

# Training for Zoo Animal Keepers of South Asia

Any attempt to develop a training programme for South Asian zookeepers needs a systematic approach to the subject. This should begin with an "Approach Study" which would help select the subject matter for the Training Programme and the method of execution

## Approach

Before developing a training programme, one should have clearly defined objectives. Various types of programmes then could be developed to achieve these objectives. For deciding on the objectives, it is necessary to make background studies of the problems connected with zoo animal keepers in a country or region. One also should know and be committed to the importance of training proposed for the keepers. It is essential to analyze the importance of zoo keepers in the management of zoos.

## Approach

- Know the importance of training
- Know importance of animal keepers
- Research condition and nature of animal keepers
- Analyse problems of animal keepers
- Then formulate objectives for training

Unless we know their importance or potential importance, we may not be able to develop a correct programme for them. The condition and nature of the zoo keepers may vary from zoo to zoo and even among the keepers in a zoo. So, an analysis of the existing condition and nature of the zoo keepers is essential so as to develop a suitable programme to fulfill the actual need. The problems of the zoo keepers will also vary among zoos and this must also be taken into consideration for formulating correct objectives for the training programme.

## Importance of keeper training

The keepers in South Asian zoos are doing almost the same work daily with scant diversion from this routine, and to some extent, dirty, sometimes dangerous and physically strenuous work. Sometimes the keepers will not find time or even develop an inclination to converse or to discuss with other keepers about his experiences, difficulties, etc. He will not get a chance to observe any new things in his routine job. So some sort of diversion from this routine work is necessary and it may be achieved through training. During the course of training the keeper gets an opportunity to mix with other keepers and thus he will be able to know and learn some new things through hearing lectures or participating in discussions.

The South Asian zoo animal keepers job, being considered as a lower category, rarely provides any opportunity to discuss or converse with higher officers. A training programme can

## Importance of animal keeper training

- Diversion from routine work
- Get together in a different social structure
- Exposure to new people and ideas
- Interaction with superiors in different way; lead to better relationship
- Improving knowledge
- Developing responsibility and interest

provide such an opportunity and pave the way for them to talk with many experienced senior officers. Their difficulties and problems can be made known to the higher officials by the keepers themselves (as opposed to a political person or non-related officer from their union) and this could result in a better understanding and relationship between keepers and their superior officers.

No doubt that any training Programme is aimed for improving knowledge in the respective field. As far as zoo keepers in this region are concerned, they rarely get a chance for any outside training to improve their knowledge.

Many keepers are completely unaware of the importance of their work and, as a result, they do not become interested in a potentially fascinating subject. A training programmer may be one of the tools to make them to understand their responsibility and induce interest in their work.

## Importance of Animal keepers

- They possess first-hand knowledge about animals, their health, condition, behaviour, etc.
- They are directly involved in feeding and handling the animals daily
- They are directly involved in the protection and safety of animals and visitors

**Importance of Animal keepers** Unless one is aware of the importance of zoo animal keepers, it may not be possible to formulate an effective training programme for them. Animal keepers are persons who have a direct link with the animals. They are the ones who observe the animals more than any other staff person. Any reliable information on the animal, its health behaviour, etc. could be obtained only from him. Most importantly, he feeds the animals, cleans their cages and protects the animals. Any lapses in his part will certainly lead to loss of animal or property.

## Nature and condition of Indian Animal Keepers

Although many of us know the importance of the animal keepers, no serious attempts have been made to improve their knowledge and their level. Any training Programme should suit their level and conditions. So it is important to know the condition and nature of the Indian Zoo Keepers.

### Condition and Nature of most South Asian Animal Keepers

- Low educational level
- No up-to-date technical knowledge
- Poor working conditions
- Economically struggling
- (often) Indifferent attitude / behaviour
- (sometimes) guided by wrong elements (labor unions <-> politics)

Many of our Zoo Keepers in South Asia are poorly educated, with an educational level ranging from illiterate to a few of high school level. Their education is in the local vernacular so even when literate, they cannot read any of the enormous volume of instructional material that has been published about animal keeping and handling. Their knowledge about animals is not sufficient so they develop their own techniques for handling animals in the absence of training. These methods can lead to uncomfortable or even fatal results for the animals.

