (53.216)	143 (29.114) at 41 institutions	Europe	56.207
			Other	58.133
<b>African elephant</b> <i>Loxodonta Africana</i> All subspecies	208 (37.171)	157 (31.126) at 42 institutions	Europe	43.138
			Other	9.24

**Space Analysis**

A Space Analysis Survey was distributed in 2010 to 85 facilities, including 78 AZA member institutions, related facilities and non-AZA facilities that were participating in the AZA Elephant TAG/SSP at the time of the survey and seven AZA institutions that no longer had elephants but had managed elephants in recent years. The responses from this survey were analyzed to determine the space that is currently available and that will be available in the future to manage elephants in AZA Elephant TAG/SSP facilities. Summary results of the Space Analysis Survey are listed in [Table 4](#).

Eighty-one of the 85 institutions surveyed responded to this survey (95%). The Elephant TAG/SSP had 78 Institutional Representatives on record at the time of this survey in 2010, and 75 responded to this survey, which represents a 96% Institutional Representative response rate. Requests for information were sent out

<sup>3</sup> US Fish and Wildlife Service, 2010. [www.fws.gov](http://www.fws.gov)

<sup>4</sup> Convention on International Trade in Endangered Species of Wild Fauna and Flora, 2010. [www.cites.org](http://www.cites.org)

<sup>5</sup> Keele, M. and K. Lewis, 2010. AZA North American Regional Studbook for Asian Elephants, 2010. [www.elephanttag.org](http://www.elephanttag.org)

<sup>6</sup> Olson, D, 2011. AZA North American Regional Studbook for African Elephants, February 2011. [www.elephanttag.org](http://www.elephanttag.org)

<sup>7</sup> Fischer, M, 2011. AZA Population Analysis & Breeding and Transfer Plan for Asian Elephant SSP, draft 2011.

<sup>8</sup> Fischer, M, 2011. AZA Population Analysis & Breeding and Transfer Plan for African Elephant SSP, draft 2011.

<sup>9</sup> ISIS Abstracts, [www.isis.org](http://www.isis.org), 2011.

three times, each non-responding institution was contacted by phone in an effort to achieve the desired 100% response rate and ample time was given to respond to the simple Survey Monkey survey.

The results of the space survey indicate that currently there are 292 (137 Asian, 155 African) spaces being occupied by elephants in AZA and non-AZA Elephant SSP/TAG facilities with a current maximum capacity of 412 (199 Asian, 213 African) spaces available. Within the next 5 years, the Space Analysis Survey results indicate that the maximum capacity will increase within SSP/TAG participating facilities to 441 (220 Asian, 221 African) spaces.

A comparison of the future space projected during the space surveys of the first, second and current editions of the AZA Elephant TAG/SSP Regional Collection Plan (RCP)<sup>10,11</sup> are listed in [Table 5](#). Since the first RCP in 2003, the trend indicates an increased level of commitment of future elephant holding space by TAG/SSP participating institutions. Additionally, the Space Analysis Survey illustrates the understanding that more bull holding space is critical to achieving population targets for both species.

Additional space for zoo management and conservation of elephants may become available in the future at new AZA facilities that enter the Elephant TAG/SSP program and/or at privately owned, non-AZA facilities but those spaces were not considered by the AZA Elephant TAG/SSP when making population recommendations and figuring target populations. In the future, the AZA Elephant TAG/SSP hopes to collaborate with new AZA facilities that enter the Elephant TAG/SSP program, non-AZA facilities and other elephant conservation organizations committed to the conservation of elephants in a combined effort to build and maintain sustainable zoo elephant populations in North America.

**Table 4: AZA Elephant TAG/SSP Space Analysis Survey, 2010**

Species	Current AZA holding at time of survey in 2010	Maximum AZA holding at time of survey in 2010	Projected AZA maximum holding in 5 years
Asian elephant <i>Elephas maximus</i> All subspecies	27.110 (137)	36.163 (199)	45.175 (220)
African elephant <i>Loxodonta Africana</i> All subspecies	30.125 (155)	40.173 (213)	47.174 (221)
<b>Total AZA Elephant Spaces</b>	<b>57.235 (292)</b>	<b>76.336 (412)</b>	<b>92.349 (441)</b>

**Table 5: Comparison of future space projections last three editions of the Elephant TAG/SSP Space Analysis**

	RCP, 1 <sup>st</sup> Edition, 2003	RCP, 2 <sup>nd</sup> Edition, 2007	RCP, 3 <sup>rd</sup> Edition, 2011
Asian elephant <i>Elephas maximus</i> All subspecies	192-205	227	220
African elephant <i>Loxodonta africana</i> All subspecies	194-201	276	221
<b>Total Spaces Projected for Elephants</b>	<b>386-406</b>	<b>503</b>	<b>441</b>

<sup>10</sup> Fischer, M., editor, 2003. AZA Elephant TAG/SSP Regional Collection Plan, First Edition. [www.aza.org](http://www.aza.org)

<sup>11</sup> Fischer, M., editor, 2007. AZA Elephant TAG/SSP Regional Collection Plan, Second Edition. [www.aza.org](http://www.aza.org)

## **Species Evaluation Process**

The AZA Protocol for RCPs requires a TAG to systematically evaluate and rank each species within a TAG's purview. The resulting species evaluations and rankings are typically used for prioritizing a TAG's zoo and field conservation efforts and for designating an appropriate program management level for each species.

The AZA Elephant TAG/SSP Steering Committee opted to forego the Species Evaluation and Ranking Process typically performed by other TAGs. With only two species within the purview of this TAG and with the availability of adequate space, it seemed unnecessary for the purposes of this TAG's RCP to evaluate and rank one species against the other.

Both Asian and African elephants deserve conservation support *in situ* and *ex situ*. Both species will be given priority for zoo and field conservation efforts in this RCP. Both the Asian Elephant SSP and the African Elephant SSP have been established and functioning for many years, and the AZA Elephant TAG/SSP Steering Committee does not recommend a change to the Management Category for either species.

To justify the decision to continue to give priority to both elephant species, the AZA Elephant TAG/SSP Steering Committee considered all of the criteria typically used by TAGs for species selection. Comments to each criterion are as follows:

- Conservation Status: The Asian elephant is endangered and the African elephant is threatened in the wild due to habitat degradation/encroachment and to competition with humans and domestic livestock.
- Existence of a viable NA zoo population: Both species currently exist in NA. The NA zoo populations of both elephant species are currently not viable without importation.
- Availability of potential founders: Founders of both species are potentially available from other zoo populations and/or from range countries.
- Potential to affect *in situ* conservation of species or ecosystem: There is potential for having a positive effect on the conservation of elephants and elephant habitats in both Asia and Africa.
- Reintroduction potential: Currently, there is no need, nor are there any plans for reintroduction.
- Scientific/research potential: Specific *in situ* and *ex situ* research questions have been identified by IUCN/SSC Asian and African Elephant Specialist Groups and by the AZA Elephant TAG/SSP, and a research plan is in place for elephants.
- Husbandry expertise: Zoo husbandry expertise exists for both African and Asian elephants, and elephant husbandry continues to evolve and improve through experience and research.
- Education value: Both African and Asian elephants have high educational value and can serve as flagship species for conservation of lesser-known African and Asian species and for conservation of a variety of critical habitats.
- Taxonomic uniqueness: Elephants are taxonomically unique at the family level.

