

Welfare Status of Temple Elephant Menaka



An Investigation into the Welfare Status of Temple Elephant Menaka of Shree Gayathri Devi Temple, Yeshwanthapur, Bangalore

SURENDRA VARMA, S. R. SUJATA AND SUPARNA GANGULY

Elephants in Captivity: CUPA/ANCF - Occasional Report No. 1



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Published by
Compassion Unlimited Plus Action (CUPA)
Veterinary College Campus, Hebbal, Bangalore 560 024 - India
www.cupabangalore.org

In collaboration with
Asian Nature Conservation Foundation (ANCF)
Innovation Centre,
Indian Institute of Science, Bangalore 560 012 - India
www.asiannature.org

Title: Welfare Assessment of Temple Elephant Menaka
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Suggested Citation: Varma, S., Sujata S.R., Ganguly, S. (2006) Welfare Status of the temple elephant Menaka: An Investigation into the welfare status of temple elephant Menaka of Shree Gayathri Devi Temple, Yeshwanthapur, Bangalore. Elephants in Captivity: CUPA/ANCF- Occasional Report No.1, Compassion Unlimited Plus Action (CUPA) and Asian Nature Conservation Foundation (ANCF), Bangalore, India.

First limited Edition 2006

Published by CUPA and ANCF

Printed by Thirumalagraphics, Bangalore

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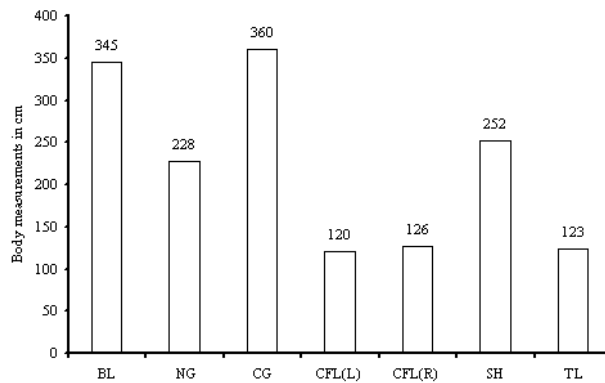
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ELEPHANT PROFILE

<p>Name of elephant</p> <p>Sex</p> <p>Age</p> <p>Location</p> <p>State</p> <p>Source</p> <p>Year of Birth</p> <p>Place of birth</p> <p>Age/Height/Weight at birth</p> <p>Type of shelter</p> <p>Type of flooring</p> <p>Source of water</p> <p>Interaction with other elephants (Yes/No)</p> <p style="padding-left: 40px;">Hours/day</p> <p style="padding-left: 40px;">Number of individuals</p> <p style="padding-left: 40px;">Personality</p> <p>Any behavioural problems</p> <p>Number of people killed/injured</p> <p>Stereotypic behaviour</p> <p>Type of work</p> <p>Source of food</p> <p>Food Type</p> <p>Disease reported/Permanent injury marks</p> <p>Veterinary doctor availability</p> <p>Number of mahouts changed</p>	<p>Menaka</p> <p>Female</p> <p>17</p> <p>Sri Gayathri Devi Temple Bangalore</p> <p>Karnataka</p> <p>Sakrebyl Elephant Camp</p> <p>August 5, 1990</p> <p>Sakrebyl Elephant Camp</p> <p>1.61 m</p> <p>1400 sq. ft. Sheet-roofed open enclosure</p> <p>Concrete</p> <p>Public Tap</p> <p>No</p> <p style="padding-left: 40px;">0</p> <p style="padding-left: 40px;">0</p> <p style="padding-left: 40px;">Calm</p> <p>Not known</p> <p>Nil</p> <p>Yes</p> <p>Temple related, (blessing devotees) and begging</p> <p>Stall-fed</p> <p>Rice, straw, hay, sugarcane, sweets</p> <p>Abscess on left rear leg</p> <p>Yes</p> <p>4</p>	  
		



BL: Body length, NG: Neck Girth, CG: Chest Girth, CFL (L): Circumference of foreleg Base (Left)
 CFL (R): Circumference of foreleg base (Right), SH: Shoulder height, TL: Tail Length

Mahout's Name	Badri Renukaiyya	Cawadi's Name	No cawadi
Age	28	Age as on 26-Jun-05	
Total experience as a mahout (in relation to his age) %	4.6	Total experience as a cawadi (in relation age) %	
Total experience with this elephant (in relation to elephant's age) %	17.9	Total experience with this elephant (in relation to elephant's age) %	
Community	Hindu	Community	
Trained or not	Trained	Source of training	
Family occupation	Agriculture	Family occupation	
Education	4th standard	Education	
Salary/year	Rs. 18,000/-	Salary/year	
Job status	Not known	Job status	
Marital status	Married	Marital status	
Number of children	Not known	Number of children	
Usage of tools	Yes	Usage of tools	
Type	Stick	Type	
Health status	Good	Health status	
Insurance	No	Insurance	
Source	NA*	Source	
Will his children join this profession?	Yes	Will his children join this profession?	
*NA : Not Applicable			

EXECUTIVE SUMMARY

This report is based on investigations into the welfare of Menaka, a 17-year-old female elephant held in captivity at the Sri Gayathri Devi Temple, near Yeshwanthapur Circle, Bangalore.