In addition their poor working conditions, inadequate wages, low status and influence by labour unions lead them to become disinterested in their jobs and/or to develop indifferent attitudes or behaviour and, in the case of labour unions, encourage patently wrong attitudes.

In the case of labour unions, these are often run by people who are in politics and are not even employed by the zoo. These people have no interest at all either in the animals at the zoo, the institution as a social facility or, in fact, in the keepers themselves. They are often associated with other unions under city municipalities which are happy to find a grievance for which they can lobby or strike, and thereby link the services and hold the city government to ransom. This is a delicate matter which, if addressed directly, can lead to unions taking a stand against training. Therefore, in

designing training, it is necessary to avoid offending these vested interests but to build interest in their job, affection for their animals and confidence in the senior staff in zookeepers which might stand up to pressure from the union to commit acts which would be destructive to the animals, to the visitors, zoo staff and institution generally.

When developing a training programme it is helpful to remember these factors. Those designing or conducting training may not be in a position to change these conditions, but they may be able to include elements in training to give more job satisfaction to keepers, which can compensate for many other things.

### Selected Problems with respect to South Asian zoo keepers

Due to poor educational standards and due to lack of technical knowledge of the Indian animal keepers, the zoo managers have to face several problems with respect to the keepers.

### Problems of (most) South Asian Animal Keepers

- Do not possess adequate knowledge about the *basic biology* of their animals
- Lack of knowledge and thus sensitivity about handling of animals
- May not know importance of *communicating* certain information about the animals ... who to inform, what, when..
- Lack of communications skills
- One keeper for many species; shifting from one species to another & changing duties

Mishandling of animals too often leads to injury, illness and even casualty. In the absence of training and adequate instructions, keepers sometimes use "home remedies" in time of illness which frequently are used for babies or handling techniques which would be appropriate in case of dealing with criminal elements or human enemies.

In many South Asian zoos is that zookeepers have to look after more than one enclosure and more than one species or even groups of animals. As a result, they cannot concentrate on any one order or species so as to learn more about its needs and behaviour. Also they cannot distinguish priorities, such as species which are threatened with extinction or particularly valuable for other reasons, such as their cost.

Zookeepers are also often shifted from one work to the other, such as from caring for animals to the taxidermy section, etc. This prevents their becoming expert with a particular aspect animal management or animal group. Exposure of a keeper to a new animal without experience has led to fatal or less unfortunate but nonetheless destructive and painful results.

### Developing Objectives for zoo animal keeper training

Only after becoming fully cognizant of the above aspects as well as particular problems or experiences of individual institutions, can an adequate and effective training programme be developed. Normally, training would be developed by senior staff in a zoo but more and more, conservation and animal welfare voluntary organizations are interested in helping the zoo by conducting zookeeper training. These organizations should take note that the relationship of the zookeeper with his institution and staff is a delicate matter and they should get any agenda and lecture approved by the zoo before including it in the training. It takes a very long time to understand the sometimes subtle but important differences in, say keeping a pet, running an animal shelter, or a rescue centre, or the differences between domestic and wild animals.

### Objectives

1. To improve animal keepers' knowledge about the animals and their management
2. To develop better interaction and coordination between animal keepers and management
3. To develop some interaction between keepers and visitors

Objectives should include a basis approach or philosophy :

1. to improve animal keepers' knowledge about the animals and their management
2. to develop a better interaction and coordination between animal keepers and other animals keepers, other staff and management
3. to develop interaction between keepers and volunteers and visitors

In many ways, the problems with respect to keepers is more the unused potential than the act themselves. Keepers are a

fountainhead of information about the animals but zoo managers cannot access this knowledge. Although the keepers are in a position to observe everything that is going on in regard to the animal, they do not know the importance of some incidents, behaviours or reactions. They do not know what to inform, how to inform, when to inform and, sometimes, the appropriate person to inform. Sometimes, very valuable information is not communicated because the zookeepers are not aware of their significance. Some of the keepers are not able to record their observation due to low educational standard. Training can address this lacunae and go a very long way in improving the potential helpfulness of zookeepers. This aspect should be given much attention in the design of training, with species and issue-specific modules.

