

## **Honolulu Zoo Elephant Management Protocol**

The Honolulu Zoo advocates the use of free contact management only with elephants that are being used for public demonstrations. We use a free contact management system to facilitate our elephant demonstration and encounter programs. Protected contact management will be used for males and intractable females. All elephants will be trained so that they can be managed in a protected contact system. This will ensure that we will always be able to provide them with proper health care.

### **I. Honolulu Zoo Elephant Management Committee**

The Honolulu Zoo has an Elephant Management Committee (EMC) made up of the Zoo Director, Assistant Director, General Curator, Zoo Veterinarian, Animal Specialist, Elephant Keeper 2 (Elephant manager), and Elephant keepers. This committee is responsible to develop and maintain the Honolulu Zoo Elephant Management Protocol and to review our elephant management program semiannually to ensure that our elephants are being properly cared for and our programs are meeting targeted objectives.

Communication will be enhanced by having regularly scheduled meetings. The EMC will meet twice a year; the animal specialist will meet with the elephant manager monthly, and the elephant manager will meet with elephant staff weekly. Agendas and minutes will be developed for each meeting. The minutes from the meetings will be copied to all members of the EMC so every one is kept up on the status of the elephant management program.

### **II. Keeper Training**

All keepers coming into the elephant program will go through a six-month apprenticeship. The elephant manager is responsible for coordinating and implementing this training. The training will be conducted such that the new keeper will be required to show proficiency in basic elephant care within the first four months. The elephant keeper apprentice will be required to work directly with the elephant manager five days a week during this time period. By the end of his/her first four months the apprentice will be required to know: basic daily routines, feeding and cleaning of animals; the maintenance and operations of facilities and all support systems; basic biology of elephants; all elephant commands and be able to do basic commands with elephants, hold in line, walk, foot up, stretch; understand basic philosophy of operant conditioning; health management of elephants; and safety. The elephant manager will develop a schedule for target training objectives. The keeper apprentice will be evaluated monthly so he/she is kept abreast of progress and need for improvement. After the first four month period the elephant manager will evaluate the elephant apprentice and decide whether or not to retain the apprentice in the elephant program. If the apprentice shows promise but has not completed their initial proficiency tests, the probationary period may be extended.

Keepers that have completed their apprenticeship and are permanently assigned to elephant will be sent to AZA elephant management school for additional training. This training will be scheduled for elephant keepers based on their seniority.

### III. Tools

**Ankus:** An "ankus" or "elephant hook," must be carried by all handlers working around elephants at all times. The ankus is the primary tool used for directing elephants' behavior. The hook on the ankus is used on specific points of the elephant's body to cue desired behaviors.

**Rifles:** An appropriate rifle (.458 caliber) is available for emergency use (animal escape or attack) in the zoo. It may be used only by personnel who have completed a special firearms training and qualification course. The rifle is used only to protect human life.

**Chains:** Leg bracelet chains are used daily to tether the elephants for their baths and for medical procedures. Our elephants' leg chains are alternated from left front/right rear to right front/left rear every other day and the leads are long enough to allow the elephant to easily lie down. All chains, clevises etc. must be inspected routinely for wear.

**Block & Tackle/Ropes:** Block and tackle may be used to help guide an animal through a desired behavior during training. It will also be used to help raise debilitated or partially anesthetized animals to their feet to ensure their recovery. Ropes may also be used to aid in training a new behavior. Only trained personnel with previous experience with these tools will utilize them.

### IV. Safety

#### A. Safety Rules: Elephant Staff

1. **No one** works alone in the elephant area when the elephants are present. No keeper is allowed to enter the elephant enclosure or approach an elephant without an ankus and an approved backup who is also required to carry an ankus. An approved backup is a staff member who has gone through the training stated in "Keeper Training."
2. All elephant keepers carry working two-way radios at all times during the work day.
3. Only members of the elephant staff give the elephant commands.
4. When non-elephant personnel are allowed to enter an elephant enclosure, elephant staff must be with them at all times.
5. Zoo visitors are not allowed in an elephant enclosure without permission of the director, assistant director, curator, mammal specialist or keeper II. Elephant staff must gain approval prior to entrance by the visitors.
6. All doors leading to the elephant enclosure must be locked when Keepers are not in the building. Only elephant staff and the Zoo's senior administration will have keys to the elephant areas.
7. When chaining an elephant, have her raise her front foot to you and always alternate feet to be chained (even days right front; odd days left front).
8. Tools and equipment are to be kept clean and to be stored out of the reach of the elephants.
9. When the veterinarian is attending an elephant and will be administering shots or doing any procedure that may be painful, the elephant must be tethered. The elephant may be laid down if this does not interfere with the veterinary procedure.
10. When operating hydraulic gates and doors the elephants must be visually checked to insure there is no possible chance of catching them. This may require entering the enclosure with the females.