The animal was observed and the observations were recorded for parameters identified in an observation sheet. Each parameter was evaluated by a scoring pattern ranging from 0 to 10, 0 representing a bad welfare condition and 10, the closest to a satisfactory condition.

The score for type of shelter is 0 as she is in an enclosure with concrete floor and tin roof and is chained in it for 10 h a day. The mean score for shade-related parameters such as shade availability, type, size, and availability of day shade is 1.5.

Menaka meets her water needs from a public tap or through buckets; the mean for availability of rest, resting area, sleep, etc. across five parameters is 2. It scores 0 for signs of stereotypy and 2 for the intensity of stereotypy observed.

Menaka scores 0 for nature of work as it involves non-natural activities such as standing in front of a temple, seeking donations of money from the public. Menaka gets stall-feeding only; she is given rice, straw, hay, fruits, coconut and occasionally sugarcane along with sweets offered at the temple. Overall mean for food-related parameters is 3. Menaka is chained for 10 h/day and hence is given a score of 0.

It scores 10 for oestrus cycling as it is reported. However, this needs to be verified by qualified veterinarians.

An important aspect of scoring is the overall mean for elephant-related parameters which is 2.1. This implies bad captive conditions. For mahout-related parameters it is 4.6, indicating poor welfare conditions.

Menaka was prematurely separated from her family and this could have led to developmental trauma, relational trauma, premature weaning. Our findings reveal the urgent need for many critical improvements in the housing, feeding, bathing and exercise of this elephant.

INTRODUCTION

Menaka is a 17-year-old female elephant held in captivity at the Sri Gayathri Devi Temple, Yeshwanthapur Circle, Bangalore. She was born in a semi-natural environment (the Forest Camp at Sakrebyle, Shimoga) to a female elephant Kaveri which was a part of a herd of 22 elephants. After three years from birth it was separated, sold and transferred to an unnatural urban environment.

OBJECTIVES

- 1) To assess the status of the elephant in terms of welfare by evaluating variables related to its captive condition: the physical, social, behavioural and physiological features that are provided and characteristics of the elephant.
- 2) To assess the socio-economic status of the mahout and his experience with this elephant.
- 3) Each of the parameters evaluated has its own importance directly or indirectly in deciding the welfare of the captive animal. For instance, maintaining elephants in cramped shelters (<1600 sq. ft.) or in vast enclosures without any natural vegetation is not conducive to its well-being. Any shelter that approximates its natural conditions as closely as possible is considered ideal.

METHOD

The animal was observed and the observations were recorded for the parameters identified in an observation sheet. Each parameter was evaluated by a scoring pattern ranging from 0 to 10, 0 representing a bad welfare condition and 10, the closest to a satisfactory condition. This pattern is based on the deviations in its captive state experienced by the elephant from those observed in the wild. For instance, if the elephant is exposed to natural running water (having less contamination), it scores 10. If the source of water is not natural, such as a water-trough, with water being prone to contamination, it scores 0 (Appendices 1 and 2).

The same scoring pattern is applied to the mahout also with the premise here being sustainability of the profession in maintaining a set standard of lifestyle.

Rating values were graded in the following manner:

- ◆ 0-2.4 : bad conditions
- ◆ 2.5-4.9 : poor
- ◆ 5-7.4 : moderate
- ◆ 7.5-10 : satisfactory

RESULTS

Shelter

Menaka scores 0 for type of shelter, as she is in an enclosure with concrete floor and tin roof (Figure 1), and is chained in it for 10 h a day; this kind of enclosure will damage her feet and the tin roof does not provide enough cooling during the long summer months and can lead to dehydration, heat stroke, and an overall compromise to well-being. Sustained periods during hot weather can result in possible death.

She scores 0 for shelter size, as it measures only 20' × 20' and anything less than 40' × 40' is considered too small for an animal of the size of an elephant causing restriction of movement even more than what chaining imposes. AZA standards for zoo animals prescribe a minimum of 1800 sq. ft. for its external enclosures (AZA, 2003). An important parameter reflecting on the elephant's health is flooring in which the animal is housed (Kane *et al.*, 2005; Gage, J.L *et al.*, 2000). Consistent exposure to hard surfaces like stone/concrete could damage its feet (Benz, 2005). It scores 0 for concrete flooring in her shelter.



Figure 1: Semi-Open shelter

Six parameters pertaining to the shelter have been scored that are type, size, flooring, roof material, openness and shelter type (Figure 2a and b) during the day and night. The mean across these parameters is 0 (SE = 0.0, N=6).



