Welfare status of captive elephant Gauri

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Sri Srikanteshwaraswamy Temple Nanjanagudu, Karnataka, Southern India

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Ramesh Belagere¹, Suparna Baksi Ganguly²ᵃ, Sujata S.R²ᵇ

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¹:Foundation for ecology and Education Development, Kengeri satellite town, Bangalore 560060, ²ᵃ: President, ²ᵇ: Researcher, Compassion Unlimited Plus Action (CUPA), Veterinary College Campus, Hebbal, Bangalore 560 024, & Wildlife Rescue & Rehabilitation Centre (WRRC), Bannerghatta Biological Park, Bangalore – 560083, Karnataka
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Recommendations

Keeping in mind the semi-natural conditions available for the elephant in its present location, it would have been more suitable for the elephant if the animal had been allowed access to it.

The premise here is by providing a natural environment; the elephant will exercise more, eat less of rich foods and express more natural behaviours leading to better physical and psychological health.

- After the elephant completes temple rituals, the animal should be allowed to range-free in fallow lands, grazing lands, areas where the elephant can walk on earthen surface and perform its natural behavioural repertoire such as using its feet to loosen grass from the soil, rubbing itself against trees, using its trunk to pull up grass or other vegetation, etc. this way, the elephant will forage which will not only help in providing much needed exercise, it will also act as an enrichment
- The elephant should not be used for blessing people
- Since the elephant is maintained singly, efforts should be made to provide for interaction with other elephants; this location may have other institutions housing elephants which can act as a source for elephant companions
- Under expert guidance, selected elephants can be exposed to each other gradually to allow for non-aggressive interaction; gradually, the amount of time which the elephant spend with each other can be increased. A suitable location, with natural landscape features (soil, trees, bushes, source of water) needs to be selected wherein the elephants interact and engage in natural behaviours
- To wean the elephant from cooked food and stall feed
- Restrict the hours for which the elephant is chained within its shelter only to a bare minimum; provide for greater length of chain to enable movement and access to water in shelter; change the floor type within the shelter to one with a mixture of sand and stone
- Not allow for washing of clothes or any other human oriented activity within the shelter
- Ensure the water trough is cleaned everyday
- Keep a record of the elephant’s weight, physical health consistently
- Provide training for the mahout by sending him to the nearest forest camp
- Provide better accommodation facilities for mahout’s family
- Impress upon the mahout that the elephant needs to be an elephant, not a chore to be dealt with
Introduction

SriKanteshwara temple in Najangudu, Mysore district is governed by the Hindu Religious Institutions & Charitable endowments department. The town is 25kms from Mysore, situated on the banks of river Kapila (Kabini).

The temple maintains a female Asian elephant, named Gauri (formerly Kalpana), aged 43 years in its premises to carry out daily rituals associated with the temple.

Objective

The captive elephant, Gauri, was observed and relevant data collected with the aim being:

a. To assess the welfare status of the elephant vis-à-vis its physical and biological environment in relation to those observed in the wild
b. To assess the welfare status of mahouts using available information

Method

Welfare status of captive elephants has been assessed using the premise that living conditions that simulate those experienced in the wild will enhance the suitability of captivity. This is so because, elephants cannot be considered to be domesticated as they have not been selectively bred and genetically altered in captivity. Thus, changes in living conditions, dictated by human beings in captivity, will affect the elephant’s psychological and physical health.

