

Welfare Assessment of the Elephant Girija Prasad



AN INVESTIGATION INTO THE WELFARE STATUS
OF THE ELEPHANT GIRIJA PRASAD (MANIKANTAN)

Pre- & Post-Seizure Status

SURENDRA VARMA

Elephants in Captivity: CUPA/ANCF - Occasional Report No. 2



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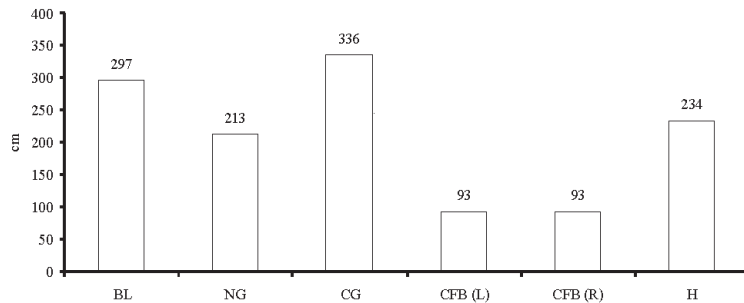
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Profile of Gijrija Prasad alias Manikantan

Name of the elephant	Girija Prasad	
Age (years)	20	
Sex	Male	
Type of ownership	Currently confiscated	
Tusk	Full grown	
Origin of animal	Kerala, then a Aiyappa Swamy Temple, Jalahalli, Bangalore	
Current location of the animal	Bannerghatta Biological Park, Bangalore	
State	Karnataka	
Year of source	2005	
Age/height at source	18	
Location of origin	Bangalore	
State	Karnataka	
Type of shelter	Open/Natural	
Type of flooring	Mud/concrete	
Source of water	Lake	
Interaction with other elephants	Yes	
Hours/day	12	
Number of elephants interacted with	9	
Personality	Calm	
Number of people killed/injured	0	
Stereotypic behaviour	Yes	
Type of work	Currently no work	
Hours/day	NA*	
Source of food	Free ranging/stall-fed	
Type of food	Free ranging, cut grass	
Status of musth	First musth reported in Aug'07	
Number of calves sired	0	
Type of disease reported	No chronic diseases	
Availability of veterinary doctor	Yes	
Number of mahouts changed	15	





KEY

BL: BODY LENGTH, NG: NECK GIRTH, CG: CHEST GIRTH, CFB (L): CIRCUMFERENCE OF FORELEG BASE (LEFT), CIRCUMFERENCE OF FORELEG BASE (RIGHT), H: SHOULDER HEIGHT

Mahout name	Kumar
Age (years)	20
Community	Jenu Kuruba
Mahout's experience (years)	6
Total experience with this animal (years)	0.5
Source of training	Experience
Mahout's father's occupation	Agriculture
Mahout's grandfather's occupation	Daily wage earner
Education	5 th standard
Salary/year	Rs 30,000
Job status	Permanent
Marital status	Not married
Number of children	NA
Type of tool used	Stick
Health status	Good
Insurance	No
Source	NA
Will his children join this profession	Not known

*NA: NotApplicable

Executive Summary

This report is based on an investigation into the welfare of the elephant Girija Prasad or Manikantan covering two phases of his life, representing pre-and post-confiscation or seizure.

Manikantan's case reflects the anomalies of a temple elephant's existence in a severely restricted environment, which when contrasted with his current life in a semi-natural condition, reveals the effects of faulty management and knowledge on captive elephants that can destroy such a precious Schedule I animal.

The report has evaluated the conditions based on several parameters that have been strictly scrutinised for any deviation from scientific integrity. It incorporates the logic of a questionnaire that has been based on the protocols devised for Karnataka and eventually the all-India Survey of Captive Elephants and Mahouts, the former being commissioned by the State Forest Department.

A pool of scientists, veterinarians, elephant camp managers, NGOs, and researchers created an in-depth questionnaire through two detailed workshops in 2005. Technically supported by the Asian Elephant Research and Conservation Centre (a division of Asian Nature Conservation Fund ANCF), this study researched the use of space, occurrence of biologically suitable environments, availability of funds and resources for the management and keeping of captive elephants.

Based on the data collected through observation and interview, it becomes evident why this elephant had to be confiscated given a background of lack of resources like manpower, space and enrichment (interaction with other elephants). Girija Prasad has changed mahouts more than 15 times in his short life of 18 to 20 years.

The rapid changes of inexperienced handlers, lack of interaction, brutal training to learn temple duties, lack of space and rest, all contributed to making him a “disturbed animal”.

His return to his former lifestyle may lead to more aggression and violence, which could eventually result in public safety issues, posing a threat to the temple devotees and other members of the public.

Background

Externally visible, apparent wounds and injuries are usually the criteria used to judge cruelty inflicted on animals. The influence of non-visible factors on cruelty is not given due importance and its role in affecting an animal's physical and mental health is disregarded. The cruelty inflicted varies widely compared to animals like street dogs and is very different from that associated with captive elephants. Though they are large-bodied and sturdy, an elephant's physical, physiological as well as psychological constitution is not suited for living in any unnatural and alien environment with conspicuous absence of features that is of biological significance to an animal. The elephant has not been domesticated despite being put to use by humans over thousands of years.