Figure 2a: Shelter with tin roof
(Note vehicle garage in the background).



Figure 2b: Day shelter with concrete floor

Shade availability

Wild elephants use shade of available vegetation during the hottest parts of a day (Kurt and Garai, 2007). Shade is a parameter of value for a captive elephant, as the animal's ability to choose a suitable place is restricted by the size of the chain. Menaka's mean score for shade-related parameters such as shade availability, type, size, availability of day shade (Figure 3a and b) is 1.5 (SE = 1.4, N=4). These values reflect the freedom of movement provided to an elephant as scores have been given considering the duration of chaining.



Figure 3a: Deficiency of shade in shelter
(Note a few eucalyptus trees in the background)



Figure 3b: Absence of shade.

Access to water

A factor of immense importance for a captive elephant is access to water both for drinking and for bathing which relate to several key functions in elephant ecology and behaviour (e.g., temperature regulation, hygiene, well-being, and hydration). Wild elephants have home ranges which include a source of water (McKay, 1973) and they drink once a day (Shoshani and Eisenberg, 1982). Menaka quenches her thirst from a public tap or from buckets (Figure 4a and b).

This method has both positive and negative aspects: (a) flowing or running water reduces chance of disease occurrence and simulates to a small extent natural conditions of flowing streams, (b) the potential for contamination of a public water source by the elephant and equally importantly when Menaka needs to drink water, she cannot access it independently. Hence, source of water for drinking and bathing is given a score of 3. Menaka drinks less than 100 l/day, while in the wild the free-ranging elephants consume an average of over 200 l/day (Sukumar, 2000). Hence, her score for quantity of water is just 1. Her mean score for water-related parameters such as distance to water source, number of times of bath, etc. is 3 (SE = 0.8, N=6).

Rest and sleep

The mean for availability of rest, resting area, sleep, etc. across five parameters is 2 (SE = 0.52, N=5). The score for rest and sleeping place is 0 as the shelter space forms both the resting and sleeping place; the shelter score is 0. The sleep pattern is different from wild elephants. Noise and exposure to people therefore may not allow the animal to relax, and poor physical condition and discomfort also may contribute to poor sleep which in turn undermines its well-being, increasing its proneness to diseases.

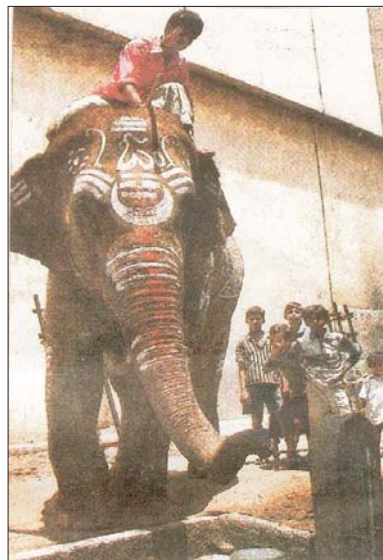


Figure 4a: Drinking water from Tap

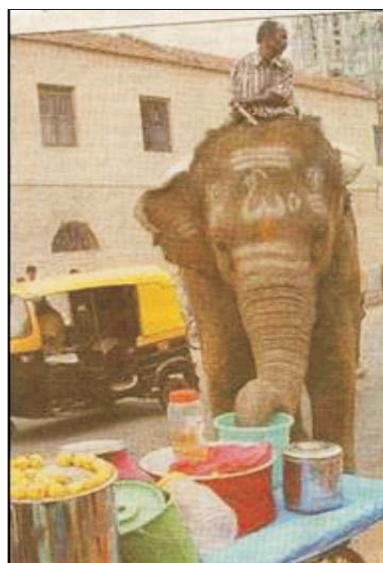


Figure 4b: Drinking water from Bucket

Physical activity

Physical activity also reflects on the status of a captive animal's condition. Too much or too little activity leads to deterioration of health especially causing foot-related problems (cited by Benz, 2005). Her mean score for walking is only 2 (SE = 1.9, N=3) for parameters such as being allowed to walk, nature of terrain and duration of walking (Figure 5a and b). A special mention must be made of the nature of terrain as the elephant is made to walk on hard surfaces like roads in Bangalore. Her rating for this feature is 0. Wild elephants on an average walk tens of kilometres daily. This is critical for mental and physical well-being (through blood circulation).



Figure 5a: Walking on tar road.



Figure 5b: Walking in residential area.

Interaction

Elephants are social obligates, but Menaka scores only 1 for this feature as her access to other elephants and duration or number of individuals is not known.

Behaviour

The behaviour that an elephant exhibits indicates the ease with which its keepers can handle the animal. Menaka scores a rating of 10 as she is reported to be calm. However, the animal might be calm due to negative conditioning. Calmness in the given context of her keeping likely reflects depression and physical deprivation which may have weakened her.