**Potential of Animal keepers**

Animal keepers in some zoos have been introduced to the higher purpose of zoos (e.g. purposes other than recreation) such as education, bringing about attitudinal and behavioural modification of visitors, conservation of wildlife, etc.

Understanding the potential of the zoo itself as a learning institution and a centre for research and conservation can achieve several objectives with regard to zookeepers. This understanding can lead to more job satisfaction for keepers and help compensate for some of the difficulties of their work. Zookeepers can be induced to understand the role of the zoo in education and conservation and its great importance and potential in changing attitudes and behaviour of very large numbers of people.

biodiversity is almost without parallel : its only “competitors” are television programmes such as Discovery, Animal Planet, etc. Such programmes, however, do not have the feature of the living animal, displayed as a valuable treasure of the earth, which is unique to zoos. Keepers who can be taught their own importance in maintaining these treasures and possibly contributing to their use in conserving other animals and plants may develop a sense of pride and responsibility in their vocation. Although there is no substitute for better working conditions, and the need for this should not be underplayed, satisfaction in one’s work is a great motivator. Hundreds of thousands of people volunteer for animal welfare and conservation action daily without receiving either a salary or any perks other than their sense of satisfaction in helping a worthy cause.

them about environment and conservation, but they became excited and responsive when zookeepers brought animals and told them simple things about their daily life at the zoo.

**Keepers duties and responsibilities**

Care and maintenance	Reporting	Safety
<ul style="list-style-type: none"> <li>•Feeding</li> <li>•Observation</li> <li>•Enclosure maintenance</li> </ul>	<ul style="list-style-type: none"> <li>•Information</li> <li>•Record - keeping</li> </ul>	<ul style="list-style-type: none"> <li>•Personal</li> <li>•Animal</li> <li>•Visitor</li> </ul>

**Developing Subjects for the Training Programme**

To achieve the objective already mentioned, one has to develop various programmes or modules. The subjects for which programmes are to be developed are to be decided first on the various duties and responsibilities of zoo animal keepers. A variety of programmes can be arranged to teach the subjects selected.

**Keepers Duties and Responsibilities**

The animal keepers duties and responsibilities may be broadly grouped under three categories. They are:

1. Care and Maintenance,
2. Reporting,
3. Safety

**Developing subjects for training programme**

- Assess the duties and responsibilities of the animal keepers
- Choose the subjects for training first covering their duties and responsibilities
- Assess other topics which would enhance their interest and broaden their mind (conservation, education, etc.)
- Formulate programmes for each subject

Zookeepers who learn about conservation can provide a very important and almost totally unique service by targeting visitors from rural areas, forests, etc., and even city visitors who are from a strata of society which does not ordinarily get educational opportunities. Educated volunteers or zoo staff often find relating to this target group very difficult but zookeepers can do so without much difficulty.

**Developing training programme**

- Forementioned issues need to be considered for developing full picture of animal keeper problems and potential
- Analysis of these issues enable us to formulate objectives of training programme

**Potential for Animal Keepers**

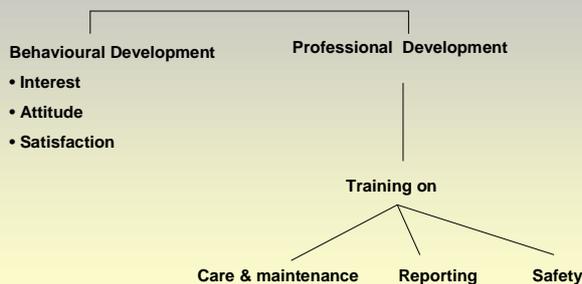
- Understanding the importance of the zoo and its role in conservation can help the keepers take pride in their work and improve their performance.
- Animal keepers (Indian, Sri Lankan) who have been educated to understand some of the conservation value of the zoo have reacted very positively
- Animal keepers who understand the serious purpose of the zoo can become excellent educators for a certain level of visitors.