Each species was assessed using the suggested WCMC Management Assessment Criteria. The Management Assessment Criteria table can be found in [Appendix III](#).

## **New AZA Animal Management Program Structure**

In 2010, the administrative structure of AZA's population management structure was modified to remove impediments to reaching sustainability, increase program flexibility and simplify program administration. As per the document entitled *Sustainable Zoo Populations: Action Plan for the Future of AZA's Species Survival Plans®*, the approved Animal Management Program Structure is as follows:

- Collection Sustainability and Conservation Action are assessed separately
- Programs earn their levels of population sustainability and/or conservation action, and levels can change depending upon the population's performance.

- Collection sustainability of each managed population will be assessed and the population placed in one of three levels: **Green, Yellow, Red** as per the descriptions found in [Table 6](#).
- Assessments will be performed with modeling programs such as ZooRisk, Vortex, or others to be developed
- The general criteria for long-term sustainability will be how long a population is projected to remain demographically viable with gene diversity above 90%. Some taxa/populations will need to consider and monitor other criteria as well.
- The level of each individual program will change in accordance with the population becoming more or less sustainable.
- All AZA institutions participating in Animal Management Programs will continue to be subject to the AZA Acquisition and Disposition and Code of Professional Ethics policies, as required by AZA accreditation standards.
- Institutional accountability regarding active participation and willingness to provide timely and accurate information is imperative to achieving collection sustainability.

**Table 6: New AZA Animal Management Program Categories, 2010**

<b>Green</b>	<b>Yellow</b>	<b>Red</b>
<p>Green SSP Programs are Currently Sustainable for the long-term.</p> <ul style="list-style-type: none"> <li>• The population is presently sustainable demographically for 100+ years or 10+ generations.</li> <li>• The population is able to retain a high amount of gene diversity (&gt;90% GD) over this time.</li> <li>• The Program is subject to SSP Full Participation and the non-AZA member application processes.</li> </ul> <p>These programs are called Species Survival Plans®</p>	<p>Yellow SSP Programs are Potentially Sustainable for the long-term.</p> <ul style="list-style-type: none"> <li>• The population currently cannot retain 90% gene diversity for 100 years or 10 generations.</li> <li>• The population requires additional attention and effort to make it more sustainable.</li> <li>• Factors affecting sustainability that need to be addressed may include: <ul style="list-style-type: none"> <li>○ Lack of husbandry and breeding expertise/predictability;</li> <li>○ Too few individuals;</li> <li>○ Too little space;</li> <li>○ Low gene diversity; and</li> <li>○ Poor demographics</li> </ul> </li> <li>• The Program’s adherence to SSP Full Participation is voluntary, and Programs can partner with non-AZA members without going through the AZA non-member application process.</li> <li>• Institutions are encouraged to participate in, and focus attention on, these Programs to increase their sustainability.</li> </ul> <p>These programs are called Species Survival Plans®</p>	<p>Red Programs are Currently Not Sustainable for the long-term and the populations are deemed critical.</p> <ul style="list-style-type: none"> <li>• The population has fewer than 50 individuals and is not designated as an SSP Program based on collection sustainability criteria.</li> <li>• The Program should be managed as an official AZA Studbook if the TAG recommends these species in the RCP, but will not require formal planning on a regularly scheduled basis.</li> <li>• Red designation may serve as a strong call to action.</li> <li>• The Program’s adherence to SSP Full Participation is voluntary, and Programs can partner with non-AZA members without going through the AZA non-member application process.</li> <li>• Some start-up efforts will fall into this category, and their designation may be changed as the appropriate sustainability criteria are reached. <ul style="list-style-type: none"> <li>○ For example, if a Red Program succeeds in raising its population size to 50 or more individuals, then it can be considered for designation as a Yellow or Green SSP Program.</li> </ul> </li> </ul>

The Program Management Level for each Elephant SSP was determined in February 2011 at the Population Management Center. The Asian elephant and African elephant programs were both determined to be **Yellow** SSP Programs. The Program Management Levels known at this time for each species can be found within the 2011 Program Summary. The Conservation Action Status of each SSP is to be determined.

### **Target Population Sizes**

Space Analysis results, population status and population viability information provided by studbook keepers/SSP coordinators and their Small Population Advisors were considered prior to setting target population sizes for each species. These target populations can be found within the AZA Elephant TAG/SSP Program Recommendations Summary in [Table 7](#).

### **Programs Roles and Purposes**

All species for which programs are recommended in this RCP contribute to the conservation and/or awareness of elephants and their native habitats or to the research intended to improve management or aid conservation. The roles and purposes for all elephant programs are included within the Program Recommendations Summary in [Table 7](#) and are described below.

- **Conservation Support and Safety Net Population:** A sustainable zoo program that is managed to ensure against the loss of the species in the wild, and which has components that directly link to some aspect of *in situ* conservation for the species.
- **Conservation Link and Education Population:** A sustainable zoo program that is maintained to ensure minimal input from wild populations, and which contributes to *in situ* conservation efforts for the species by generating interest and support through interpretive education programs for zoos and zoo visitors. The need for released animals in field programs is not immediate, and the management of the population for release is not considered a priority.
- **Education and Display Population:** A sustainable managed zoo program that will require minimal input from wild populations. The program is intended for species that do not have strong conservation links, but which are important elements of mixed-species or other displays, and/or may be utilized in zoo education programs.
- **Research Population:** A zoo program that is maintained in a sustainable program to provide data for research, either basic or applied, intended to improve elephant management and/or contribute to elephant conservation.

**Table 7: AZA Elephant TAG/SSP Program Summary**

Species	Program Designation	Target Population in AZA facilities	Program Role and Purpose	Program Contacts
<b>Asian elephant</b> <i>Elephas maximus</i> All subspecies	Yellow SSP	220	Conservation Support and Safety Net	Martha Fischer Saint Louis Zoo (SSP Coordinator) ----- Charlie Gray African Lion Safari (SSP Vice-Coordinator) ----- Mike Keele Oregon Zoo (NA Regional Studbook)
<b>African Elephant</b> <i>Loxodonta africana</i> All subspecies	Yellow SSP	250	Conservation Support and Safety Net	Martha Fischer Saint Louis Zoo (SSP Coordinator) ----- David Hagan Indianapolis Zoo (SSP Vice-Coordinator) ----- Debbie Olson International Elephant Foundation & Indianapolis Zoo (NA Regional Studbook)

---

**AZA AND INTERNATIONAL ELEPHANT FOUNDATION PARTNERSHIP**

---

AZA and its members currently support more than 85 elephant conservation, research and education projects. In 2004, AZA and the International Elephant Foundation (IEF) entered into a new partnership to help identify and fund critical conservation and research projects that will benefit Asian and African elephants. The Memorandum of Understanding (MoU) provides for greater collaboration and addresses serious needs for programs assisting elephants in the wild and in AZA-accredited zoos. The AZA Elephant TAG/SSP encourages institutions to collaborate with IEF on elephant conservation and research efforts. Information about IEF and its programs can be found at [www.elephantconservation.org](http://www.elephantconservation.org).



---

## **AZA ELEPHANT TAG/SSP OPERATIONAL STRUCTURE**

---

The AZA Elephant TAG/SSP was approved by the AZA Board of Directors in 2001 as a result of the AZA Elephant Planning Initiative. The AZA Elephant TAG/SSP was formed to follow through on actions outlined in the AZA Policy on Elephants (adopted by the AZA Board of Directors on 21 March 2000). This TAG/SSP serves as an advisory group to AZA participating facilities for zoo and field conservation of Asian and African elephants.