Stereotypy

A behavioural feature used as a standard in evaluating captive animals is the occurrence of stereotypy which is the repeated invariant occurrence of behavior(s) expressed by animals in captivity that are not functionally appropriate in the context of available environmental stimuli (King, 2003). Menaka scores 0 as she shows signs of stereotypy and also gets a score of 2 for the intensity of stereotypy observed.

Nature of work

Work is a defining feature of elephants in captivity as this determines the nature and degree of restriction imposed on their natural behaviour. Menaka scores 0 for nature of work as it involves in non-natural activities such as standing in front of a temple, seeking donations of money from the public (Figure 6a and b), etc. Again the effects of these activities in health are best assessed from the perspective of stress and the degree and way in which they deviate from normative conditions of behaviour and activity in wild elephants.



Figure 6a: Work 1: Begging from public.



Figure 6b: Work 2: Blessing.

Menaka is made to seek donations from public and in the process is made to bless them. This is a cause of stress for the animal as:

- a) This is not natural to an elephant's behavioural repertoire.
- b) This activity involves training.
- c) There are chances of the animal being overworked by mahouts who do not pay attention to its welfare but only concentrate on the amount of money they can extract.
- d) Constant rising of trunk, during the process of blessing, adds to stress for the animal.

There is no provision of shade during working hours; hence, this feature also gets a score of 0. Eight work-related parameters have been scored, with a mean of 0.875 (SE=0.4, N=8).

Food and type

Elephants graze and browse on a variety of plants numbering more than a hundred species (Sukumar, 2000). Those not allowed to free range will not be able to forage for themselves. This reflects on their health as the range of vegetation used by free-ranging elephants cannot be matched by the stall-fed ones. In short, we may

understand measures of elephant welfare in practice by mahouts as dictated by financial parameters and not on elephant health considerations. The elephant's welfare is based on an economic model but not on the well-being of the animal. As Menaka is allowed only stall-feeding, her score for food source is just 5. Its score for food type is 2 as she is given rice, straw, hay, fruits, coconut and occasionally sugarcane along with sweets offered at the temple. Overall mean for food-related parameters is 3 (SE = 1.7, N=6).

Chaining

Captive elephant movement is restricted through chaining (Figure 7a and b). Menaka scores 0 for this feature as she is chained for 10 h/day. One aspect that needs to be highlighted is the use of a scooter chain (chain used for securing two-wheelers) around her neck, which has led to marks in this region and might result in abrasion-related infections. Improper fixing of chains and consistent chaining at the same region of the body may lead to injuries and wounds which could be hard to treat (Kurt and Garai, 2007). Her score for chain type is 0. Chain-related features such as type, dimensions, region of chaining, etc. have been scored. Her mean score for all these parameters is 0.57 (SE = 0.32, N=7).



Figure 7a: Tied by 1-foot chain (Note: unhygienic conditions).

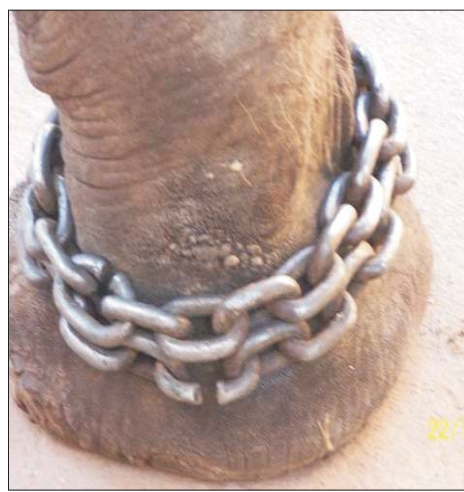


Figure 7b: Chain size and region.

Reproductive status

Occurrence of oestrus cycle is an index of an animal's reproductive health. Menaka is given a score of 10 as she is reported to be in cycling. However, this has to be verified by qualified veterinarians. The animal seems to have been exposed to males in semi-wild conditions,

with no breeding success. In fact, she seems to have shown abnormal disinclination towards males. This indicates that capture and captivity have severely compromised its basic behaviour and biology provides light on the non-breeding status of the animal and the care taken by its keepers in maintaining the animal's normal reproductive health. Among various causes, isolation, poor nutrition and stress due to harsh handling are linked to abnormal reproductive status (Clubb and Mason, 2002).

Injuries/disease

A direct way of assessing an animal's health status is to check its disease profile or occurrence of injuries/diseases. Menaka is given a score of 1 for leg injury (Figure 8a, b and c). As details on the number of locations of lacerations were not provided, a score of 1 has been given to reflect on the stress the animal goes through due to the injury.



Figure 8a: Abscess on left rear leg.

Figure 8b: Dry and poor skin condition. Figure 8c: Damaged foot.