Elephants are a highly social, intelligent and long-living species with a very complex system of communication (Poole and Moss, 2008). Females and their calves form the core unit of elephant families; females of all age classes stay in their group throughout their lives, while males disperse from the group at sexual maturity and lead semi-solitary lives with varied interactions among males in the wild (McKay, 1973). Bulls associate with their maternal herds till pubertal age, that is around 15 years and disperse gradually from their herds (Vidya and Sukumar, 2005).

Depending on the forest type, food and other resources available, wild elephants walk about 8 to 12 km / day in search of food and water. In a man-made environment or restricted space of captive environment, they do not forage for food. However, they should exercise at least a little and socialise to keep themselves active and healthy. Wild elephants are active for nearly 18 to 20 h a day (75 to 83%) (Eisenberg, 1981), but in captive conditions they move only for 33% of the day with chains; they stand in one place for long hours affecting their health or behaviour.

Depending on the temperature and humidity of a given place, an elephant drinks more than 200 l of water a day (Sukumar, 2000); they need to be bathed at least once a day (Shoshani and Eisenberg, 1982). Spraying of dust/wallowing seen among wild elephants helps in thermoregulation and acts as an insect repellent (Shoshani and Eisenberg, 1982). Mahouts/handlers bathe the captive animals and scrub the skin for removal of parasites/dead cells/dirt (Kurt and Garai, 2007).

Elephants kept in unnatural substrates or made to walk long periods exposed to the hot sun have severe heat-related problems. The large surface area of the elephant along with its rudimentary sweat glands makes the animal vulnerable to exposure to excessive temperatures as it depends on heat loss from its body surface especially its ears (Weissenbock, 2006). Elephants that are kept in the open or on concrete/tarred substrates face severe heat-related problems, as these surfaces reflect more heat. Absence of shade during the most sun-intensive hours results in eye diseases and, in conjunction with poor nutrition, could lead to total blindness (Kurt and Garai, 2007).

In comparison with other herbivores that feed on similar food, dry matter digestibility of elephant is lower (Fowler and Mikota, 2006). Free-ranging elephants digest foods to a greater

extent than captive elephants. Inadequate or low nutrient diet also causes intestinal problems, enteritis, colic and impaction. Horses whose digestive system is similar to that of elephants have been reported to suffer from colic due to poor nutrition, rapid consumption of feed, changed feeding routine/quantity and absence of water (Ullrey *et al.*, 1997). Elephants which starve for a while tend to eat more, and need food in smaller quantities and at frequent intervals. They manipulate their food items and those that make them use their feet, knees, trunk and other parts of body providing a high rate of activity are ideal.

(Kurt and Garai, 2007). Excessive body weight is said to be one of the causes for non-cycling in adult females (Clubb and Mason, 2002).

Given the complex social system and associated interaction among all individuals in an elephant herd, it is of immense importance to maintain captive animals in a group. Aggression among elephants may be attributed to different causes, with bulls becoming aggressive during musth (Kurt and Garai, 2007). Coupled with this, the practice of exerting dominance on an elephant through punishment/negative reinforcers will lead to aggression towards humans (Clubb and Mason, 2002).

Investigation

The main objective of this investigation is to assess the welfare and the status of cruelty inflicted on the male elephant Girija Prasad (aged 20 years). The elephant is presently housed at the Bannerghatta Biological Park following rescue from a temple. His well-being under previous and current ownership is assessed here.

Welfare and cruelty status have been measured in terms of a number of ecological, management and veterinary parameters such as the type of shelter provided, area of the shelter, flooring type available, provision of food, types of feed provided, provision for interaction among elephants, availability of veterinary care, etc. (see Appendix 1 for parameters used for the survey).

Methods

The animal was observed and parameters were recorded in an observation sheet. Each parameter was evaluated by a scoring pattern. For instance, an elephant exposed to natural running water (since running water has relatively less contamination) is given a score of 10. If source of water is not natural, such as a water-trough, with water being prone to contamination, a score of 0 is given.

Each of these parameters has its own importance directly or indirectly in deciding the welfare of the captive animal. For instance, maintaining an elephant in cramped shelters (<1600 ft²) or in vast enclosures without any natural vegetation is not conducive to its welfare. Any shelter that approximates its natural conditions as closely as possible is considered ideal for the animal.

Observations:

I. Status of shelter

Pre-seizure: Mean for shelter and associated parameters was only 2.8 (Standard error SE = 1.9, N=7); shelter size, type of flooring and type of facilities provided were assigned 0 due to their quality (Figure 1).

Post-seizure: Mean for shelter and associated parameters improved to 8.2 (SE = 1.5, N=7); shelter size, type of flooring and facilities provided were assigned 10 due to their quality.