The rating method

A rating scale from zero (unsuitable conditions) to ten (suitable conditions) was used to assess the welfare status of captive elephants. Experts (both wild and captive elephant specialists, wildlife veterinary experts, managers from protected areas, those having both wild and captive elephants and other wildlife, members of welfare organisations and elephant handlers) were invited to assess the welfare based on welfare parameters and their significance through an exclusive workshop conducted on the subject (Varma, 2008; Varma, et al., 2008; Varma and Prasad, 2008). Experts rated a total of 114 welfare parameters covering major aspects of captivity

- The experts, based on their concept of the importance of a particular parameter to an elephant, developed rating for each parameter. For example mean expert rating of 8.0 (SE= 0.5, n=29; n= number of responses) for a parameter ‘floor’ and 9.0 (SE=0.4, n=31) was arrived for ‘source of water’ from the ratings suggested by each expert.
- A mean rating for each parameter, across all the participating experts, has been used as the Experts’ Rating (E-R) which represents the importance attached to a parameter.
Elephants were visited on the ground; data for each parameter was collected by direct observations or with the interviews of people associated with the animal. Ratings were assigned to each parameter for each elephant and Mean Rating (M-R) was calculated for a given parameter by averaging across the observed elephants. Thus the Mean Rating (M-R) denotes welfare status of existing conditions on the ground for the particular parameter.

For example, if an elephant is exposed only to natural flooring, the animal receives a M-R of 8 and for entirely unnatural flooring the value is 0; if an animal is exposed to both natural and unnatural flooring, the value is 4 (as 8+0/2= 8/2= 4). If an elephant is exposed to a natural water source, such as a river, it receives a value of 9; if the source of water is large lakes or reservoirs, it gets 4.5. A value of 3.5 is assigned for small water bodies like tanks and ponds. Tap water (running) gets 2.5 and if only buckets, pots, and tankers are in use, then the allocated value is 0.5.

In this investigation, variables which represent a common feature of the captive condition have been grouped to form a parameter. For example, the variables shelter type, shelter size, floor type in the shelter; all represent different aspects of the physical space provided to the elephant. Hence, they are grouped together to form the parameter “Shelter” and each constituent variable is a sub-parameter. In this investigation, the E-R for a parameter (say, shelter) represents the mean of E-Rs across all related sub-parameters. M-R is also based on similar lines.

E-R and M-R for each of the regimes represent the average across related parameters observed for the regime. For instance, E-R / M-R for a parameter “shelter” represents the average of related parameters (termed sub-parameters) such as type, flooring, size, and shade availability.

Results have been presented comparing E-R and M-R as a means of comparing the extent of deviation present in the parameters observed. The difference between E-R and M-R (expressed as percentage) indicates deviations from the prescribed norm.

The same rating logic has been applied to the set of observed features for handlers, viz., comparison of mean rating for each of the observed variables (M-R) with those prescribed by the expert team (E-R). Greater deviation implies poorer socio-economic status.

**Results**

The elephant was observed and relevant personnel interviewed to get details about captive conditions; a total of 34 parameters were observed for the elephant and 7 for the mahout. Following are the ratings:

**Elephant welfare status**

- **Source of acquisition of elephant:**
  The elephant was purchased from Tithimati forest camp in 1987 when she was 8 years old. This would involve a change in living conditions from a forest based environment to an environment dominated by humans.

  *Rating for this parameter was 1.5, showing a deviation of 75% from ER.*
Elephant was kept in a tin shed all the time (both day and night); Tin shed was built close (about 100mts) to drainage that flowed further into the river near temple. Flooring was stone based and tapered, but water and urine tended to collect and stagnate. Food, water and elephant excreta were all done under same roof making the condition very unhealthy for elephant to live in.

**Rating for this parameter was 1.3 (se=1.2, n= 7) with a deviation of 84% from ER.**

Figure 1: Comparison between ER and MR for shelter related parameters
Rating shows more than 90% deviation from norms prescribed as acceptable for 6 of the 7 shelter related conditions.

Water and related parameters
Source of water was a tank built within the shelter; this was also used by the mahout’s family to wash their clothes. The elephant was also taken to the river flowing near the temple.

Rating was 3.2 (se= 1.0, n= 4) with a deviation of 60% from ER.

![Figure 3: Comparison between ER and MR for water related parameters](image1)

![Figure 4: Percent deviation from ER for water related parameters](image2)

Of 4 observed parameters, three showed deviation of 50% or more from ER indicating less than satisfactory conditions for these features.
➢ Opportunity to walk and related parameters

The elephant was walked on hard substrates (roads) outside the temple and stood on stone floors when inside.