The Asian Elephant SSP and the African Elephant SSP are managed cooperatively under the purview of the AZA Elephant TAG/SSP to synchronize the zoo management of these two important populations in a way that will result in the best utilization of the available resources and promote the establishment of sustainable zoo populations for both species into the future.

### **Steering Committee**

The AZA Elephant TAG/SSP leadership group consists of a WCMC-appointed TAG Chair/SSP Coordinator, two Steering Committee-appointed TAG Vice-Chairs/SSP Vice-Coordinators and twelve IR-elected Steering Committee members.

The AZA Elephant TAG Chair/SSP Coordinator is appointed by WCMC. The Chair/Coordinator's primary responsibility is to lead the TAG/SSP as it coordinates, facilitates and progresses toward the goals of its cooperative elephant management and conservation programs.

The AZA Elephant TAG Vice-Chairs/SSP Vice-Coordinators are appointed by the Steering Committee. The Vice-Chairs/Vice-Coordinators assist the Chair/Coordinator with the leadership of the TAG/SSP. As necessary, the Vice-Chairs will fill the role of Chair should the Chair be unavailable. In the event that the Chair steps down or is removed for any reason, one of the Vice-Chairs will assume the leadership for the TAG/SSP temporarily while a replacement is identified.

The AZA Elephant TAG/SSP Secretary is appointed by the Steering Committee and is responsible for conducting all TAG/SSP elections and communicating election results to the Steering Committee, to facilities and to AZA. The Secretary is also responsible for recording minutes at all TAG/SSP meetings and distributing the open meeting minutes to the TAG/SSP membership.

The majority of the AZA Elephant TAG/SSP Steering Committee is made up of twelve elected individuals from the TAG/SSP Institutional Representatives (IRs). The Steering Committee members are elected based on their elephant management expertise, the historical commitment of their facilities toward elephant management and conservation and/or their demonstrated leadership abilities. The twelve elected Steering Committee members are elected to three-year terms, with the terms staggered so four or five Steering Committee member positions are available through election each year. Once a year, a Call for Interest is conducted and each facility has an opportunity to put its IR up for election to the Steering Committee at that time.

### **Officer and Steering Committee Responsibilities**

All Officers and Steering Committee members are expected to participate in the activities of the AZA Elephant TAG/SSP. Steering Committee members must have the professional commitment and the institutional support to fulfill the following responsibilities:

- Dedicate sufficient time to carry out the TAG/SSP duties.
- Attend at least one TAG/SSP meeting per year.
- Be prepared to chair TAG/SSP subcommittees or serve as TAG/SSP Secretary.
- Review and vote on submission of the RCP to WCMC.
- Review and vote on the TAG/SSP policy recommendations to the Board.
- Review and vote on SSP Masterplan recommendations.
- Have access to email.

### **Institutional Liaisons**

To facilitate communication flow between the AZA Elephant TAG/SSP and the participating facilities, each Steering Committee member is responsible for liaising with a subgroup of 5-7 participating facilities. Each Steering Committee member serves as the Institutional Liaison for his/her subgroup. A complete listing of the Steering Committee members and the facilities within his/her regional subgroup can be found in [Appendix IV](#).

The primary responsibility of the AZA Elephant TAG/SSP Institutional Liaison (IL) is to support and assist the participating facilities within his/her assigned subgroup with issues related to elephants and the AZA Elephant TAG/SSP. Support and assistance are offered in a number of ways:

- The IL should serve as an information conduit between the subgroup of facilities he/she represents and the Elephant TAG/SSP.
- As needed, the IL may be responsible for distributing Elephant TAG/SSP communications to the facilities in his/her subgroup (TAG/SSP documents, surveys, etc.)
- The IL may also be called upon to serve as a resource of Elephant TAG/SSP information for participating facilities within his/her subgroup (answer questions, explain TAG/SSP direction/goals/activities/recommendations, accept feedback, etc.)
- The IL should distribute outgoing communications from the Elephant TAG/SSP to the participating facilities and respond to incoming inquiries from the participating facilities to the Elephant TAG/SSP in a timely fashion.
- The IL should attempt to handle questions, concerns and clarifications at the IL level. However, when appropriate and necessary, the IL should share incoming communications from participating facilities with the Elephant TAG/SSP Chair and Steering Committee.
- The IL should keep a record of all communication with regard to the Elephant TAG/SSP business and provide a brief summary report of his/her interactions with each facility within the subgroup annually.
- The IL should provide input/comment on institutional performance and compliance to recommendations at time of accreditation.

### **Advisory Groups**

To most effectively pursue the goals outlined in its Mission Statement, the Steering Committee of the AZA Elephant TAG/SSP partners with a team of Advisors who assist with the management and conservation efforts of the TAG/SSP. Eleven Advisory Groups currently exist within the AZA Elephant TAG/SSP: Behavior, Enrichment and Training, Education, Field Conservation, Fund Raising, Nutrition, Pathology, Public Relations, Reproduction, Research, Population Management and Veterinary Medicine. To facilitate communication between the Steering Committee and the Advisory Groups, each Advisory Group has a liaison from the Steering Committee.

Each Advisor has the option to form a subcommittee to assist them in managing his/her Advisory Group. The Advisors, the subcommittee members and the Steering Committee liaisons are listed in [Appendix V](#). The Job Descriptions for the Elephant TAG/SSP Advisor positions are detailed in [Appendix VI](#).

### **Institutional Representatives**

At the time of publication of this Regional Collection Plan, there are 74 participating facilities in the AZA Elephant TAG/SSP. According to the AZA guidelines for TAGs, each AZA-accredited facility may designate an Institutional Representative (IR) to the TAG, if it so chooses. The IR is the primary point of contact with the TAG, will receive all TAG communications and is responsible for disseminating TAG information within his/her facility. IRs are responsible for voting to elect Steering Committee Members. A complete listing of the AZA Elephant TAG/SSP IRs for each facility is available from AZA or the TAG/SSP Chair.

---

## **AZA ELEPHANT TAG/SSP LISTSERVS AND WEBSITE**

---

The Steering Committee and Advisors of the AZA Elephant TAG/SSP communicate throughout the year via email. There are three closed listservs available for various communications about Elephant TAG/SSP business and/or elephant management.

[elephantsc@lists.aza.org](mailto:elephantsc@lists.aza.org) is a listserv that includes the AZA Elephant TAG/SSP Chair and Vice-Chairs, Steering Committee, AZA Staff and WCMC Liaison. This listserv is used to provide a confidential method of communicating among the Steering Committee and conducting AZA Elephant TAG/SSP business (discussions, voting, etc.)

[elephantscad@lists.aza.org](mailto:elephantscad@lists.aza.org) is a listserv that includes the AZA Elephant TAG/SSP Chair and Vice-Chairs, Steering Committee, Advisors, AZA Staff and WCMC Liaison. This listserv is used to conduct AZA Elephant TAG/SSP business that includes the Advisors.

[elephant@lists.aza.org](mailto:elephant@lists.aza.org) is a listserv that includes the AZA Elephant TAG/SSP Chair and Vice-Chairs, Steering Committee, Advisors, Institutional Representatives, AZA Staff and WCMC Liaison. This listserv is used for more general communication with and between the AZA Elephant TAG/SSP and the IRs.