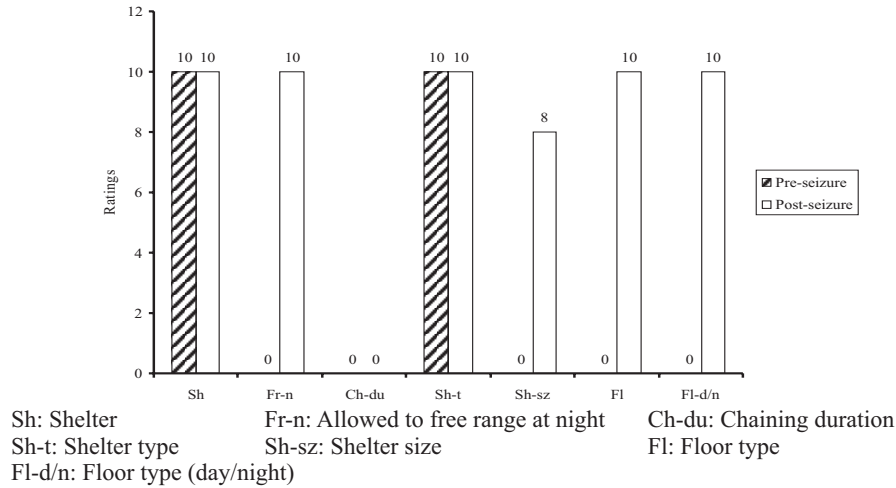


Figure 1: Rating for shelter and associated parameters.

II. Status of shade

Pre-seizure: Mean for shade and associated parameters was only 5 (SE = 1.1, N=7); the value for area (size) of shade was 0 (Figure 1).

Post-seizure: Mean for shade and associated parameters (Figure 3) is, 10 (SE= 0 N=7). The shade is natural (Figure 2), and the animal has the opportunity of utilising the shade when needed. Type, quality, and area (size) of shade is also different now; overall hygiene of the enclosure also improved effectively. The floor is an earthen one, hence, there are no problems associated with heat being reflected off from concrete floors during sun-intensive hours.



Figure 2: Natural shade, unchained post-seizure.

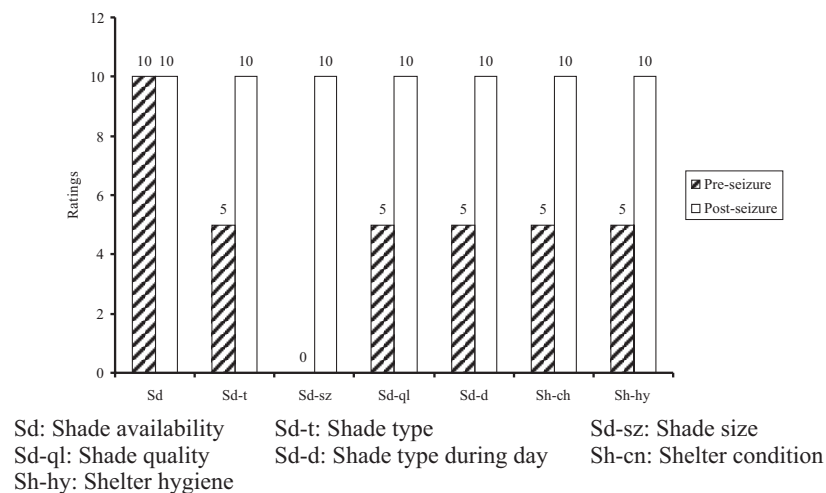
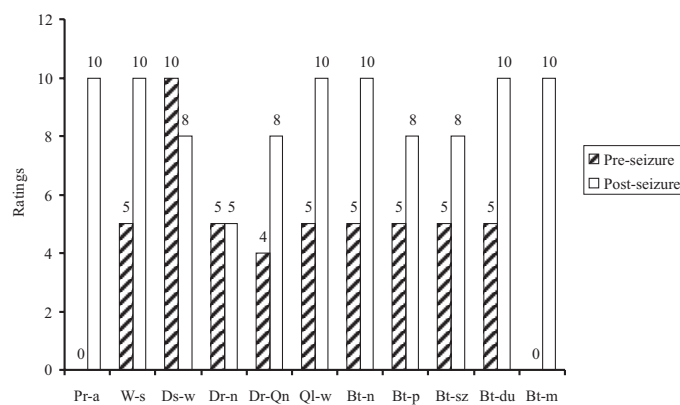


Figure 3: Rating for shade and associated parameters.

III. Access to water

A factor of immense importance for a captive elephant is access to water, both for drinking and bathing. Every animal is dependent on water but for an elephant its dependency on water is very critical. Wild elephants drink water at least once a day (Shoshani and Eisenberg, 1982).

Pre-seizure: Mean value for water and associated parameters was only 4.5 (SE = 0.8, N=11), the value for source and material used for bathing received 0 (Figure 4). The elephant had access to water through taps only, although implying the availability of running water (less contaminated), its availability and quantity are restricted; it has to depend on the mahout when in need.