## B. Safety Rules: Non-Elephant Staff

1. No one is allowed in the elephant enclosure unless accompanied by an elephant keeper.
2. Only members of the elephant staff may give the elephants commands.
3. Maintenance work (e.g. mowing) in proximity to elephant yards during training, demos, etc. must have prior approval by elephant staff.
4. Safety zone is 12 to 15 feet away from the elephant yard perimeter. Loitering within this area could result in a possible strike from the elephants.

## V. Elephant Training and Training Techniques

### A. Introduction

Elephants are trained for many reasons: physical exercise, mental stimulation, medical procedures, basic maintenance for animal health and well being (foot care and baths) etc. We use the operant conditioning techniques taught in AZA's Principals of Elephant Management School.

**Free Contact:** The direct handling of an elephant when the keeper and the elephant share the same unrestricted space. Neither the use of chains nor the posture of the elephant alters this definition.

**Protected Contact:**

- A. Handling of an elephant when the keeper and the elephant do not share the same space. Typically in this system the keeper has contact with the elephant through a protective barrier of some type while the elephant can leave the work area at will.
- B. Includes confined contact. Handling of an elephant through a protective barrier where the elephant is confined in an ERC.

For each command there are appropriate cues that the handler can use if necessary. Cues and verbal commands instruct the elephant which behavior to perform. The elephant is positively reinforced when it performs well. When training new behaviors, the elephant is positively rewarded with food much more frequently than for known behaviors.

After the animal has learned the behavior, food reward frequency diminishes or put on a variable schedule. Each time an animal(s) has finished a successful demonstration a "treat" bucket is given. Handlers must be aware that elephants need encouragement and affection; kind words and friendly pats go a long way.

Elephants may occasionally need discipline. Discipline should be viewed as an important training technique which may be administered when unacceptable behavior must be modified. Just as inappropriate elephant behaviors, e.g. aggressive behavior, will not be tolerated, unwarranted discipline by keepers will not be tolerated.

Operant Conditioning Techniques are used for free and protected contact management. The cues given are with an ankus in free contact and a target in protected contact.

### B. Techniques

1. Always remember that each elephant's personality is different and that all elephants need to be treated according to their individual temperaments. (See elephant profile)
2. Handlers must use established commands while training elephants (see attached list). Consistency by all elephant handlers is extremely important for elephant understanding and follow-through. Training consistency by handlers is required by this Elephant Management Protocol.
3. Always give the elephants a chance to obey. Give a command the first time in a clear crisp voice without the use of the ankus. Remember, elephants have keen hearing; don't yell. Never ask what you can't get or don't expect to get.
4. If the elephant refuses a command, give the command a second time utilizing the ankus on the appropriate pressure point. The ankus is an effective tool, which has been used for centuries; use it to guide your elephant through behavior routines. When you use your ankus, hook quickly, then release. The elephants' thick skin is protective, but very sensitive to the hook. For the male elephant worked in protected/confined contact the use of a time out is appropriate.

NOTE: If an animal refuses, be sure there is not a medical problem, which causes the refusal. Never ask for a behavior, which an elephant is unable or unwilling to perform due to physical disability (e.g. sprained knee with accompanying pain).

5. An aggressive act by an elephant may range from high-headedness, refusal to obey commands, displacing handler, trunk swing or full attack. Any of these behaviors must be dealt with immediately. Striking the elephant with the hook is not recommended, but in an emergency situation it may come in to play as a form of self defense. If that predicament arises the most suitable place to strike an elephant is the head, forcefully, applying the blow on the front cranium between and just above the eyes. The animal will not be injured as a result of this blow. The handler's hope is that this, his ultimate sanction at that moment, will stop the elephant from carrying out its aggressive behavior. Never strike or hook an elephant in or near eyes, mouth, ear canal, rectum or vagina. You must remain in full control of your own emotions and your behavior. Discipline is a technique to modify behavior; there is no other purpose. Discipline must never become abuse.
6. Always keep in mind that you are responsible for your actions in the elephant enclosure. If you are in doubt about a situation with the elephant(s), go to the senior elephant keeper or in his/her absence, the curator.
7. Any new training behaviors or changes in training routines must first be approved by the Keeper II. If necessary, these will be discussed at the next EMC meeting.
8. Elephant Time. When elephants are not working, they are on "elephant time." Only basic barn manners are to be expected. Do not give unnecessary commands. This is a time when they are free to choose behaviors and associates.