**Rating for time of walk and nature of terrain were both 0.0 showing 100% deviation from ER.**

➢ Social interaction

The elephant was maintained singly, hence, there was no opportunity to interact with other elephants.

**Rating was 0.0 for this parameter showing 100% deviation from ER.**
Chaining

The elephant was chained by its fore and hind leg. There was no opportunity to range-free. Rating was 0.0 (se= 0.0, n= 3) showing 100% deviation from ER.

Figure 5: Comparison between ER and MR for chaining related parameters
All observed features related to chaining showed 100% deviation from prescribed norms (ER).

- **Behaviour**
The elephant was calm and obedient, responding to commands of the mahout and his family. Rating was 8.0 for observed behaviour and 9.0 for incidents of aggression (killing or injury) by the elephant showing no deviation from ER.

- **Work and related parameters**
The elephant performed temple rituals for a total of three hours in a day; blessing visiting devotees was also seen. Rating was 0.8 for work type (90% deviation from ER) and 0.0 for work duration (100% deviation from ER).

- Food provisioning
Stall feed was the major food source with opportunistic browsing on leaves and bamboo while walking to the river. Stall feed was leaves of banyan, banana, coconut, cooked ragi cakes and jaggery, rice mixed with Ghee and sugar.

**Rating was 3.3 (se= 2.1, n= 3) indicating a deviation of 63% from ER.**

![Figure 7: Comparison between ER and MR for food related parameters](image1)

![Figure 8: Percent deviation from ER for food related parameters](image2)

Except for number of items, type of food provisioning and hygiene maintenance were both rated such that deviation was 50% or more from ER.
Reproductive status
The elephant had been exposed to a captive male, several years ago. Exposure to males and opportunity to mate was not available as this elephant was maintained singly. Rating was 8.0 for exposure to males (no deviation from ER) and 0.0 for calf-birth (100% deviation from ER).

Health status and veterinary care
The elephant was overweight, had toe nail cracks, and suffered from an infected tush. Veterinary doctor was available on call. Rating was 5.5 (se=1.2, n= 5) with a deviation of 32% from ER.

Figure 9: Comparison between ER and MR for health and veterinary status
Application of oil and testing of samples appear to have been done as these features do not show any deviation from ER. Veterinary doctor too appears to have experience in treating elephants.

**Socio-economic status of mahouts**

Interviews with mahouts yielded information on his socio-economic status. This was used for rating the same.

- **Training**
  The mahout had not been trained either as a traditional occupation or by others in the same field. **Rating was 0.0 showing 100% deviation from ER.**

- **Occupation**
  The mahout worked in a bicycle repair shop before his present occupation; **rating was 0.0 showing 100% deviation from ER.**

- **Education**
  The mahout had not attended school, was illiterate; **rating was 0.0, showing 100% deviation from ER.**

- **Salary**
  Annual salary was Rs.10000/-; **rating was 0.0, showing 100% deviation from ER (acceptable norms).**
Overall rating for mahout was 0.8 (se = 0.9, n = 4) showing a deviation of 91% from ER. All observed features showed deviation of 50% or more from ER. As only 4 parameters were rated, the socio-economic profile of the mahout may change with availability of more information.

Figure 11: Comparison between ER and MR for mahout’s socio-economic profile
Overall rating for elephant

Pooling all observed parameters together, i.e., without categorizing them into sub-categories, rating for the elephant was 2.9 (se= 0.6, n= 34) showing a deviation of 64% from acceptable norms (ER). 71% of 34 parameters showed deviation of 50% or more from ER. 59% of all the parameters (n= 34) showed a deviation of 75% or more from ER.

The same elephant was rated for its welfare status in 2005 as part of a nation-wide survey on captive elephants. Overall rating from that survey was 3.4 (se= 0.6, n= 31) showing a deviation of 57% from ER. The rating appears to be comparable across the years.
Reference