Pr-a: Availability of perennial running water source
 Ds-w: Distance to water source
 Dr-n: Number of times/day drinking water
 Dr-Qn: Quantity of water drinking/day
 Bt-n: Number of times bathing/day
 Bt-p: Bathing place
 Bt-sz: Bathing place size
 Bt-du: Bathing duration
 Bt-m: Bathing materials
 W-s: Water source
 Ql-w: Quality of water
 Bt-p: Bathing place
 Bt-du: Bathing duration

Figure 4: Rating for water and associated parameters.

Post-seizure: Mean for water and associated parameters is 8.8 (SE = 0.5, N=11) Most parameters received values of 10. The animal has access to sufficient water sources for both drinking and bathing purposes with provision for mud bathing also (Figure 5).



Figure 5: Drinking and bathing facility post-seizure.

IV. Rest and sleep

Pre-seizure: Mean for rest, sleep and associated parameters was 6.5 (SE = 0.8, N=10).

Post-seizure: Mean for rest, sleep and associated parameters is 9.8 (SE = 0.2, N=10) All sections received values of 10 (Figure 6). Except for sleep area (size), all other parameters related to sleep have a value of 10., The type of resting place, size (area), shade availability, place of sleep, area (size) of sleep are similar to natural conditions.

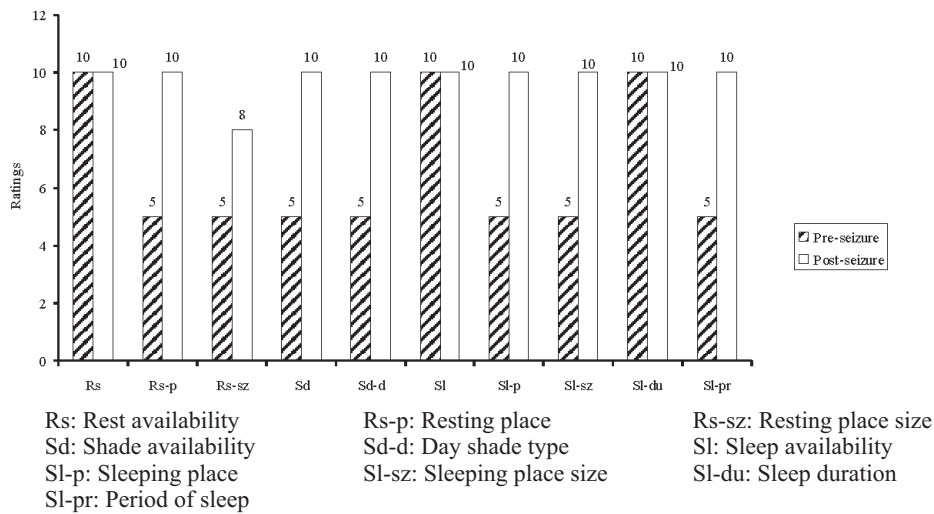


Figure 6: Rating for rest and sleep-related parameters.

V. Physical activity

Pre-seizure: Physical activity also reflects on the status of a captive animal's condition. Too much or too little activity leads to deterioration of health. However, the elephant was not made to walk while under temple custody and therefore was given a score of 0 (SE = 0, N=4). (Figure 7). This implies that the mean of all the parameters associated with it also get 0.

Post-seizure: Mean for physical activity and associated parameters is 10 (SE = 0, N=4). All sections to this parameter received 10.

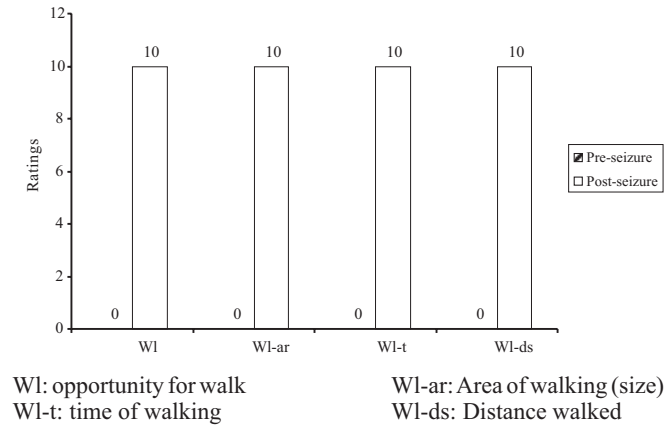


Figure 7: Rating for walk-related parameters

VI. Interaction

Pre-seizure: An elephant is a very social animal and absence of social interaction may cause stress to it (Figure 8). It had no opportunity to interact with any other elephant and gets a mean of 0 (SE=0, N=6).

Post-seizure: The animal being unpredictable was tied to a pole and the amount of interaction with other animals is minimal and also is restricted due to chaining. It gets a mean of 4.5 (SE=1.2, N=6).