### C. Command List

1. Move up: Walk straight forward.
2. Back: Walk straight back.
3. Get over in line: Side step away from handler.
4. Get over: Turn away from handler (90 degree angle).
5. Come here: Turn towards handler or come from a distance.
6. Turn: Turn in a circle.
7. Tail up: Elephant holds tail of elephant in front of her.

8. Come here in line: Elephants form line.
9. Trunk: Curl trunk above head.
10. Foot: Raise foot forward.
11. Pad: Raise foot back.
12. Salute: Raise trunk and left foot.
13. Bow: Both front legs kneel.
14. Stretch: Sternal recumbency.
15. Down: Lay on side at which handler is standing.
16. Sit: Tub sit up.
17. Sit up: Ground sit up.
18. Hup: Hind leg stand.
19. Pick it up: Pick up object.
20. Push: Push object.
21. Pull: Pull object with trunk.
22. Head down: Lower head.
23. Ear: Present ear.
24. Wave: Wave with trunk.
25. Bul: Vocalize.
26. Blow: Squirt water (Spray, Blow).
27. Easy: Slow animal down.
28. Steady: Hold any behavior; stop.
29. No: Stop an unwanted behavior (quit).
30. All right: Releases all behaviors.
31. Shake: Shake head back and forth.
32. Switch: Curl trunk and raise right front and left rear foot
33. Brace: Lift both legs on same side.
34. Give it to me: Give object to handler.
35. Empty: Defecate.
36. Come here in stretch: Turn slightly toward handler in stretch.
37. Get over and stretch: Turn slightly away from handler while in stretch.
38. Catch: Catch stick.
39. Paint: Hold brush and stroke on canvas.

D. Individual Elephant Training Profile (See Attached)

VI. Male Management Protocol (When we get a male.)

Bull elephants are potentially the most dangerous animals in any zoo because of their huge size, incredible strength and remarkable intelligence. A bull may kill any human if given the opportunity, especially while in musth. As long as Zoos are committed to captive breeding, bull elephants will be maintained. Even in an artificial insemination procedure, the sperm needs to be extracted from a live bull elephant.

The management of bull elephants will require the construction of secure facilities strong enough to sustain challenges by a mature bull, squeezes and shifts to hold and move bulls. In addition, keepers will require facilities to insure their safety while working around bulls.

A. Guidelines for Juvenile or Mature bulls

1. No one will be allowed to approach the male at any time. Safe zones will be established and marked in the barn and yard areas. Everyone including elephant personnel **must** observe these limits. The Elephant Manager will determine the size of the safe area and will be responsible for maintaining the markings of the safe areas.
2. Only permanent elephant staff will be allowed to manage and feed the male. The male will always be moved remotely. Keepers need to insure that the bull is all the way through a door before closing it.
3. Health management of a bull will be done via protected contact or in the squeeze. The Elephant Manager will be responsible for training bulls to enter and stay in the squeeze. In addition, all elephant keepers should be familiar with the operations of the squeeze.

#### B. Guidelines for Male Calves

1. Male babies will be managed with their mothers as a unit. Babies should not be separated from their mothers for long periods of time.
2. Keepers should be working with babies, teaching them simple commands. The Elephant Manager will be responsible for determining when the male babies will be placed in the protected contact mode.

#### VII. Female Management Protocol

Many captive female elephants are tractable but there is always an element of danger when handling animals that possess such great intelligence and size. The current method of handling female elephants at the Honolulu Zoo is free contact until such time that it is no longer applicable to certain or all of our females. This helps us establish a positive working relationship so we can create a safe environment for our elephants and their keepers. We are also able to give them optimum care (foot and skin care, medical procedures) and mental and physical exercise through training. All elephants including tractable females will also be trained in the protected contact mode and must be familiar with going through and being held in the squeeze.

The Elephant Manager will be responsible for monitoring the behavior of all elephants, including females, and recommending the mode of handling. The Elephant Management Committee will make the final decision.

#### VIII. Emergency Protocol - Elephants

##### A. Accident or Attack

Accident: In the event of an accident caused by a zoo elephant, our first attempts will be to secure the animal(s) in a safe environment, and get emergency help for the victim (human). Our policy states that no person will come into contact with an elephant without at least two qualified elephant handlers in attendance. The zoo radio will be the lifeline for the handlers in this case. A Code Blue warning should be called along with details, to alert appropriate staff to the emergency. This will free the handler(s) to give their full attention to placing the elephant in a safe area thereby defusing the situation from further danger. Quick response by zoo elephant handlers is a must to keep injury to a minimum.