Zookeepers can also provide education of a certain type to educated people. As the zoo staff who most handle the animals on a daily basis, zookeepers have many experiences and stories to tell about them which are of immense interest to visitors, even highly educated visitors. In Mysore Zoo, in a teacher training workshop conducted in about 1984, teachers were practically indifferent to very knowledgeable and important resource persons brought to teach

The first and foremost duty of a keeper is the care and maintenance of the animal and the enclosure of his charge. He has to feed the animals and to make observations which might be clues to its health and well being. Thus health care also is the responsibility of the keeper in that he has to execute the instruction given by the veterinarians and higher officials as well as report anomalies in appearance,

The zoo as a unique teaching institution for conservation of wildlife and

## Developing training programme for animal keepers

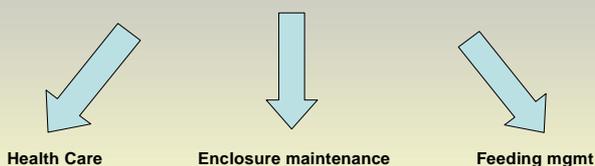


feeding and behaviour. Apart from these, he has to maintain the enclosure so that the animal is comfortable and safe.

The animal keepers are usually the first person to see the animal in the day. Their observations should be properly communicated and recorded either by them or by those who can keep a written record. The animal keepers have to take specific safety measures to protect themselves, their animals and also the visitors visiting the enclosure.

### Programmes with respect to Care and Maintenance:

## Training on Care and maintenance programmes



### Feeding Management

Feeding management deserves special attention in any training programme. Although feeding the animal is a routine work for a keeper, much care has to be observed while attending this work. Timely feeding is absolutely essential and keepers should be taught about the consequences of late or untimely feeding. In the same way correct food, both in quantity and quality should be ensured. Keepers should know the accurate proportion of various food items to be fed and also the necessity of giving the prescribed food.

Observation of feeding is essential. Keepers should be taught which aspects are to be observed regarding feeding. Rejection of food often indicates illness and should be recorded and informed. In feeding management, hygiene

is extremely important. Zoo keepers should be taught the meaning and importance of hygiene from a very basic level.

Feeding baby animals requires special instructions and a gentle and caring touch, and the same holds true for pregnant and sick animals. Training programmes should include the technique of hand-rearing and also special information regarding nursing and handling sick, injured and recovering animals.

## Feeding management

- Food-feeding-hygiene
- Timely feeding
- Correct food
- Quality food
- Quantity correct
- Observation of feeding
- Special feeding for special conditions
  - infants
  - pregnant animals
  - sick animals
  - Other situations -- ???? Suggestions ?

### Programmes for Health Care

Although attending health care work is the duty of the veterinarian, many observations and information on the health of the animals can be observed by zookeepers, who are around the animals most of the day. Normal health of an animal will be indicated from the feeding and behaviour of the animals. Keepers should be taught how to recognize the aberrations in animal behaviour which indicate the onset of illness. Often, if caught early, a disease or virus can be put down before doing any real damage to the animal.

## Health care – keepers can help

- Behaviour of animals – observations - indicators
- Feeding behaviour
- Abnormal behaviour
- Competition-fighting-injury
- Regular Health Care
- Periodicity
- Prophylactic measures
- Handling sick and infant animals
- Handling newly brought animals – quarantine
- Treatment procedure
- Timely administering medicine, proportion, reporting of amt taken, any reactions, etc.

Keepers should also be taught the activities related to prevention of illness and injury and such health care work has to be attended on a regular basis.

The medicines prescribed by the veterinarians should be given at the correct time and in accurate proportion. Much emphasis should be given for preventative measures and correct treatment in training of zookeepers.

### Enclosure maintenance

This topic includes : a) General maintenance, b) Specific maintenance. Under general maintenance, training may be given about the daily routine maintenance works and periodic maintenance works, so that they can be systematised. There are maintenance works which may vary depending upon the enclosure type and the animals and separate programmes are required for maintaining special enclosures, such as nocturnal houses, aquarium, etc. Separate modules or programmes should be developed for training keepers to maintain all of these enclosures : (a) cages (b) animal house (c) animal compound, (d) island (e) moats, (f) safari style enclosures, (g) aquatic mammal exhibits, (h) Visitors Gallery, etc.