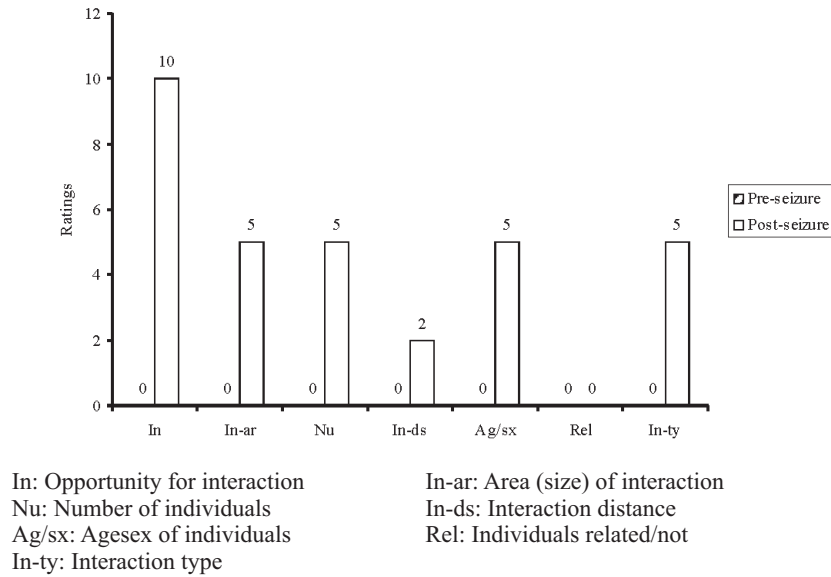


Figure 8: Rating for interaction-related parameters.

VII. Behaviour

The behaviour of an elephant indicates the ease with which its keepers can handle it. The animal was quiet, in general, and is described as reliable. This feature gets a rating of 10 (Figure 9) during both periods (pre- and post-seizure). However, “quiet” nature of an animal might also reflect its conditioning. However, it seems to be aggressive towards its mahout.

VIII. Stereotypy

“A behavioural feature used as a standard in evaluating captive animals is the occurrence of stereotypy which is the repeated invariant occurrence of behaviour(s), expressed by captive animals that are not functionally appropriate in the context of available environmental stimuli.” Girija Prasad is given a rating of 0 (Figure 9) for both the periods (pre- and post-seizure) as he has been showing signs of stereotypy. For both the periods, the parameters for behaviour and stereotypy have been given a mean value of 6 (SE = 2.7, N=3)

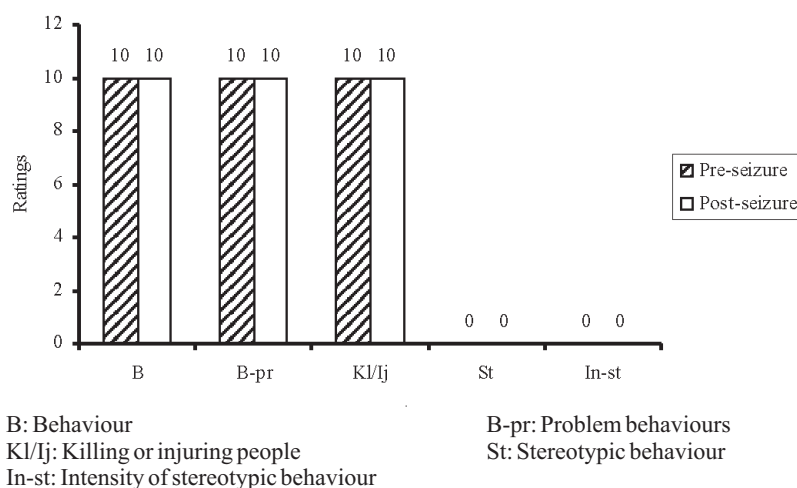


Figure 9: Rating for personality and stereotypic behaviour.

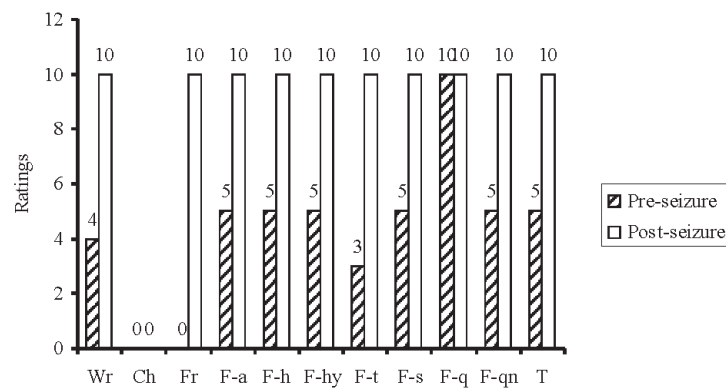
IX. Nature of work and food provided

Pre-seizure: Work is a defining feature of a captive elephant, as this determines the nature and degree of restriction imposed on its natural behaviour. Elephants 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 under stall-fed conditions. The animal was given a rating of 3.9 (SE = 0.86, N=11) for the type of work he was made to perform (Figure 10) and the food provided to him (Figure 11).

Post-seizure: During this period the mean changed to 9.1 (SE = 0.87, N=11). The animal was not made to work and was allowed to range free.



