

# **Saint Louis Zoo Elephant Management Policy**

## **I. Introduction**

Wild elephant populations continue to decline in both Africa and Asia. During the 1970's, the African elephant population has suffered a precipitous decline from an estimated 1.3 million animals to perhaps 500,000 animals. This decline is due primarily to rampant poaching for the ivory trade. While the rate of decline for Asian elephants in this same decade is lower, the wild population only numbers 30,000 to 50,000 animals. Habitat destruction has been the primary cause of the decline in Asia, although poaching of males for their ivory has decimated long-term viability in some populations. If these trends continue, both species could become extinct by the middle of the next century.

Zoological parks have an obligation as stewards of a part of the world's natural heritage to manage their elephant populations in a humane and scientific manner to ensure both species' survival for future generations. Educational programs in zoos serve to promote conservation efforts on behalf of elephants and their habitats. Captive management programs are becoming increasingly important to the survival of elephants. These programs can constitute secure reservoirs of animals and their gene pools to re-establish wild populations that have become extinct; they can also reinforce remnant populations debilitated by genetic and demographic problems. Zoos also have a unique opportunity to contribute to the body of scientific knowledge about elephants by conducting research on general physiology, nutrition, behavior and reproduction of their captive collection.

Because of their popularity, elephants have been maintained in captivity for as many as 3000 years in menageries, circuses, zoos, and as semi-domestic beasts of burden. Presently there are approximately 17,000 Asian elephants involved in domestic capacities throughout Asia. Despite this long captive history, there has been little success in the captive propagation of either species outside of their countries of origin until recently. Traditionally, it has always been easier to recruit replacements from the wild populations. Moreover, the inherent danger of working with unpredictable bull elephants has further discouraged attempts at captive propagation. The current and alarming population trends for both species have necessitated a re-evaluation of this shortsighted approach to captive management.

Zoos have responded to this re-evaluation process by formulating organized captive propagation programs for elephants. The American Zoo and Aquarium Association has organized a studbook for both the Asian and the African elephant and a combined Species Survival Program/Taxon Advisory Group (SSP/TAG) for elephants. As of 31 December 2001 there are 153 Asian elephants (26 males/127 females) in 44 participating institutions; and as of April 2002 there are 122 African elephants (15 males/107 females) held at 47 participating institutions. To facilitate the breeding and husbandry of both species, research programs under the aegis of the AZA are underway in reproductive physiology, nutrition, behavior and genetics.

The purpose of this Elephant Management Policy is to outline for our employees, our managers and our visitors the Saint Louis Zoo's mission as it relates to the management of elephants in captivity. The guidelines listed in this policy are intended to maximize the safety of our animals and the personnel responsible for their care. This policy will be

subjected to annual review and revision to ensure that it reflects the current philosophy, attitudes, and technology relevant to elephant management.

## **II. Objectives**

The Saint Louis Zoo has a long-standing commitment to the conservation and display of elephants. This commitment involves a multi-disciplinary approach to the captive management of these species; current developments in such diverse fields as animal science, wildlife biology, mechanical engineering, veterinary medicine and theriogenology are all applied to the elephant program with an eye towards contributing in a meaningful way to global conservation efforts on behalf of elephants. In order to meet this commitment, the Saint Louis Zoo has formulated an Elephant Management Policy. This policy has been shaped by the following objectives:

- To maximize the safety of our employees, our visitors and our elephants.
- To promote humane and scientific management of our elephant collection.
- To manage our elephants through operant conditioning using positive reinforcement in order to meet their social and husbandry needs.
- To cooperate with the goals of the Elephant SSP/TAG within the American Zoo and Aquarium Association.
- To contribute to the establishment of a captive breeding nucleus of elephants which can serve as a genetic reservoir from which potential reintroduction programs can spring if needed.
- To display elephants in aesthetic exhibits supported by interpretive graphics and educational programs that draw upon knowledge of elephant natural history to both enchant and educate the visitors.
- To contribute to the body of scientific knowledge about elephants by conducting research on general physiology, nutrition, behavior, reproduction and captive management techniques.

## **III. Personnel**

In conjunction with the required general St. Louis Zoo new employee training courses, all elephant keepers will receive additional formalized elephant handling/management training from four sources:

### **A. Elephant Management Policy**

The St. Louis Zoo Elephant Management Policy is mandatory reading for all new keepers in the River's Edge. The purpose of providing this policy as mandatory reading is to communicate and clarify for the new keeper the Saint Louis Zoo's mission, objectives and policies related to the captive conservation of elephants. The goal is for every keeper to share the same understanding of and commitment to what the Saint Louis Zoo is trying to accomplish with its elephant program. The Elephant Management Policy is reviewed and revised, if necessary, on an annual basis. The keeper staff participates in these annual reviews and revisions.