### Enclosure maintenance

- |   |  |
|---|--|
| <p><b>GENERAL</b></p> <ul style="list-style-type: none"> <li>• Daily maintenance</li> <li>• Periodic maintenance</li> <li>• Timely reporting</li> </ul> | <p><b>SPECIFIC</b></p> <ul style="list-style-type: none"> <li>• Cage</li> <li>• Animal house</li> <li>• Animal compound</li> <li>• Island</li> <li>• Specialised enclosures</li> <li>• Visitors gallery</li> <li>• Barriers</li> </ul> |
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### Collection of information

Important observations which are not passed on to someone who can interpret and act upon it or record it for future become useless. Therefore, the animal keepers should be taught how to recognize what information is important. Sometimes, very valuable (even life-saving) observations are not communicated or recorded by the keepers, who do not know that this information is important. Training should convey to keepers that information pertaining to the following are to be recorded and communicated: (a) animal health (b) animal behaviour (c) mating and reproduction (d) food and feeding and (e) enclosure maintenance. A standard proforma may be prepared

for keepers so that it will be easy for them to collect the information under different categories. These categories can be indicated in a table by drawings or symbols instead of alphabets in case of non-literate

### Collection of information by animal keepers

- What to Collect?
- Information pertaining to :
  - Animal health
  - Animal behaviour
  - Mating and reproduction
  - Food and feeding
  - Enclosure maintenance
- When to collect ?
- Where to collect ?
- How to collect ? (non-literate; new method dev.)
- How and to whom to report ?

Certain information is to be collected during specific periods, such as during the night. Every keeper is expected to find out what has happened during the night and report it to his superior. Similarly, certain information has to be collected during breeding season. This information may either be passed on to higher authorities or recorded by the keeper, depending upon the necessity and importance.

### Reporting — passing and storing information and feed-back

Generally all the observations are made inside the enclosure and thus, the starting point of most information is the enclosure. Animal keepers are the agents for collecting this information and passing it on for recording. Some of the daily observation by the keepers may not require special attention by the superior but accumulations of this information will form a good record for future management. Such observations may be recorded by the keepers themselves if they are able to read and write. Even so, it is very essential for senior staff to go through these observations from time to time to insure that keepers are maintaining the record usefully. There are certain standard Daily Report formats followed by the Zoos. Information received from the keepers are passed through the forms. Some Important observations will be recorded either by the Veterinary wing or by the Directors office depending upon the matter. Training module on

reporting should cover all the above aspects and thereby ensure a useful information recording system.

### Safety

- Public safety
- Personal safety (animal keepers themselves)
- Other staff safety
- Animal safety

### Safety measures

One of the major deficiencies in South Asian Zoo keepers is that they are ignorant of many safety measures. Therefore, it is very important to train them for their personal safety, for the animals safety and for the visitors safety. Many casualties among keepers, animals and also among visitors may be avoided through training.

### Personal safety Source of illness & injuries

- |   |  |
|---|--|
| <p><b>INDIRECT</b><br/>Infection of animals<br/>(zoonoses : sanitation &amp; hygiene, personal)</p> | <p><b>DIRECT</b></p> <ul style="list-style-type: none"> <li>• While treating/handling</li> <li>• While feeding</li> <li>• During mating</li> <li>• During breeding</li> <li>• While cleaning</li> <li>• While transporting or catching up</li> <li>• Handling doors/shutters</li> <li>• Injurious animals, plants</li> </ul> |
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### Training in personal safety of keepers

Saving themselves from the injuries while working is generally lacking among many keepers from this region. This is primarily due to their ignorance of animal behaviour. They may get injuries either directly or indirectly. All keepers should be aware of the infectious diseases that spread through animals. Similarly they should know when and how they are liable for injuries. They normally get injuries while handling the animals, while feeding certain dangerous animals, during breeding season, while cleaning, while trapping and transporting animals. Apart from these animal sources, they are also likely to get injuries while handling the doors and shutters and also from some animals like snakes found in the island enclosures. A detailed programme should be arranged for demonstrating safety measures to be taken against all

the above mentioned causes and practice in correct handling given.