Figure 10: Training method pre-seizure.



Wr: Work type
 F-a: Feeding area
 F-t: Food type
 F-qn: Food quantity
 Ch: duration of chaining
 F-h: Feeding hours
 F-s: Food source
 T: Total quantity of food provided
 Fr: Opportunity for free range
 F-hy: Feeding hygiene
 F-q: Food quality

Figure 11: Rating for work and food-related parameters.

X. Chained or not and chain specifications

The animal is chained during both periods, although allowed to range free in the post-seizure period. During the pre-seizure period, he was not allowed to move about and there was no scope for physical exercise. This could be a reason for his severe stereotypic behaviour as chained animals show increased frequency of stereotypy (Gruber *et al.*, 2000). This has continued even after being shifted to a semi-natural state.

XI. Reproductive status

Its keepers did not report the reproductive status of this animal during pre-seizure accurately and only post-seizure has it shown signs of musth. Pre-seizure period was apparently not the best of period in its life to reach musth (the animal was with the temple authorities till 18 years). However, harsh handling during pre-seizure period has played a significant role (Figure 12). For pre-seizure, mean for this parameter is 0 (SE = 0, N=9), as no musth has been reported. Musth-related behavioural problems or injuries were not reported during this period. The animal exhibited these problems post-seizure and the mean is 7 (SE = 1.53, N=9). Had the animal continued under the previous management regime, the mean for these parameters would have reduced significantly from the current value.

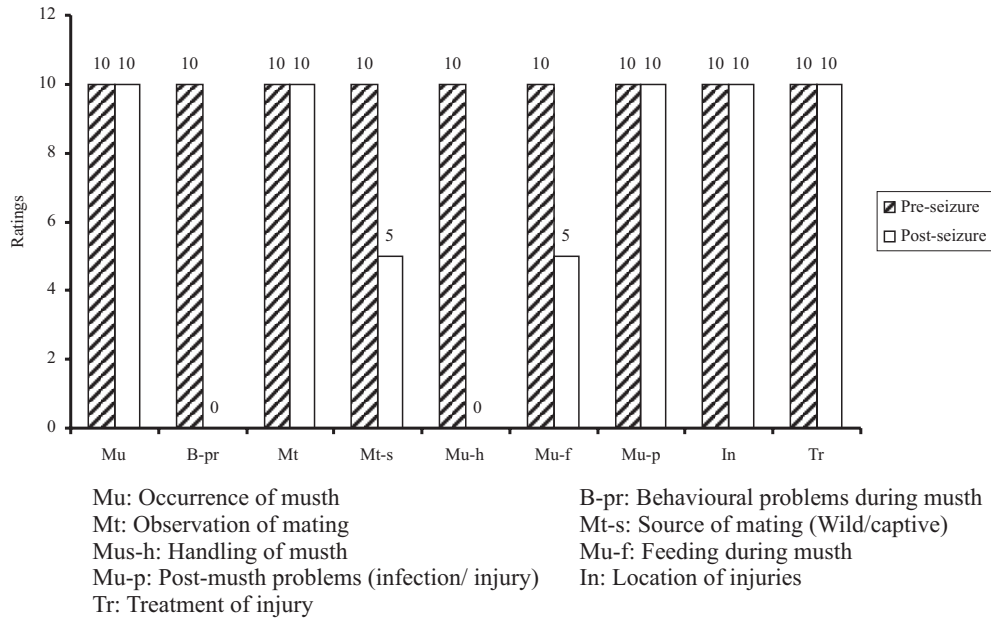


Figure 12: Ratings for reproductive and related parameters.

XII. Injury/disease

Pre-seizure: A direct way of assessing an animal's health status is to check its disease profile or occurrence of injuries. Seventy percent of the parameters assessed were given a score of 3.6, and only body condition value showed 10 (Figure 13). Scars of old wounds were visible on forehead, back and on both sides of the forelegs. Injuries particularly in elephant's head, eyes and trunk region were very prominent. The injuries effectively originated from the cruelty inflicted on the animal; it appears that it was handled very harshly during the pre-seizure period.