[www.elephanttag.org](http://www.elephanttag.org) is the AZA Elephant TAG/SSP website that includes information on Asian and African elephants, as well as resources such as studbooks, regulations and other professional documents.

---

## **AZA ELEPHANT TAG/SSP POLICIES, PROCEDURES AND PROTOCOLS**

---

Several AZA and AZA Elephant TAG/SSP Policies, Procedures and Protocols are available to facilities and individuals seeking more information on elephant management and conservation. If you are interested in acquiring one or more of these documents, contact your IL for assistance.

### **AZA Elephant TAG/SSP Policies, Procedures and Protocols**

The [AZA Standards for Elephant Management and Care](#), 1991 (revised in 2003; amended in 2005; revisions currently in prep for reissue in 2011) are available from AZA, on the AZA Elephant TAG/SSP website ([www.elephanttag.org](http://www.elephanttag.org)) or from your AZA Elephant TAG/SSP IL.

In addition, several elephant health monitoring and research protocols are available on-line at [www.elephantcare.org](http://www.elephantcare.org), [www.elephanttag.org](http://www.elephanttag.org), from the AZA Elephant TAG/SSP Veterinary Advisor or from your AZA Elephant TAG/SSP IL.

### **AZA Elephant TAG/SSP Breeding/Transfer Recommendations Procedure**

Breeding and transfer recommendations should be in line with and lead to accomplishing the goals of the AZA Elephant TAG/SSP.

**Breeding Recommendations:** The AZA Elephant TAG/SSP Steering Committee uses the following decision tree when making breeding recommendations:

**Question #1:** Will the offspring of the proposed breeding potentially contribute genetically, demographically or scientifically to the goal of a self-sustaining *ex situ* elephant population?

If the answer to question #1 is yes, then go to question #2.

If the answer to question #1 is no, then deny recommendation.

**Question #2:** Does the proposed breeding have a probability of success? (i.e. the reproductive status of the participants is known and documented).

If the answer to question #2 is yes, then go to question #3.

If the answer to question #2 is no, then deny recommendation.

**Question #3:** Does the institution where the calf is to be born have the capability to house a male offspring, or has it made a commitment in writing, signed by the director of the institution, to provide housing for a male offspring in perpetuity?

If the answer to question #3 is yes, then approve recommendation.

If the answer to question #3 is no, then deny recommendation.

This decision tree functions to determine recommendations for all reproductive situations, including artificial insemination. It also applies when considering working with non-Elephant TAG/SSP institutions, such as providing semen for AI. These situations also require AZA Elephant TAG/SSP approval.

Breeding recommendations for AZA Elephant TAG/SSP participating institutions will primarily be generated by the Steering Committee as a part of the overall management plan. In the cases where institutions generate breeding requests, these requests should be submitted by the IR to the TAG/SSP Steering Committee Institutional Liaison assigned to the institution. The Steering Committee IL will gather all necessary details and present the request to the Steering Committee for review and approval/denial. In order for a breeding request to be approved, a 2/3 majority vote must result from the Steering Committee.

**Transfer Recommendations:** To best manage the populations, the AZA Elephant TAG/SSP Steering Committee uses the following decision tree when making transfer recommendations that do not include breeding recommendations:

**Question #1** Will the move potentially contribute spatially, demographically, or scientifically to the goal of a self-sustaining *ex situ* elephant population, or does it meet a specific housing, (i.e. for facility renovation) or animal welfare need?

If the answer to question #1 is yes, then go to question #2.

If the answer to question #1 is no, then deny recommendation.

**Question #2** Is the move to an AZA-accredited or a non-AZA SSP participating institution?

If the answer to question #2 is yes, then go to question #5.

If the answer to question #2 is no, then go to question #3.

**Question #3** Has the receiving institution been inspected by qualified elephant staff from the sending institution or a member of the AZA Elephant TAG/SSP Steering committee and written documentation of the findings of the inspection submitted to the steering committee?

If the answer to question #3 is yes, then go to question #4.

If the answer to question #3 is no, then table the request until appropriate documentation has been submitted.

**Question #4** Does the receiving institution meet the AZA Standards for Elephant Management and Care sufficiently for the TAG Steering Committee to be convinced that the facility can adequately care for the elephant?

If the answer to question #4 is yes, then go to question #5.

If the answer to question #4 is no, then deny recommendation.

**Question #5** Does this move represent an improvement in the overall situation for the elephant?

If the answer to question #5 is yes, then go to question #6.

If the answer to question #5 is no, then deny recommendation.

**Question #6** Does the move potentially conflict with the AZA Code of Ethics, or other AZA policies or practices?

If the answer to question #6 is yes, then consult with the WCMC chair in writing to request a WCMC review of the proposed move.

If the answer to question #6 is no, then approve the recommendation.

**Appendix I. Estimated minimum and maximum number of elephant in the wild in Asia, 2010<sup>12</sup>**

<b>Country</b>	<b>Minimum</b>	<b>Maximum</b>
Bangladesh	150	250
Bhutan	250	500
Cambodia	250	600
China	200	250
India	26,390	30,770
Indonesia	2,400	3,400
Lao PDR	500	1,000
Malaysia	2,100	3,100
Myanmar	4,000	5,000
Nepal	100	125
Sri Lanka	2,500	4,000
Thailand	2,500	3,200
Vietnam	70	150
<b>Total</b>	<b>41,410</b>	<b>52,345</b>

<sup>12</sup> Choudhury, A., Lahiri Choudhury, D.K., Desai, A., Duckworth, J.W., Easa, P.S., Johnsingh, A.J.T., Fernando, P., Hedges, S., Gunawardena, M., Kurt, F., Karanth, U., Lister, A., Menon, V., Riddle, H., Rübel, A. & Wikramanayake, E. 2008. *Elephas maximus*. In: IUCN 2010. IUCN Red List of Threatened Species. Version 2010.1. [www.iucnredlist.org](http://www.iucnredlist.org). Downloaded on **20 June 2010**.

**Appendix II. Summary of Elephant Population Estimates on the African Continent, IUCN 2007.**

Region	Country	Number of Elephants				Range Area (km <sup>2</sup> )
		Definite	Probable	Possible	Speculative	
Central Africa	Cameroon	179	726	4,965	9,517	118,571
	Central African Republic	109	1,689	1,036	500	73,453
	Chad	3,885	0	2,000	550	149,443
	Congo	402	16,947	4,024	729	135,918
	Democratic Republic of Congo	2,447	7,955	8,855	4,457	263,700
	Equatorial Guinea	0	0	700	630	15,008
	Gabon	1,523	23,457	27,911	17,746	218,985
	<b>Total</b>	<b>10,383</b>	<b>48,936</b>	<b>43,098</b>	<b>34,129</b>	<b>975,079</b>
Eastern Africa	Eritrea	96	0	8	0	5,293
	Ethiopia	634	0	920	206	38,365
	Kenya	23,353	1,316	4,946	2,021	107,113
	Rwanda	34	0	37	46	1,014
	Somalia	0	0	0	70	4,526
	Sudan	20	0	280	0	318,239
	Tanzania	108,816	27,937	29,350	900	390,366
	Uganda	2,337	1,985	1,937	300	15,148
	<b>Total</b>	<b>137,485</b>	<b>29,043</b>	<b>35,124</b>	<b>3,543</b>	<b>880,063</b>