Veterinary facility and infrastructure

Menaka gets a score of 10 for availability of veterinary facility. Although a veterinary doctor has been given charge of this elephant, use of this facility is reported to be very limited. The overall mean score for veterinary and related infrastructure parameters is 5.2 (SE = 2.4, N=6).

Mean rating presented in Figure 9 represents mean for a variable across ratings which are related. Hence, the rating for the variable shelter refers to mean value considering all observed shelter parameters, in this case seven aspects include shelter type, size, open/closed, floor type, flooring during day/night, daytime and night time shelter types.

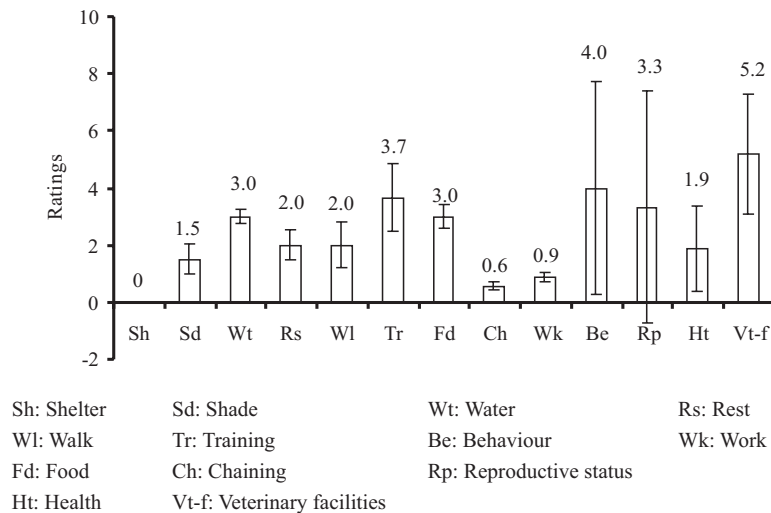


Figure 9: Mean rating for observed parameters for Elephant Menaka.

High variation observed in some of the parameters could be attributed to two factors:

- a. The parameters rated for the elephant include 'presence or absence' variables which can only be rated in either one of two values: 0 or 10. Such parameters formed 24% of all the variables. Ten scores from such parameters contributed to 10.6% of all the ten values recorded.

The presence of a parameter (with consequent 10 rating) was not followed by high rating for related variables of that parameter. For instance, the parameter 'Training' was given a mean rating of 3.6 (SE = 3.9, N= 3) which included one '10 or 0' variable. When the '10 or 0' variable was removed, the mean rating was 0.5 (SE = 0.7, N =2) implying relatively poor conditions of related variables.

- b. Lack of information regarding related parameters: The feature 'Behaviour' included two '10 or 0' variables from among the observed three variables. However, further information regarding related aspects such as incidents of aggression/ disobeying the mahout, etc. could have reduced the observed high variance values.

Socio-economic status of the mahout

The relationship that a mahout shares with his elephant reflects on the well-being of the animal and keeping this in view, the mahout's welfare status was assessed using several parameters representing physical, social, economic conditions and his relationship with the animal. The current mahout has been with this elephant for the past 6 years; overall mean score is 4.6 (SE = 1.08, N=20). The mahout's relation with the elephant was assessed using parameters such as knowledge of commands, use of tools, experience with this elephant and his attitude towards it; he gets a mean rating of 4.3 (SE = 2.1) showing poor conditions. Rating for socio-economic status showed a mean of 5.4 (SE = 1.4) indicating moderate conditions. This parameter was rated considering features such as availability of accommodation, number of children, wages paid, etc.

Overall welfare value for Menaka

An important aspect of scoring is the overall mean for elephant-related parameters which is 2.1 (SE = 0.42, N=66) implying bad captive conditions and for mahout-related parameters it is 4.6 (SE = 1.1, N=20) indicating poor welfare conditions.

It should be noted that for the elephant, 86.7% of scored parameters fall within 0–5, while scores between 0 and 2 form 76.4% of all the parameters (Figure 10). Each of these parameters representing the living environment of Menaka captures the state the animal is in. Scores between 0 and 5 represent poor welfare status.

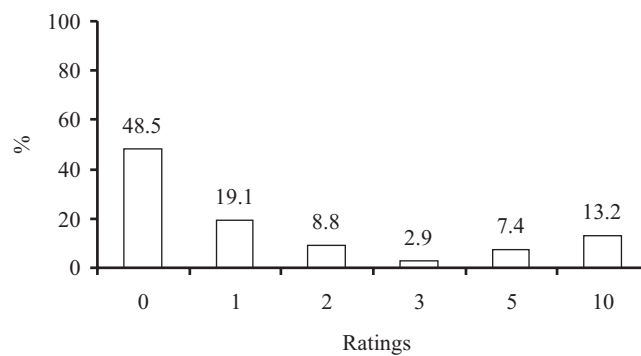


Figure 10: Percentage occurrence of rating for elephant Menaka.