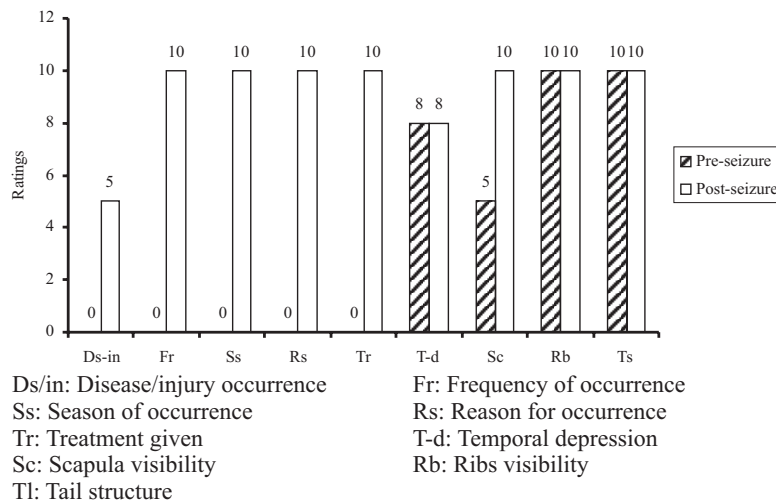


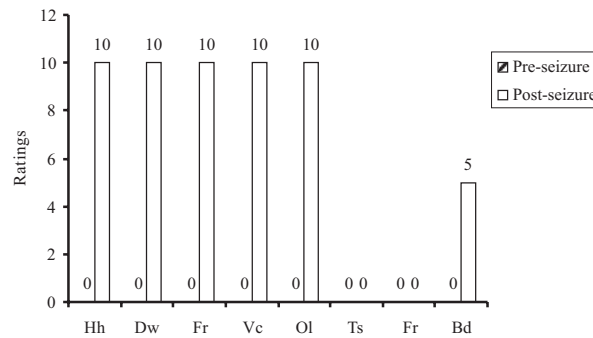
Figure 13: Rating for disease related parameters.

This is evident from the injury marks seen on its sensitive regions. This could also be one of the reasons for the animal showing severe aggression towards its handlers. During this phase, frequency of occurrence of injuries appeared to be very high (Figure 14); they occurred round the year (all seasons), and the reasons associated with such injuries are related to its harsh handling for work. The score for the visibility of scapula (shoulder blade) was only 5.



Figure 14: Handling-related injuries pre-seizure.

Post-seizure: Mean for injury/disease-related parameter is 9.2 (SE = 0.6, N=9). Regular veterinary care resulted in significant improvement during this period. Factors related to harsh handling, de-worming and vaccination, regular oiling of animal were given importance only post-seizure (Figure 15). Mean rating for these aspects for post-seizure is 6.8 (SE = 1.7, N=8) and for 0 it is pre-seizure.



Hh: Harsh handling
 Dw: De-worming
 Fr: Frequency of de-worming
 Vc: Vaccination status
 Ol: Oiling status
 Ts: Tests on blood/urine/dung samples
 Fr: Frequency of tests
 Bd: Body measurements taken

Figure 15: Rating for harsh handling and other parameters.

XIII. Veterinary care and other facilities

Pre-seizure: A significant feature is lack of access to a veterinary doctor or facility. These parameters were given a mean rating of only 0.92 (SE = 0.52, N=13).

Medical Treatment

1. There was no doctor for the elephant for routine check up (Figure 16).
2. Medical record of the elephant does not show that it had any access to veterinary services of any kind.
3. It may have been subjected to quack treatment, which might have caused greater damage than cure its ailments.

Post-seizure: There has been a significant improvement in the parameters related to these aspects and a mean rating of 8.15 (SE = 0.63, N=13) is given.

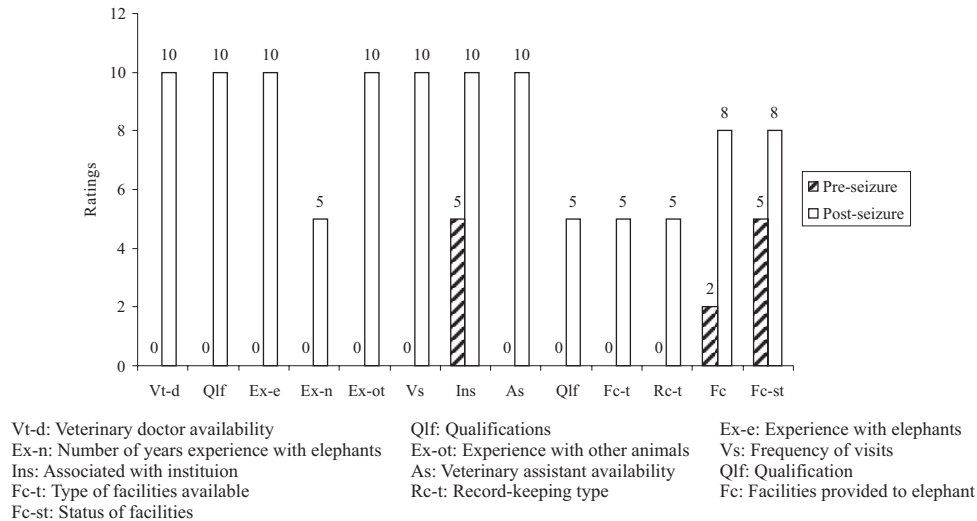


Figure 16: Rating for veterinary and related parameters.

Summary of ratings

A total of 107 parameters were rated for the elephant to assess its past and current status.

Pre-seizure: Overall mean rating was only 3.9 (S.E. = 0.4, N = 107). This rating is also due to more than 10 values given to the animal for its reproductive status.

Post-seizure: Overall mean rating during this period has gone up to 8.3 (SE = 0.3, N=107). These two values are statistically highly significant ($z = 5.2, p < 0.01$) suggesting that the animal's welfare status improved greatly during this period (Figure 17).