**Appendix II (cont). Summary of Elephant Population Estimates on the African Continent, 2007.**

Region	Country	Number of Elephants				Range Area (km <sup>2</sup> )
		Definite	Probable	Possible	Speculative	
Southern Africa	Angola	818	801	851	60	406,946
	Botswana	133,829	20,829	20,829	0	100,265
	Malawi	185	323	632	1,587	7,538
	Mozambique	14,079	2,396	2,633	6,980	334,786
	Namibia	12,531	3,276	3,296	0	146,921
	South Africa	17,847	0	638	22	30,455
	Swaziland	31	0	0	0	50
	Zambia	16,562	5,948	5,908	813	201,247
	Zimbabwe	84,416	7,033	7,367	291	76,931
	<b>Total</b>	<b>297,718</b>	<b>23,186</b>	<b>24,734</b>	<b>9,753</b>	<b>1,305,140</b>
West Africa	Benin	1,223	0	0	0	13,673
	Burkina Faso	4,154	320	520	0	19,872
	Ghana	789	387	241	12	23,301
	Guinea	135	79	79	57	1,524
	Guinea Bissau	0	0	7	13	1,346
	Ivory Coast	188	152	119	506	33,985
	Liberia	0	0	0	1,676	15,977
	Mali	357	0	141	156	31,878
	Niger	85	0	17	0	2,683
	Nigeria	348	0	105	375	22,968
	Senegal	1	0	0	9	1,090
	Sierra Leone	0	0	80	135	1,804
	Togo	4	0	61	0	5,444
<b>Total</b>	<b>7,487</b>	<b>735</b>	<b>1,129</b>	<b>2,939</b>	<b>175,545</b>	
<b>Total Continental Estimates</b>		<b>472,269</b>	<b>82,704</b>	<b>84,334</b>	<b>50,364</b>	<b>3,335,827</b>

**Appendix III. AZA Elephant TAG/SSP Program Management Assessment Table, 2011.**

<b>Criteria</b>	<b>Asian Elephant</b>	<b>African Elephant</b>
Availability within AZA	<b>Low</b>	<b>Low</b>
Availability outside AZA	<b>Low</b>	<b>Low</b>
Extinction Risk w/out management (in zoos and aquariums)	<b>Endangered/Threatened</b>	<b>Endangered/Threatened</b>
Extinction Risk with management (in zoos and aquariums)	<b>Decreases</b>	<b>Decreases</b>
Demand within AZA	<b>High</b>	<b>High</b>
Institutional Commitment	<b>Moderate</b>	<b>Moderate</b>
Ease of Breeding	<b>Low-Moderate</b>	<b>Low-Moderate</b>
Extinction Risk (wild) IUCN designation	<b>Endangered/Threatened</b>	<b>Endangered/Threatened</b>
Acquisition cost (outside AZA)	<b>High</b>	<b>High</b>
Program operating costs	<b>High</b>	<b>High</b>
International program	<b>Yes</b>	<b>Yes</b>
Link to conservation of wild populations	<b>Direct</b>	<b>Direct</b>
N. American governmental conservation program	<b>No</b>	<b>No</b>
<b>Program designation</b>	<b>Yellow SSP</b>	<b>Yellow SSP</b>

**Appendix IV. AZA Elephant TAG/SSP Institutional Liaison Assignments, 2011.**

<b>John Davis</b> <a href="mailto:jdavis@riverbanks.org">jdavis@riverbanks.org</a> 803.978.1062	<b>Terri Roth</b> <a href="mailto:Terri.roth@cincinnati.org">Terri.roth@cincinnati.org</a> 513.569.8220	<b>Bruce Bohmke</b> <a href="mailto:Bruce.bohmke@zoo.org">Bruce.bohmke@zoo.org</a> 206.548.2417	<b>Dale Leeds</b> <a href="mailto:dleeds@denverzoo.org">dleeds@denverzoo.org</a> 303.376.4927	<b>Charlie Gray</b> <a href="mailto:cgray@lionsafari.com">cgray@lionsafari.com</a> 519.623.5732
Riverbanks Zoo	Cincinnati Zoo	Woodland Park Zoo	Denver Zoo	African Lion Safari
Toledo Zoo	Chaffee Zoo	Point Defiance Zoo	Buffalo Zoo	Calgary Zoo
Montgomery Zoo	Honolulu Zoo	Oregon Zoo	Buttonwood Park Zoo	Have Trunk Will Travel
Greenville Zoo	Six Flags Marine World	Cheyenne Mtn Zoo	Bronx Zoo	Albuquerque Zoo
Utah's Hogle Zoo		Phoenix Zoo	Audubon Zoo	Fort Worth Zoo
				Metro Toronto Zoo
				Granby Zoo
<b>Darryl Hoffman</b> <a href="mailto:dhoffman@houstonzoo.org">dhoffman@houstonzoo.org</a> 713.533.6615	<b>Stephen Eisele</b> <a href="mailto:stephen.eisele@disney.com">stephen.eisele@disney.com</a> 407.938.2090	<b>Guy Lichty</b> <a href="mailto:Guy.lichty@nczoo.org">Guy.lichty@nczoo.org</a> 336.879.7000 ext 7604	<b>Brandie Smith</b> <a href="mailto:smithbr@si.edu">smithbr@si.edu</a> 202.633.3246	<b>David Hagan</b> <a href="mailto:dhagan@indyzoo.com">dhagan@indyzoo.com</a> 317.630.2092
Houston Zoo	Disney's Animal Kingdom	North Carolina Zoo	Smithsonian National Zoo	Indianapolis Zoo
Topeka Zoo	Miami Metrozoo	Oakland Zoo	El Paso Zoo	Knoxville Zoo
Baton Rouge Zoo	Lowry Park Zoo	Zoo Atlanta	Dallas Zoo	Louisville Zoo
Reid Park Zoo	Roger Williams Park Zoo	Virginia Zoo	Little Rock Zoo	Brookfield Zoo
Rosamond Gifford Zoo	Jacksonville Zoo	Baltimore Zoo	Africam Safari Park	Caldwell Zoo
			San Antonio Zoo	Cameron Pk Zoo
				Nashville Zoo
<b>Harry Peachey</b> <a href="mailto:Harry.peachey@columbuszoo.org">Harry.peachey@columbuszoo.org</a> 614.724.3688	<b>Mike Quick</b> <a href="mailto:mquick@scz.org">mquick@scz.org</a> 316.266.8237	<b>Randy Rieches</b> <a href="mailto:rrieches@sandiegozoo.org">rrieches@sandiegozoo.org</a> 760.738.5015	<b>Amos Morris</b> <a href="mailto:amorris@meskerparkzoo.com">amorris@meskerparkzoo.com</a> 812.435.6143 ext 401	
Columbus Zoo	Sedgwick Co. Zoo	San Diego WAP	Pittsburgh Zoo	
Busch Gardens/Tampa	Kansas City Zoo	San Diego Zoo	Tulsa Zoo	
Seneca Park Zoo	Milwaukee Co Zoo	Santa Barbara Zoo	Oklahoma City Zoo	
Cleveland Metroparks	Lee Richardson Zoo	Los Angeles Zoo	Dickerson Park Zoo	
Niabi Zoo	Memphis Zoo	Wildlife Safari	Birmingham Zoo	
	Omaha's Henry Doorly Zoo			