Summary of observations and recommendations on future upkeep, maintenance and housing of elephant Menaka

Menaka was prematurely separated from her family and this could have led to developmental trauma, relational trauma, and premature weaning. Our findings

reveal the urgent need for many critical improvements in the housing, feeding, bathing and exercise of this elephant. They are very important factors in the long-term welfare and maintenance, if not of more significance than the external manifestation of outward signs of torture. For example, the animal may appear healthy but overfeeding with wrong foods, standing on concrete surfaces for long periods, walking on hard and tarred roads can be extremely damaging to its health and psychological status. Both acute (e.g., specific beating) and chronic (e.g., poor housing, poor nutrition, presence of multiple stressors such as overworking, no heat protection, social isolation) conditions need to be reviewed.

The occurrence of near-natural conditions is integral to an animal's health and well-being (Figures 11a, b, c, d and e reflect natural surface, sufficient water, mud bathing, and interaction with other elephants, which are almost equivalent to natural conditions).



Figure 11a: Sufficient water and scrubbing.



Figure 11 b: Mud bathing after bath.



Figure 11c: Friendly interaction



Figure 11d: Mud bath and social interaction.



Figure 11e: Feeding and social interaction. (Note the earthen floor).

Specific observations and recommendations for Menaka

Skin

This elephant is not exposed to clean and adequate water. Its external appearance is poor with dry and infected skin condition.

To improve the condition, daily bathing and scrubbing in running water as in a river or lake is essential. Bathing should be twice daily, for a minimum of one hour, each time.

Foot

The problem is associated with the surface in which it is housed and the walking terrain. Animal should not be made to stand on concrete floors or walked on tar roads. This, if continued, will lead to irreversible foot problems.

Floor

Concrete floor is the main cause of her poor foot condition. Her unhygienic surroundings need to be changed immediately. Flooring needs to be packed with earthen floor only. Utmost cleanliness is required.

Stereotypic behaviours (vigorously shaking, bobbing or nodding the head and trunk) is a reflection of boredom and stress. This condition can lead to physiological disorders. Such stress leads to unpredictability in behaviours and hyper aggression. The motivation for treatment therefore can be argued from the standpoint of elephant and mahout well-being. To prevent this, exploring the possibility of shifting her to a place where interactions with other elephants are possible will be beneficial without chaining to allow for free movement. She needs to be able to interact with other elephants and be in touch with other elephants everyday consistently (e.g., same elephants, group fidelity).

Shade and shelter

Poor conditions of shade and overall environmental surroundings have resulted in poor skin, body and leg conditions. The elephant must be allowed to live in natural space, floor and environment. At least one acre of natural space with natural shade, without tin or metal sheds is necessary. Menaka should be left to roam without chains. Presently she is chained for 10 hours and then walked and forced to beg on streets.

Food

It is reported to have constipation and dehydration as indicated by small-sized dung bolus; this reflects on the serious inadequacy of food and water intake. She has been observed scavenging from local vegetable markets and garbage. She must have access to forage naturally and choice of foods that provide the spectrum of nutrition for the elephant. Menaka needs to be fed regularly and in adequate quantities. It should not be under or overfed. A quantity not exceeding 150-200 kg comprising grains, fresh green grass, hay, plantain leaves, vegetables and fruits, horse gram, ragi, etc. should be given.

ACKNOWLEDGEMENTS

The captive elephants in Karnataka were surveyed with financial assistance from the State Forest Department (Wildlife) and the World Society for Protection of Animals (WSPA), UK.

The former also provided the necessary permissions and assistance. Special thanks are also due to Rajendra Hasbhavi, Shama Karkal, and Karthik, who provided critical data and information of the animal. Gay Bradshaw, founder and Director of the Kerulos Center for Animal Psychology and Trauma recovery, USA and Dr. Shiela Rao of Compassion Unlimited Plus Action (CUPA) provided critical inputs. Sreenivasa Rao and Susanto Sen provided editorial support.

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Appendix 1 Rating values for female elephant Menaka

Sl.No	1	2	3
Parameter rating value	Shelter type 0	Area of enclosure 0	Open/Closed shelter 0
REASON FOR SCORES	Man-made enclosure: Tin/Asbestos = 0	< 10,000 sq.ft. = 0	Open shelter + No protection from weather conditions = 0
Sl.No	4	5	6
Parameter rating value	Flooring type 0	Flooring (Day/Night) 0	Daytime shelter 0
REASON FOR SCORES	Hard floor (Stone/Concrete) = 0	Hard floor (Stone/Concrete) = 0	No shelter, in the open = 0
Sl.No	7	8	9
Parameter rating value	Night time 0	ShelterShade availability 10	Shade type 1
REASON FOR SCORES	Man-made enclosure Tin/Asbestos = 0	Shade available = 10	Man-made: Tin/ Asbestos = 1
Sl.No	10	11	12
Parameter rating value	Shade area 0	Day shade 0	Distance to water source 1
REASON FOR SCORES	Man made shelter < 40' x40' = 0	No shade = 0	Ease of accessibility for an elephant who is not free ranging 24 h: 10 to 100 ft. = 1
Sl.No	13	14	15
Parameter rating value	Drinking water source 3	Bathing water source 3	Qty. of water per day 1
REASON FOR SCORES	Tap water = 3	Tap water = 3	Adult elephants (not free ranging, i.e., access to water is controlled): 50-100 l = 1