## B. The River's Edge Elephant Management Manual

The River's Edge Elephant Management Manual includes AZA's Standards for Elephant Management and Care, elephant behavior profiles, elephant care protocols, elephant facility/equipment maintenance/care instructions and safety/emergency procedures as well as other important documents for the River's Edge personnel. The River's Edge Management Team (Curator of Mammals/Ungulates & Zoological Manager/River's Edge) and the River's Edge keeper staff have jointly developed this manual. It is considered mandatory reading for all persons working in the River's Edge. The manual is reviewed annually and revised as needed.

## C. Staff Training

The River's Edge Management Team and the experienced elephant keepers on staff supervise training of new keepers. For purposes of this document, experienced elephant keepers are defined as those River's Edge keepers who have successfully completed the elephant keeper training program. During their training period, new keepers are present as observers while the elephants are being worked. At this time they are instructed to study the established management routines, the list of elephant training terminology and to read the suggested literature which are all provided in the River's Edge Elephant Management Manual. New keepers must demonstrate, to the satisfaction of the River's Edge Management Team, a responsible attitude towards animal management in order to qualify to begin working with elephants. Keepers-in-training will then begin working with the elephants under the direct supervision of the Zoological Manager or another experienced elephant keeper at all times.

In line with St. Louis Zoo policy, all new River's Edge personnel are subject to a 90-day performance review by the River's Edge Management Team. Thereafter all River's Edge personnel will receive an annual performance review on the anniversary of their initial employment by the Saint Louis Zoo. Employees who are unsuitable for working with elephants will be retrained or removed from the elephant area at the discretion of the Curator of Mammals/Ungulates and General Curator. If removed from the elephant area an employee may be offered alternative employment within the zoo at the sole discretion of the Director.

## D. Outside Sources

As a keeper's training progresses, outside sources of training may be utilized to offer a broader spectrum of information and experiences. Consulting experts may be hired to visit the zoo and train specific techniques on-site. Keepers may be supported to attend conferences or training courses specifically focused on the keeper profession, elephant care and management, operant conditioning/training or enrichment.

## IV. Elephant Management Philosophy

Elephants can be unpredictable and potentially dangerous animals. The Saint Louis Zoo is committed to maintaining the highest level of safety for the elephant keepers. Routine facility maintenance/cleaning and routine elephant care will be performed with the benefit of a protective barrier in between the keepers and the elephants. The elephant

keepers will not share the same unrestricted space with the elephants on a routine basis.

Under controlled circumstances and after careful consideration and approval by the River's Edge Management Team and the General Curator, certain procedures may be carefully planned and performed without a barrier between the keepers and a tethered elephant(s) if specific objectives are deemed best and safely achieved in this manner.

### Safety & Emergency Protocols

The safety of the visitors, the employees and the animals is the primary responsibility of all Zoo employees. Unsafe conditions and practices must be avoided. If unsafe conditions or practices occur, they must be reported immediately for resolution. The Zoo's goal is to create a safe and hazard-free work environment for the mutual benefit of our employees, our animals and our visitors.

Each new employee to the zoo is provided with the St. Louis Zoo Emergency and Safety Procedures handbook and the St. Louis Zoo Animal Escape Emergency Procedures protocol. These two documents provide the guidelines for safety and emergency response zoo-wide and serve as the basis for safety within our elephant management program.

The Saint Louis Zoo is committed to maintaining the highest level of safety for the elephant keepers. Routine facility maintenance/cleaning and routine elephant care will be performed with the benefit of a protective barrier in between the keepers and the elephants. The elephant keepers will not share the same unrestricted space with the elephants on a regular basis.

Every effort will be made to maintain and care for the elephants without needing to share space with them. However, it may be necessary and/or in the best interest of the elephant, to carefully plan and perform certain procedures without a barrier between the keepers and a tethered elephant. This will only occur after extensive consideration and discussion with the River's Edge Management Team and with approval from the General Curator.

No elephant keeper may work an elephant in a close-contact session (i.e. at an open work panel, pass-through gate, door gap, partially-opened door or ERD, etc.) unless another experienced elephant keeper is present as a back-up. Failure to adhere to this "two-person rule" will result in disciplinary action.

In case of an emergency the Saint Louis Zoo reserves the right to use any and all means at its disposal to save human and/or animal life as dictated by the circumstances.

In an emergency situation, it may be necessary to share space with an elephant in order to resolve the emergency. During an emergency, the decision to share space with an elephant will only be done after careful consideration and approval by the River's Edge Management Team and the General Curator (or Curator-in-Charge that day).