### Animals safety

Sources of injuries to the Zoo animals may direct or indirect. Indirect sources of injuries come either from the animal keepers or from other agents. Infectious diseases like TB may spread to animals from the keepers or vice versa. In the same way, certain infections will come from other animals which have intruded into the enclosure such as jackal, mongoose, etc. The training programme should demonstrate how to prevent such injuries and illnesses from affecting the animal.

#### Safety : Visitor Misbehaviour

- Teasing and feeding of animals
- Offensive noise-making which disturbs animals
- Vandalism of property
- Destructive behaviour to other visitors
- Eve Teasing
- Destructive behaviour to themselves even
- Many other things
- Zookeepers can help control these to some extent and should be empowered and instructed.

There are several sources of agents affecting the animals directly. Fighting among group animals is a main source. Animals can be injured during mating. Visitors throwing stones, cigarettes, etc. can injure animals. Keepers should know the behaviour of the animals before they are introduced into the group and keep a keen eye on the behaviour of human beings. On many occasions visitors are found to be the source of causing injury to zoo animal

Trapping animals require special technique. Invariably, most of the animals get injury while trapping. Practical training programmes are needed to develop this technique. Keepers also should be taught to be calm and quiet when trapping an animal. Injuries occur for both man and animal when keepers shout and beat the side of the cage when trying to make an animal go out or enter an enclosure.

Some time certain structures of the enclosure such as fence, moat, cage doors, sides of house, etc may cause injuries. Keepers should be trained to inspect all of these daily for protruding nails, splinters, broken barriers, etc.

and report this to the section of the zoo which repairs such things. Keepers can be taught to make minor, interim repairs so that the animals don't become injured or escape before the enclosure can be repaired. Suitable safety measures should be taught to the keepers for protecting the animals from all these threats.

### Visitors' safety

The keepers duty does not stop with protecting himself and the animals but also should include visitor safety. There are many incidents of severe injuries caused to visitors by the zoo animals. The visitors should be warned to keep away from the animals reach and also guided by the respective animal keepers. First Aid training should be given animal keepers. They should be trained in emergency measures, such as animal escape and how to save a visitor fallen into the moat. Such training should be more practical than theoretical.

#### Visitor Safety

VISITOR SAFETY source of injuries

- Injuries from zoo animals by Zoo mistake / visitor mistake
  - Zoo mistake – improper barriers, lack of warning signs, wrong animal interaction
  - Visitor mistake – ignoring warnings, trespassing into off-limit areas, etc.

**Correctly trained, keepers can observe, report, warn and ward off many mishaps**

#### Visitor Safety

VISITOR SAFETY source of injuries

Other accidents while in zoos by zoo mistake or visitor mistake

- Zoo Mistake – walkways uneven or with blockage, barriers with protruding nails, construction materials in public thoroughfare
- Visitor mistake – trespassing into off-limit areas, tripping inadvertently on their own feet, choking, dropping children in moats, etc.

**Correctly trained, keepers can observe, report, warn and ward off many mishaps**

### HOWEVER ... !

- practically speaking, anything bad that happens to a visitor while in the zoo will be seen and interpreted as a zoo mistake !
- So beware.
- Keepers could be trained to try to divert visitors before they enter wrong areas, or by keeping pathways clear, or holding children improperly around animal cages.

### Executing training programmes

It is important for the organizers of the training programme to decide how different training programmes for the keepers could be arranged and executed. Many of the subjects dealt so far could be taught through internal training programmes, with each zoo devising their own training programmes for their keepers. Many basic things could be taught by the respective zoos themselves. These internal training programmes may be arranged weekly or monthly depending upon the need. These can be arranged on zoo holidays.

#### Execution of training

Nature of training	Schedule	Programmes
Internal	Weekly	Teaching all basic subjects
	Monthly	Practical demonstrations
External	Annual	Special subjects with practical demos

Sending keepers to other zoos to get new ideas, broaden their horizons, and as a reward can be part of a training. The Indian system of regional training course organized at a zoo in the four corners of the country is working well. They call experts from throughout the country to train keepers who gather at a particular zoo. These keepers meet other keepers and get to see a different zoo from their own. This is an effective method of training which can be arranged yearly or every two to three years for different groups of zookeepers.