Sl.No	16	17	18
Parameter rating value	Bathing freq per day 5	Bathing materials 5	Type of resting place 0
REASON FOR SCORES	Adult elephants (not free ranging, i.e., access to water is controlled): once a day = 5	1. Any natural material (Pandanus/Mundakai/coconut fiber) = 10 2. Plastic brush/stone/soap = 0	Resting place same as shelter = 0
Sl.No	19	20	21
Parameter rating value	Resting area 0	Sleep 10	Place of sleep 0
REASON FOR SCORES	Man-made enclosure, < 40' × 40' = 0	Allowed to sleep = 10	Man-made resting place: Hard floor + tin/asbestos roof = 0
Sl.No	22	23	24
Parameter rating value	Sleeping area 0	Walking 1	Walking area 0
REASON FOR SCORES	Man-made enclosure, < 40' × 40' = 0	Allowed to walk = 10	Tarred roads/ hard surfaces = 0
Sl.No	25	26	27
Parameter rating value	Speed of walk 5	Interaction with other elephant(s) 1	Training 1
REASON FOR SCORES	< 1 km/h and < 5-6 km = 5	No details regarding duration/day + No details regarding number of individuals + Interaction reported = 1	No details on training type + trained = 1

Sl.No	28	29	30
Parameter rating value	Duration of training 0	Retraining 10	Behaviour 10
REASON FOR SCORES	> 6 months = 0	Retraining not needed = 10	Calm =10: Reflects the elephant's apparent degree of comfort with its environment and ease with which the elephant can be handled.
Sl.No	31	32	33
Parameter rating value	Stereotypic behaviour 0	Intensity of stereotypic behaviour 0	Work type 0
REASON FOR SCORES	Stereotypic behaviour observed = 0	Stereotypic behaviour low = 2	For temple, worshipping/ blessing, etc = 0
Sl.No	34	35	36
Parameter rating value	Work duration 0	Seeking donations 0	Shade during work 0
REASON FOR SCORES	> 5 h a day = 0	For temple, worshipping/blessing, etc = 0	No shade available = 0
Sl.No	37	38	39
Parameter rating value	Water availability during work 2	Feeding during work 2	No. of food items during work 1
REASON FOR SCORES	Water available + limited quantity of water (< 10 l) = 2	Animal is fed + animal is given food (Not all three types) = 2	Provision of < 3 types = 1
Sl.No	40	41	42
Parameter rating value	Stall + free range feed 5	Special food 1	Number of food items/day 1
REASON FOR SCORES	Only stall-fed = 5	Provision of any one type =1	Provision of < 3 types = 1

Sl.No	43	44	45
Parameter rating value	Using Ration Chart 0	Food type 0	Providing straw/Hay 10
REASON FOR SCORES	Not used = 0	Provision of sweets/bread, etc = 0	Provision of straw = 10

Sl.No	46	47	48
Parameter rating value	Free-ranging/ chained 0	Chain type (neck) 0	Region/location of chaining 0
REASON FOR SCORES	Chained = 0	Neck chain score = 0 as scooter chain is used.	One leg + neck = 0

Sl.No	49	50	51
Parameter rating value	Chain weight/ Leg 1	Chain type (neck) 1	Region/location of chaining 0
REASON FOR SCORES	< 10 kg = 1	< 5 kg = 1	< 50 ft. = 0; Longer chain length provides relatively more freedom of movement to the animal

Sl.No	52	53
Parameter rating value	Chaining duration 0	Distance of chaining place from work place 2
REASON FOR SCORES	Chained for > 5 hrs + no free range = 0	0100 ft = 2; in case of any emergency if mahout is not close by, the elephant might suffer. On the other hand, for captive elephants, if work place and chaining place are the same, the animal will not have any change in its routine every day (like caged animals). Hence, a lower score of 2.