Pepper spray and hot shots are provided in several locations throughout the EMF for use only in the case of extreme emergency. Keepers are also allowed to carry small

canisters of pepper spray if they so choose. The use of these emergency safety devices at any time other than an emergency will result in disciplinary action

## Husbandry

The following guidelines will be adhered to within the Saint Louis Zoo elephant management program:

- The Saint Louis Zoo will meet or exceed all USDA regulations governing humane animal management.
- The Saint Louis Zoo will meet or exceed the AZA Standards for Elephant Management and Care.
- A balanced diet based on current knowledge of elephant nutritional requirements will be provided daily. Browse will be made available on a regularly scheduled basis to facilitate proper tooth development and provide enrichment.
- Water will be available to the elephants at all times.
- Qualified veterinary care will be given to the elephants as needed to maintain their health.
- Elephants will be maintained in social groups unless such an arrangement compromises the well-being of a particular individual or its herdmates. Every effort will be made to integrate such individuals into a social group at such time as there is no longer a substantial risk in doing so.

- Because foot, skin and tusk care, as well as many veterinary procedures beneficial to elephants, require close physical contact with the animals, all elephants will be maintained in a tractable condition to facilitate optimal care. This tractability will be achieved through the use of behavior modification techniques as described in Section VII.

- No elephant keeper may work an elephant in a close-contact session (i.e. at an open work panel, pass-through gate, door gap or partially-opened door, etc.) unless another experienced elephant keeper is present as a back-up.

## VII. Behavior modification

### A. Purpose

Behavior modification is employed in elephant management to increase the amount of control the keeper can exercise over the elephants for the elephants' direct benefit. Elephants are large, intelligent and potentially dangerous animals. They require frequent special care for their feet, skin and tusks to maintain them properly in captivity. In addition, it is desirable to be able to perform routine veterinary procedures (blood collection, physicals, etc.) without resorting to frequent tranquilizations. Public appreciation of elephants and the conservation message that they represent can also be enhanced through the use of demonstrations and supervised contact sessions with the

animals. For these reasons the Saint Louis Zoo maintains its elephants in a tractable condition through the use of behavior modification techniques.

#### B. Positive Relationship

The current elephant facility was designed and constructed to allow us to manage the elephants with the benefit of a protective barrier. The elephant keepers must establish a positive relationship with the elephants in their care to create a safe and cooperative environment for both the elephants and the keepers. In establishing this relationship keepers use physical, mechanical and psychological controls to maintain elephants in a tractable condition. Through operant conditioning behaviors are shaped to facilitate proper management of elephants.

The relationship between elephants and their keepers should be based on positive interactions between the two parties. Rewards of praise, contact and food are given frequently to cement the relationship between keepers and elephant. Inappropriate behaviors can often be effectively addressed by giving them no reinforcement or by using a "time-out" to reduce their frequency.

In case of an emergency the Saint Louis Zoo reserves the right to use any and all means at its disposal to save human and/or animal life as dictated by the circumstances.

### VIII. Breeding program

The Saint Louis Zoo is committed to making a positive contribution to the captive propagation of Asian and African elephants under the guidance of the AZA Elephant SSP/TAG. The zoo's contribution consists of the following:

- Participation in reproductive research as time and funding permit;
- Cooperation with the recommendations of the AZA Elephant SSP/TAG regarding animal translocations and breeding;
- Operation of a modern elephant breeding facility capable of safely and humanely handling elephants.

### IX. Research

The Saint Louis Zoo is committed to contributing to the body of scientific knowledge about elephants through humane research. Research performed at the Saint Louis Zoo will be designed to create some benefit to the elephants through the application of its results to the conservation, propagation, and captive management of the species.

A formal research proposal will be written and will be subject to review of its content, risks and potential benefits to the elephants. This review process will be undertaken by the zoo's Institutional Animal Care and Use Committee (IACUC). The results of each project will be organized for publication and will be shared freely with all interested parties for the benefit of elephant conservation.

## **Enrichment**

Behavioral enrichment is essential to the health of captive animals, including elephants. Enrichment provides them with opportunities to increase their activity, stimulate their brains and use many of their unique natural behaviors. Enrichment is a high priority in the St. Louis Zoo elephant management program and the elephants receive enrichment on a regular basis.

### ***Demonstrations & Keeper Chats***

Demonstrations and keeper chats using elephants can be powerful vehicles for educating people about elephants and their plight. These sessions can also be of direct benefit to the elephants involved by providing them with much-needed exercise, by providing psychological stimulation to alleviate boredom and by reinforcing the mutual bond between elephants and their keepers.

Elephants at the Saint Louis Zoo will not be asked to perform any potentially harmful behaviors that could result in direct injury to the elephants or their keepers.

## **XII. Future considerations**

1. The Saint Louis Zoo will continue to develop and improve current facilities and management practices for its elephants to ensure humane and optimal care for these animals.

2. The Saint Louis Zoo is committed to maintaining a modern elephant management facility that will make possible the use of modern management techniques for elephants into the future.

3. The Saint Louis Zoo will review its Elephant Management Policy annually to ensure that it reflects the most current scientific knowledge, management and training practices and attitudes relevant to the captive conservation of elephants.

4. The Saint Louis Zoo is committed to the continuing education and professional development of its elephant management team through expanded library resources, conference travel, participation in AZA's Principles of Elephant Management course and on-the-job training related to elephant care.

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