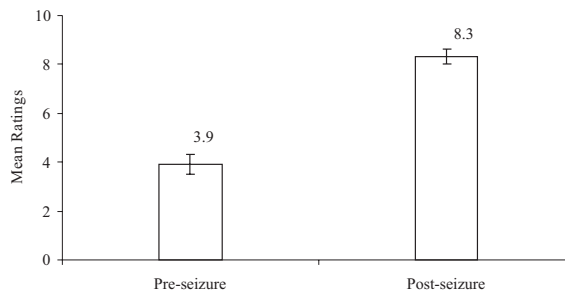


Figure 17: Overall mean rating pattern for pre- and post-seizure periods.

Rating between 0 and 5 indicate poor conditions for the animal. Overall, 76% of the parameters (Figure 18) were given a rating below 5 during pre-seizure period. Significantly, about 78% rating between 8 and 10 occurred during post-seizure period and ten values contributed 70%. There were only 8% of zero values and 22% values between 0 and 5 during this period (Figure 18).

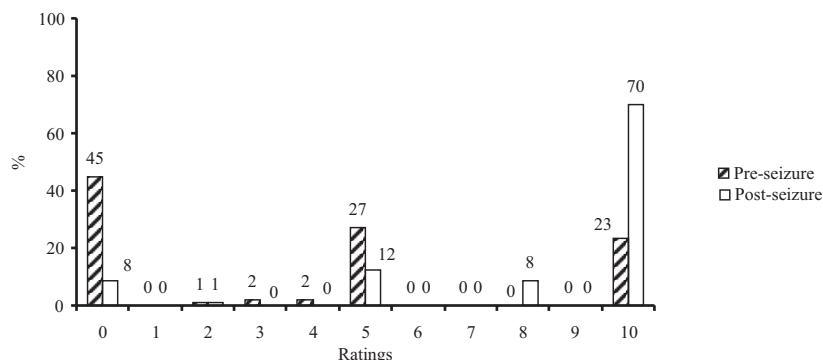


Figure 18: Percentage rating for pre- and post-seizure periods.

Current status

On complaints of an NGO, the Forest Department of Karnataka minutely evaluated the physical and environmental condition of the animal, Girija Prasad and deemed it fit to confiscate the elephant in 2005. It was initially sent to the Dubare Camp. Later, it was transferred to the Bannerghatta Biological Park (BBP), Bangalore, where it has remained in custody for the last two and a half years. It is being looked after jointly by Compassion Unlimited Plus Action (CUPA) and the BBP.

In general, the elephant is maintained in a good management regime (see Table 1 for pre- and post- seizure status) at the Biological Park and this is evident from its rating. One-year's care is reflected on the animal's health. It is a growing elephant and it is strongly advised that the animal be kept in a proper management regime. Standing on a concrete floor for long hours, walking on concrete roads, begging on the streets will prove immensely detrimental to its health and psychological conditions, thereby posing a threat to public safety.

Routine health check-up, under the supervision of a knowledgeable veterinarian is advised. This can be achieved only by keeping the animal in a facility that does not expose the animal to unnatural conditions like high ambient temperatures, limited water availability with no provision for bathing or mud wallowing, which is so essential for the well-being of an elephant, providing low quality and quantity of food, combined with the stress of continuous work from morning to evening.

Table 1: Pre- and post-seizure status of elephant Girija Prasad

Sl.No	Parameters	Pre-seizure	Post seizure
1	Shelter type	Concrete floor and asbestos roof	Forested (mixed forest species)
2	Water availability	Tap or water provided by hose pipe	Tank and reservoir
3	Bath	Once a day for maximum 10 minutes	Two times/day, each lasting 1 to 2 hours
4	Rest	Four hours/day	No work
5	Sleep	Yes, in concrete stall	Yes, forested area

6	Work	Standing in front of a deity and blessing devotees	No work
7	Food	Coconut leaves, cooked rations, bananas, sweets, devotee offerings.	Free ranging (forest species), cut green grass and rice
8	Tool type	Primarily ankush	Stick
9	Interaction	No	Yes
10	Veterinary doctor/ care availability	No	Yes

Conclusion

While Girija Prasad was in the previous temple management, cruelty inflicted on him was a clear and evident indication that the specific biological needs of the animal were not met. Our investigation on the past and present status reveals that the animal was maintained in the most unnatural situations, least suited for its well-being. Now it is in an apparently good physical condition and physiological observations do not indicate major deviations suggesting any diseased condition. The apparent good condition of the animal is a reflection of the improved management regime followed for the past two and a half years, while the animal has been in the custody of the BBP.

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†: Original not seen

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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 organizations 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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The report investigates the well-being and the status of cruelty inflicted on the male elephant Girija Prasad when it was managed by a temple at Bangalore. It is presently housed at the Bannerghata Biological Park following rescue. His welfare status under private and current ownership has been assessed. Welfare and cruelty status have been measured in terms of a number of ecological, management and veterinary parameters.