**Appendix V. AZA Elephant TAG/SSP Advisory Groups Advisors, Subcommittees and Steering Committee Liaisons, 2010.**

<b>Group</b>	<b>Advisor(s)</b>	<b>Subcommittee</b>	<b>SC Liaison</b>
Training, Behavior and Enrichment	Jill Mellen, Disney's Animal Kingdom <a href="mailto:jill.mellen@disney.com">jill.mellen@disney.com</a>  Bruce Upchurch, Woodland Park Zoo <a href="mailto:bruce.upchurch@zoo.org">bruce.upchurch@zoo.org</a>	Charlie Gray, African Lion Safari Darryl Hoffman, Houston Zoo Gary Johnson, Have Trunk Will Travel	Chuck Doyle
Education	Kathy Lehnhardt, Disney's Animal Kingdom <a href="mailto:kathy.lehnhardt@disney.com">kathy.lehnhardt@disney.com</a>		Stephen Eisele
Field Conservation	Peter Leimgruber, Smithsonian National Zoo <a href="mailto:leimgruberp@si.edu">leimgruberp@si.edu</a>  Debbie Olson, International Elephant Foundation <a href="mailto:dolson@elephantconservation.org">dolson@elephantconservation.org</a>	Wahdi Azmi, Fauna & Flora International Ravi Corea, Sri Lanka Wildlife Conservation Society Ian Craig, Northern Rangeland Trust Benoit Goossens, Borneo Peter Guss, South African National Parks, Kruger National Park Iain Douglas Hamilton, Save the Elephants Jayantha Jayewardene, Biodiversity & Elephant Conservation Trust Mike Loomis, North Carolina Zoo Michele Miller, Palm Beach Zoo Arun Zachariah, Department of Forest and Wildlife, Kerala, India	Harry Peachey
Fund Raising	Vacant	Vacant	Vacant
Nutrition	Jason Williams, Mazuri Exotic Animal Feeds <a href="mailto:jjwilliams@landolakes.com">jjwilliams@landolakes.com</a>	Eduardo Valdez, Disney's Animal Kingdom Troy Tollefson, Busch Gardens-Tampa	Bruce Bohmke
Public Relations	Steve Feldman, AZA <a href="mailto:sfeldman@aza.org">sfeldman@aza.org</a>		Martha Fischer
Reproduction	Janine Brown, NZP CRC <a href="mailto:brownjan@si.edu">brownjan@si.edu</a>  Dennis Schmitt, Missouri State Univ/Feld Entertainment <a href="mailto:dennisschmitt@missouristate.edu">dennisschmitt@missouristate.edu</a>	Richard Fayer-Hosken, University of Georgia-Athens Thomas Hildebrandt, IZW Naida Loskutoff, Omaha's Henry Doorly Zoo Terri Roth, Cincinnati Zoo Anne Savage, Disney's Animal Kingdom Barb Wolfe, The Wilds Jeff Wyatt, Seneca Park Zoo Wendy Kiso, Doctoral Candidate, Smithsonian National Zoo	Terri Roth

Group	Advisor(s)	Subcommittee	SC Liaison
Research	Janine Brown, NZP CRC <a href="mailto:brownjan@si.edu">brownjan@si.edu</a>	Laura Graham Nancy Hawkes, Woodland Park Zoo Laura Richman, Johns Hopkins School of Medicine Terri Roth, Cincinnati Zoo Michele Miller, Palm Beach Zoo	Terri Roth
Small Population Management	Bob Wiese, Zoological Society of San Diego <a href="mailto:bwiese@sandiegozoo.org">bwiese@sandiegozoo.org</a>  Sarah Long, AZA Population Management Center <a href="mailto:slong@lpzoo.org">slong@lpzoo.org</a>	Lisa Faust, AZA Population Management Center	Brandie Smith
Veterinary and Pathology	Michele Miller, Palm Beach Zoo <a href="mailto:mmiller@palmbeachzoo.org">mmiller@palmbeachzoo.org</a>  Scott Terrell, Disney's Animal Kingdom <a href="mailto:Scott.p.terrell@disney.com">Scott.p.terrell@disney.com</a>	Genny Dumonceaux, Busch Gardens Rae Gandolf, The Wilds Thomas Hildebrandt, IZW Ramiro Isaza, University of Florida College of Veterinary Medicine Scott Larsen, University of California-Davis College of Veterinary Medicine Joel Maslow Susan Mikota, Elephant Care International Don Neiffer, Disney's Animal Kingdom Jim Oosterhuis, SDWAP Janet Payeur, USDA, Ames, Iowa Laura Richman, Johns Hopkins School of Medicine Dennis Schmitt, Missouri State University/Feld Entertainment Dominic Travis, University of Minnesota College of Veterinary Medicine	David Hagan
TAG/SSP Advisor	Mike Keele, Oregon Zoo <a href="mailto:mike.keele@oregonzoo.org">mike.keele@oregonzoo.org</a>		

## Appendix VI. AZA Elephant TAG/SSP Advisor Job Descriptions, 2010

---

### **Behavior, Enrichment and Training**

The Behavior, Enrichment and Training Advisors will serve as a resource for the AZA Elephant TAG/SSP and member facilities and will assist members on the issues related to training, behavior, and enrichment as follows:

1. Assist, when needed, in the development of training protocols for AZA facilities.
2. Explain the continuum of the principles and techniques of elephant management.
3. Evaluate individual elephants and make recommendations regarding appropriate training protocols/strategies.
4. Evaluate training programs and their compliance with AZA Standards for Elephant Management and Care.
5. Advise facilities with animals that have behavioral issues.
6. Identify environmental conditions that promote behaviorally healthy animals.
7. Develop guidelines for reducing aggression towards herd mates and humans.
8. Develop guidelines for reducing various stereotypic behaviors.

### **Education:**

The Education Advisors will serve as a resource for the AZA Elephant TAG/SSP and member facilities and will assist members on the issues related to education and maximize the educational potential of the zoo elephant populations as follows:

1. Assist the TAG in developing key messages and recommending that they be presented at every exhibiting facility.
2. Develop samples of signs, manuals and curricula, where appropriate, translate these products into the language(s) and learning styles of range countries and make them available in the form of their traditional learning materials.
3. Manage the TAG website.
4. Assist the TAG in developing educational materials that might include a detailed range map of the distribution of all wild populations, a package of basic natural history information, accounts of status in the wild and in zoos, and other pertinent information that could easily be incorporated into signage, teacher manuals, "partners in conservation" programs, curricula for local schools and reading lists.
5. Gather information on the cultural, legal and educational values and attitudes of the citizens of range countries as they relate to elephant conservation.

### **Field Conservation:**

The Field Conservation Advisors will assist the AZA Elephant TAG/SSP of relevant conservation/research initiatives for Asian and African elephants as follows:

1. Maintain a listing of TAG/SSP institutions' current funding support of *in situ* elephant conservation projects.
2. Assist in developing and prioritizing broad *in situ* conservation funding objectives by providing advice, feedback, and expertise on conservation priorities and strategic goals related to conservation.
3. Facilitate the linkage of TAG/SSP individuals and institutions with the IUCN Specialist groups as well as other range country or national elephant conservation plans, initiatives, projects and principles.
4. Review field conservation proposals and make recommendations regarding the support of such proposals.