Attack: In the event of an attack on zoo personnel or zoo visitors, quick decisions need to be made to determine if the animal(s) are stable or out of control. The Code Red alert and/or Code Blue alert must be given to alert zoo staff for proper response to the event. In any event provide for your own safety while assuring visual contact with the elephant. Prevention is the key to avoiding an attack emergency. Elephant handlers must be aware of the moods of their animals, keep track of and report any changes in behavior that might indicate a potential problem in the making. As stated previously, equipment failure could also lead to animal emergencies. Elephant handlers must be aware of any weaknesses in their holding compound.

#### B. Elephant Escape

In the event of an elephant escaping the confines of the compound, your first job will be to return it safely to the compound in as short a time as possible. The following sequence of events must take place:

1. Call a Code Red, Category II over the radio to alert other zoo staff of the emergency. Give all of the pertinent information regarding the location of the animal(s), and if moving, the direction of the elephant(s). Keep the animal in view at all times.
2. Determine that no human is in danger because of the elephant escape. If there is a chance of a human life being endangered, our response may switch from recapture of the animal to disposition of the animal.
3. Gather all of the safety equipment necessary for your personal protection.
4. Confer with other handlers and zoo supervisors to determine the best way to bring the situation under control and return the elephant to the compound. Act in accordance to the plan formulated by the OIC and your supervisor.
5. Upon safe return of the elephant(s) to their compound, confer with fellow handlers and supervisors to determine the cause of the escape. If equipment in the compound failed, it must be immediately repaired to prevent further escape as the animals will quickly test that area when given the opportunity.
6. Determine the mood of the escaped animal(s). Are they excited about the event, are they tractable? Will they eat if given hay or some other food item? Is there any possibility the excitement will cause the elephants to do harm to one another? Elephant handlers must determine it is safe to leave their animals with no handler present.
7. In the event we acquire a Male Elephant, no personnel will be approved to approach the escaped animal. If it is determined we can safely immobilize the animal for return to the exhibit, a plan will be formulated with the zoo veterinarian, along with personnel from the zoo's shooting team.

#### C. Power Failure (For new enclosure)

1. To move hydraulic doors manually in an emergency (doors will not be lockable).
2. Shut off power to hydraulics.
3. Red levers are mains to shut off flow of hydraulic fluid.
4. Disconnect lines at top of black tubes on hydraulic unit. Have a bucket available as fluid will leak.
5. Doors may now be pushed open or closed. Lines will bleed as the doors are pushed.
6. For power outage that last more than 12 hours we bring in a portable generator that will operate doors, and lights.

## IX. Dealing With The Public

Our Zoo is dedicated to elephant conservation. We have committed hundreds of thousands of dollars to this cause in the form of a new physical plant, a full time elephant staff, and conservation education. We give educational presentations which show the strength and agility of working elephants. While people watch an elephant working and performing a variety of behaviors, they are simultaneously entertained and educated.

As a representative of the Honolulu Zoo, you must be aware that you are an integral part of this highly visible program. The public is watching the elephants and you. You must be an exemplary member of the zoo keeping/elephant handling profession. A clean, complete uniform is a must. Personal cleanliness and acceptable grooming are required. A friendly, polite attitude is always encouraging to the public; this usually makes people more captivated by you and your elephants, and more willing to engage in conversation about elephants. Answer all questions enthusiastically, even the ones that are asked hundreds of times each day. While working with your elephant(s), don't look bored with the job, or mad at the elephants or other people. As always, if you must use your ankus, use it discreetly to achieve your goal. Remain positive, informative and upbeat at all times in front of the public. Visitors will consistently have enjoyable, educational visits to our Zoo because of you. Public appreciation of our individual elephants will translate to support for conservation of elephants in the wild!

## XI. References. recommended reading

1. Don't Shoot the Dog. Pryor, K., 1984
2. Asian Elephant SSP and Husbandry Manual. AZA
3. The Asian Elephant; Ecology and Management. R. Sukumar, 1989
4. Elephants. Eltringham, S. K., 1982
5. Zoo and Wild Animal Medicine. M. Fowler, ed. pp 436-454. 3<sup>rd</sup> ed, 1993
6. Managing Elephants. A. Roocroft & D. Zoll, 1994
7. Natural History of the African Elephant. Sikes, S., 1971
8. Wild Animals in Captivity. Hediger, H., 1964
9. Wild Elephants in Captivity. Adams, J., 1981
10. Restraint and Handling of Wild & Domestic Animals. M. Fowler, pp 231-239, 1978
11. The Elephant's Foot/Prevention and Care of Foot Conditions in Captive Asian and African Elephants. ed Csuti, B., Sargent, E., Bechert, U., 2001

**This Protocol Will Be Revised Yearly; Everyone on the EMC must read and sign off on this document**