Sl.No	54	55	56
Parameter rating value	Free ranging at night 0	Alternate food during Musth/ Pregnancy 0	Occurrence of Heat cycles 10
REASON FOR SCORES	Not allowed to free-range = 0	No change in food = 0	Cycling = 10

Sl.No	57	58	59
Parameter rating value	Allowing to Breed 0	Injuries 1	Disease/Injury intensity 1
REASON FOR SCORES	Not allowed to breed = 0	Injury present, but location and number of injury not known = 1	Cause of disease not known, but reported = 1

Sl.No	60	61	62
Parameter rating value	Visible signs of harsh handling 0	Availability of Veterinary doctor 10	Experience in treating elephants 0
REASON FOR SCORES	“Discoloration in neck due to bell and chain, Marks of metal ankush”	Doctor available = 10	No experience with elephants= 0

Sl.No	63	64	65
Parameter rating value	Experience with other animals 0	Value for Vet visit freq 1	Status of staff quarters 10
REASON FOR SCORES	cattle/sheep/goat = 0	Rare = 1	Available = 10

Sl.No	66	67	68
Parameter rating value	Freq of replacement of rope 0	Mahout number 10	Camp assist number 10
REASON FOR SCORES	Not replaced in > 1 year = 0	Ratio of Mahout:elephant 1:1 = 10	Available = 10

Appendix 2 Rating values for Menaka's mahout

Sl.No	1	2	3
Parameter rating value	Mahout's experience 5	Choosing mahout as profession 10	Trains as Mahout/ Cawadi 10
REASON FOR SCORES	If mahout's age is 15, 50% of elephant's age, score = 5	If mahout chooses this profession with interest/found it attractive = 10. Choosing mahout profession is due to one's interest is given a higher value as this implies a liking for the job.	Trained = 10
Sl.No	4	5	6
Parameter rating value	Family occupation 0	Mahout's education 5	Father's occupation 0
REASON FOR SCORES	If family occupation is not related to elephant care = 0	Educated: 1st9th standard = 5	Father/grandfather Mahout = 10
Sl.No	7	8	9
Parameter rating value	Wages 1	Education status of family 0	Accommodation 10
REASON FOR SCORES	If salary is Rs. 1000-2000/- per month = 1	Not educated = 0	Accommodation available = 10
Sl.No	10	11	12
Parameter rating value	Tool type of accommodation 10	Knowledge using commands 10	Tool used while giving commands 0
REASON FOR SCORES	Separate permanent house = 10	Good knowledge of commands = 10	Uses tool = 0
Sl.No	13	14	15
Parameter rating value	Tool type 1	Health status 10	Health check-up 0
REASON FOR SCORES	uses tool = 0	Good health = 10	Not checked = 0

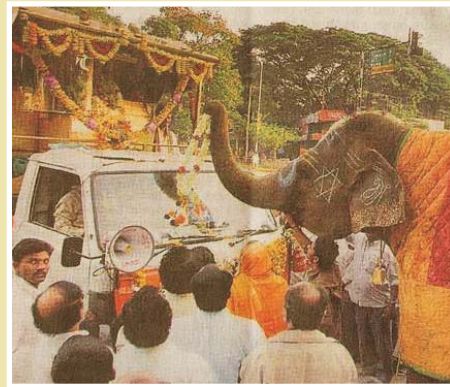
Compassion Unlimited Plus Action (CUPA) is a non-profit public charitable trust registered in 1991 that works for the welfare of all animals. Since 1994, CUPA has worked in close collaboration with government departments and agencies on various projects. CUPA's mission is to protect animals from abuse and violence and do what may be required to alleviate their suffering at the hands of humans. CUPA does not differentiate among pet, stray or wild animals, since all of them require assistance and relief from cruelty, neglect and harm. The organisation's objective has been to design services and facilities which are employed fully in the realisation of these goals.

Wildlife Rescue and Rehabilitation Centre (WRRC) is a registered public charitable trust for the welfare of wild animals and birds that often find themselves trapped in an urban environment. The Trust is a sister concern of CUPA and both organisations complement each other in their services. WRRC was established as a separate Trust in 1999.

Asian Nature Conservation Foundation (ANCF) is a non-profit public charitable trust set up to meet the need for an informed decision-making framework to stem the rapidly declining natural landscape and biological diversity of India and other countries of tropical Asia. The Foundation undertakes activities independently and in coordination with governmental agencies, research institutions, conservation NGOs and individuals from India and abroad, in all matters relating to conservation of natural resources and biodiversity, endangered flora and fauna, wildlife habitats and environment including forests and wetlands. It participates and disseminates the procured information, knowledge and inferences in professional, academic and public fora.

World Society for Protection of Animals (WSPA) With consultative status at the United Nations and the Council of Europe, WSPA is the world's largest alliance of animal welfare societies, forming a network with 910 member organisations in 153 countries. WSPA brings together people and organisations throughout the world to challenge global animal welfare issues. It has 13 offices and thousands of supporters worldwide.

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Menaka, a 17-year-old female, was born in a semi-natural environment to a female elephant which was a part of a group of 22 elephants. Within three years it was separated, sold and transferred to an unnatural urban environment. This report assesses the status of this elephant in terms of welfare by evaluating variables related to its captive condition: the physical, social, behavioural and physiological features provided to and characteristic of the elephant.