5. Identify and confirm Field Conservation Subcommittee members.
6. Encourage greater funding and commitment of TAG/SSP institutions to *in situ* conservation activities.

**Fund Raising:**

The Fund-Raising Advisors will serve as a resource for the AZA Elephant TAG/SSP as follows:

1. Assemble lists of the resource needs of TAG/SSP-identified *in situ* and *ex situ* projects, and then attract funding for elephant conservation and research in general, thereby freeing sponsors from the need to investigate specific taxa and projects.
2. Identify, review and prioritize the projects to which contributions will be directed.
3. Identify and establish contacts with non-AZA organizations that are funding elephant research and conservation projects.

**Nutrition:**

The Nutrition Advisors will serve as a resource for the AZA Elephant TAG/SSP as follows:

1. Provide an annual summary of activities for AZA Elephant TAG/SSP.
2. Conduct comprehensive literature searches and updating bibliography for elephants.
3. Ensure that the nutrition section and all written diet husbandry, feeding guidelines and updates are submitted to the Nutrition Advisor Group (NAG) vice-chair for review in a timely manner.
4. Assist with review of nutrition-related research proposals to the AZA Elephant TAG/SSP.
5. Facilitate review of any NAG Fact Sheets pertaining to elephants.

**Public Relations:**

The Public Relations Advisors will advise members on the issues related to public perception and media coverage regarding elephants as follows:

1. Maintain updated lists and materials regarding elephant related issues and coverage.
2. Identify existing public attitudes and perceptions towards elephants *in situ* and *ex situ*.
3. Distribute national and global media releases concerning elephants to committee and institutional representatives.

**Reproduction:**

An important aspect of the future of zoo elephant management is the ability to breed the animals in the AZA population. The Reproduction Advisors will serve and advise the Elephant TAG/SSP as follows:

1. Participate in the reproductive evaluation of animals in the zoo population.
2. Consult with institutional representatives regarding elephant reproductive physiology.
3. Advise the Steering Committee on proposed TAG/SSP sponsored projects related to reproductive physiology.

**Research:**

The Research Advisors will assist members on the direction of research initiatives for Asian and African elephants as follows:

1. Assist the TAG/SSP in developing research goals for *in situ* research action and maintain an international inventory of *in situ* research projects.

2. Assist the TAG/SSP in developing research goals for *ex situ* research action and maintain an international inventory of *ex situ* research projects.
3. Facilitate the development of research projects by TAG/SSP members.
4. Review all research proposals submitted to the TAG/SSP for support and make recommendations to the TAG/SSP Steering Committee.
5. Distribute relevant announcements and issues from outside scientific sources that are relevant to elephant research to committee members.

**Small Population Management:**

The Small Population Management Advisors should assist development of a sound genetic and demographic program for the AZA population as follows:

1. Consult with Asian and African elephant studbook keepers, steering committee and institutional representatives, etc. when conducting analyses of the population.
2. Review SSP Breeding and Transfer recommendations.
3. Participate in master planning sessions.
4. Evaluate recommended pairings through computer analysis.
5. Assist the management committee in evaluating progress towards genetic and demographic goals.

**Veterinary & Pathology:**

Recognizing the unique challenges related to elephant medicine, the Veterinary Advisor and the Pathology Advisor assist members as follows:

1. Identify the major medical problems for the taxon and pursue methods of diagnostic evaluation and treatment.
2. Update quarantine, transport, preventive medicine, and necropsy protocols to best suit the individual taxon.
3. Provide regular morbidity and mortality reports; significant diagnostic tests and their availability, accuracy and cost; updates on vaccine recommendations and other significant medical activities.
4. Identify scientific specialists in the areas affecting the health and well being of the species; assist in coordinating data collection efforts between other AZA Science Advisors, scientific specialists, collection managers and veterinarians.
5. Facilitate the development of centralized sera and tissue banks, if needed.
6. Act as a reviewer for proposed research protocols and methods that pertain to the species/taxa. The SSP/TAG Steering Committee must be advised on the value and potential health and welfare issues posed by such proposals.
7. Act as reviewer for the medical portion of any surveys that are being sent out through the SSP/TAG or that are received by the SSP/TAG.
8. Serve as a resource for consultation on individual medical cases and provide assistance in networking specific expertise/resources required for implementation of specific plans.

**Appendix VII. AZA Elephant TAG/SSP Program Updates from 2007 RCP.**

<b>Program</b>	<b>Previous Program Recommendation 2007</b>	<b>Program Designation 2010</b>	<b>Program Leader Change?</b>	<b>New Program Leader?</b>
<b>Elephant TAG</b>	TAG	TAG	Yes	Chair, Martha Fischer Saint Louis Zoo  Vice-Chair, Charlie Gray African Lion Safari  Vice-Chair, David Hagan Indianapolis Zoo
<b>Asian Elephant SSP</b>	SSP	<b>Yellow</b> SSP	Yes	Coordinator, Martha Fischer Saint Louis Zoo  Vice-Coordinator, Charlie Gray African Lion Safari
<b>Asian Elephant NA Regional Studbook</b>	Studbook	Studbook	No	No Changes
<b>African Elephant SSP</b>	SSP	<b>Yellow</b> SSP	Yes	Coordinator, Martha Fischer Saint Louis Zoo  Vice-Coordinator, David Hagan Indianapolis Zoo
<b>African Elephant NA Regional Studbook</b>	Studbook	Studbook	No	No Changes

**Appendix VIII. AZA Elephant TAG/SSP Program Status Table, 2011.**

Program	Date Program Initiated	Current Program Leader	Date Leadership Assumed	Date of Last Studbook Update	Date of Last SSP Publication	Date of Last RCP Publication
Elephant TAG	1985	Chair, Martha Fischer, Saint Louis Zoo <a href="mailto:fischer@stlzoo.org">fischer@stlzoo.org</a> Vice-Chair, Charlie Gray, African Lion Safari <a href="mailto:cgray@lionsafari.com">cgray@lionsafari.com</a> Vice-Chair, David Hagan, Indianapolis Zoo <a href="mailto:dhagan@indyzoo.com">dhagan@indyzoo.com</a>	2010	N/A	N/A	2011
Asian Elephant NA Regional Studbook	1985	Studbook Keeper, Mike Keele, Oregon Zoo <a href="mailto:mike.keele@oregonzoo.org">mike.keele@oregonzoo.org</a>	1985	2010	N/A	N/A
Asian Elephant SSP	1985	Coordinator, Martha Fischer, Saint Louis Zoo <a href="mailto:fischer@stlzoo.org">fischer@stlzoo.org</a> Vice-Coordinator, Charlie Gray, African Lion Safari <a href="mailto:cgray@lionsafari.com">cgray@lionsafari.com</a>	2010	N/A	2011	N/A
African Elephant NA Regional Studbook	1992	Studbook Keeper, Debbie Olson, Indianapolis Zoo & International Elephant Foundation <a href="mailto:dolson@elephantconservation.org">dolson@elephantconservation.org</a>	1996	2011	N/A	N/A
African Elephant SSP	1985	Coordinator, Martha Fischer, Saint Louis Zoo <a href="mailto:fischer@stlzoo.org">fischer@stlzoo.org</a> Vice-Coordinator, David Hagan, Indianapolis Zoo <a href="mailto:dhagan@indyzoo.com">dhagan@indyzoo.com</a>	2010	N/A	2011	N/A

**Appendix IX. AZA Elephant TAG/SSP Leadership, Advisors and Program Leaders Contact Information, 2011.**

PROGRAM	INDIVIDUAL	CONTACT INFORMATION
<b>Officers</b>		
TAG Chair and SSP Coordinator African and Asian Elephants	Martha Fischer, Saint Louis Zoo	<a href="mailto:fischer@stlzoo.org">fischer@stlzoo.org</a> 314-646-4610
TAG Vice-Chair and SSP Vice-Coordinator Asian Elephants	Charlie Gray, African Lion Safari	<a href="mailto:cgray@lionsafari.com">cgray@lionsafari.com</a> 519.623.5732
TAG Vice-Chair and SSP Vice-Coordinator African Elephants	David Hagan, Indianapolis Zoo	<a href="mailto:dhagan@indyzoo.com">dhagan@indyzoo.com</a> 317.630.2092
Secretary	Mike Quick, Sedgwick County Zoo	<a href="mailto:mquick@scz.org">mquick@scz.org</a> 316.266.8237
<b>Steering Committee</b>		
	Bruce Bohmke, Woodland Park Zoo	<a href="mailto:bruce.bohmke@zoo.org">bruce.bohmke@zoo.org</a> 206.548.2500 ext 1123
	John Davis, Riverbanks Zoo and Garden	<a href="mailto:jdavis@riverbanks.org">jdavis@riverbanks.org</a> 803.978.1062
	Stephen Eisele, Disney's Animal Kingdom	<a href="mailto:stephen.eisele@disney.com">stephen.eisele@disney.com</a> 407.938.2090
	Darryl Hoffman, Houston Zoo, Inc.	<a href="mailto:dhoffman@houstonzoo.org">dhoffman@houstonzoo.org</a> 713.533.6615
	Dale Leeds, Denver Zoo	<a href="mailto:dleeds@denverzoo.org">dleeds@denverzoo.org</a> 303.376.4927
	Guy Lichty, North Carolina Zoological Park	<a href="mailto:guy.lichty@nczoo.org">guy.lichty@nczoo.org</a> 336.879.7000 ext 7604
	Amos Morris, Mesker Park Zoo	<a href="mailto:amorris@meskerparkzoo.com">amorris@meskerparkzoo.com</a> 812.435.6143 ext 401
	Harry Peachey, Columbus Zoo and Aquarium	<a href="mailto:harry.peachey@columbuszoo.org">harry.peachey@columbuszoo.org</a> 614.724.3688
	Randy Rieches, Zoological Society of San Diego	<a href="mailto:rrieches@sandiegozoo.org">rrieches@sandiegozoo.org</a> 760.738.5015
	Terri Roth, Cincinnati Zoo & Botanical Garden	<a href="mailto:terri.roth@cincinnati.org">terri.roth@cincinnati.org</a> 513.569.8220

PROGRAM	INDIVIDUAL	CONTACT INFORMATION
<b>Steering Committee (Cont)</b>		
	Brandie Smith, Smithsonian National Zoo	<a href="mailto:smithbr@si.edu">smithbr@si.edu</a> 202.633.3246
<b>Studbook Keepers and SSP Coordinators</b>		
Asian Elephant NA Regional Studbook Keeper	Mike Keele, Oregon Zoo	<a href="mailto:mike.keele@oregonzoo.org">mike.keele@oregonzoo.org</a> 503-220-2445
African Elephant NA Regional Studbook Keeper	Debbie Olson, Indianapolis Zoo & International Elephant Foundation	<a href="mailto:dolson@elephantconservation.org">dolson@elephantconservation.org</a> 817.237.9034
Asian Elephant SSP Coordinator	Martha Fischer, Saint Louis Zoo	<a href="mailto:fischer@stlzoo.org">fischer@stlzoo.org</a> 314-646-4610
Asian Elephant SSP Vice-Coordinator	Charlie Gray, African Lion Safari	<a href="mailto:cgray@lionsafari.com">cgray@lionsafari.com</a> 519.623.5732
African Elephant SSP Coordinator	Martha Fischer, Saint Louis Zoo	<a href="mailto:fischer@stlzoo.org">fischer@stlzoo.org</a> 314-646-4610
African Elephant SSP Vice-Coordinator	David Hagan, Indianapolis Zoo	<a href="mailto:dhagan@indyzoo.com">dhagan@indyzoo.com</a> 317.630.2092
<b>Advisors</b>		
Behavior, Enrichment & Training Advisor	Jill Mellen, Disney's Animal Kingdom  Bruce Upchurch, Woodland Park Zoo	<a href="mailto:jill.mellen@disney.com">jill.mellen@disney.com</a> 407.939.6221 <a href="mailto:bruce.upchurch@zoo.org">bruce.upchurch@zoo.org</a> 206.548.2500 ext 1700
Education Advisor	Kathy Lehnhardt, Disney's Animal Kingdom	<a href="mailto:kathy.lehnhardt@disney.com">kathy.lehnhardt@disney.com</a> 407.939.7340
Field Conservation Advisor	Peter Leimgruber, Smithsonian National Zoo  Debbie Olson, International Elephant Foundation	<a href="mailto:leimgruberP@si.edu">leimgruberP@si.edu</a> 540.635.6589 <a href="mailto:dolson@elephantconservation.org">dolson@elephantconservation.org</a> 817.237.9034
Fund Raising Advisor	Vacant	Vacant
Nutrition Advisor	Jason Williams, Indianapolis Zoo	<a href="mailto:jwilliams@indyzoo.com">jwilliams@indyzoo.com</a> 317.630.2053

PROGRAM	INDIVIDUAL	CONTACT INFORMATION
<b>Advisors (Cont)</b>		
Pathology Advisor	Scott Terrell, Disney's Animal Kingdom	<a href="mailto:scott.p.terrell@disney.com">scott.p.terrell@disney.com</a> 407.938.2746
Public Relations Advisor	Steve Feldman, AZA	<a href="mailto:sfeldman@aza.org">sfeldman@aza.org</a> 301.562.0777 ext 252
Reproduction Advisor	Janine Brown, Smithsonian National Zoo  Dennis Schmitt, Missouri State University/Feld Entertainment	<a href="mailto:brownjan@si.edu">brownjan@si.edu</a> 540.635.6586 <a href="mailto:dennisschmitt@missouristate.edu">dennisschmitt@missouristate.edu</a> 417.836.5091
Research Advisor	Janine Brown, Smithsonian National Zoo	<a href="mailto:brownjan@si.edu">brownjan@si.edu</a> 540.635.6586
Small Population Management Advisors	Bob Wiese, Zoological Society of San Diego  Sarah Long, AZA Population Management Center	<a href="mailto:bwiese@sandiegozoo.org">bwiese@sandiegozoo.org</a> 619.744.3315 <a href="mailto:slong@lpzoo.org">slong@lpzoo.org</a> 312.742.3993
Veterinary Advisor	Michele Miller, Palm Beach Zoo	<a href="mailto:mmiller@palmbeachzoo.org">mmiller@palmbeachzoo.org</a> 561.833.7130 ext 224
TAG/SSP Advisor	Mike Keele, Oregon Zoo	<a href="mailto:mike.keele@oregonzoo.org">mike.keele@oregonzoo.org</a> 503-220-2445