



**Dr Sonali Ghosh, IFS,  
Director,  
National Zoological Park (NZN),  
Mathura Road, New Delhi  
[info-nzp@gov.in](mailto:info-nzp@gov.in)**

28<sup>th</sup> October 2021

Dear Dr Ghosh,

### **Solutions for the rehabilitation of Shankar the elephant at the Delhi Zoo**

The Pro Elephant Network (PREN) consists of an international community of diverse individuals and organizations, comprising specific expertise, on wild and captive African and Asian elephants, including the fields of science, health, conservation, welfare, economics, community leadership, social justice and the law.<sup>1</sup>

We appreciate the recent public statements from the management of the National Zoological Park. These include the focus towards empathy and care for the animals as well as the interest in involving academia to assist with understanding animal behaviour better, in order to improve their welfare and wellbeing at the Zoo.<sup>2</sup>

We have unfortunately received disturbing reports about the condition and behaviour of the young adult male African elephant Shankar, kept at the Delhi Zoo. Members of PREN have studied the footage of Shankar engaging in stereotypic behaviour during September 2021.<sup>3</sup> The reports indicate that Shankar is being kept chained up and that he is standing on hard surfaces for approximately 17 hours a day. His distress is causing him to self-harm during musth while trying to free himself from his unpadding, metal chains.

Collectively we all care deeply about elephants and we hereby formally offer the opportunity of collaboration in order for us to discuss possible solutions for improving Shankar's living conditions for the betterment of his welfare and his future health and well-being.

According to the *Elephant Encyclopaedia and Database*<sup>4</sup>, Shankar was caught in the wild in Zimbabwe, aged two years old, and gifted to India in 1998. Shankar arrived at the Delhi zoo on the 2<sup>nd</sup> of October 1998. Shankar has been a solitary elephant since 2005, when his companion Bombai died.

Recent research has invalidated the previously-held notion that elephant bulls are naturally solitary animals.<sup>5</sup>

---

<sup>1</sup> [Members of PREN – PRO ELEPHANT NETWORK](#)

<sup>2</sup> [From safety to well-being — Delhi Zoo reinvents itself \(thepatriot.in\)](#)

<sup>3</sup> [Video of Shankar September 2021](#)

<sup>4</sup> [Shankar at New Delhi Zoo in India - Elephant Encyclopedia and Database](#)

<sup>5</sup> M. Tuomisto 2019 The effect of friendships on the health of the Asian elephant [Tuomisto\\_Matleena\\_opinnayte.pdf \(utupub.fi\)](#) ; Goldenberg *et al* 2014 Controlling for behavioural state reveals social dynamics among male African elephants



Members of PREN have contributed to extensive research into elephant behaviour, cognition<sup>6</sup> and the neurological impacts of captivity<sup>7</sup>. There is growing evidence that elephants are one of the animals who suffer the most in captivity,<sup>8</sup> particularly in solitary confinement.<sup>9</sup>

Generally, elephants are not suited to captivity and Asian elephants are “prone to problems that include poor health, repetitive stereotypic behaviour and breeding difficulties”.<sup>10</sup>

Maintaining a healthy elephant in a zoo requires a substantial financial commitment, this includes competent and constant management of the elephant’s diet<sup>11</sup>, health care provision<sup>12</sup> as well as nurturing their mental wellbeing<sup>13</sup>. In addition, research has shown that despite efforts to provide enrichment at zoos, the needs of elephants are still compromised in captive environments.<sup>14</sup> Not only are captive elephants likely to acquire physical ailments that invariably shorten their lifespan,<sup>15</sup> they are also prone to developing psychological issues that can result in depression<sup>16</sup> and aggressive behaviour, particularly in the case of solitary bulls<sup>17</sup>.

Elephants in the wild naturally cover long distances (typically 10-50-km) every day, while feeding on a rich variety of vegetation across different ecosystems. Their home ranges cover hundreds of square kilometres.<sup>18</sup> When elephants are restricted in a captive environment, they frequently develop musculoskeletal and cardiovascular conditions, which can prove fatal.<sup>19</sup> Elephants also require mental stimulation<sup>20</sup>—their natural behaviours include mud wallowing, bathing, interacting with their companions<sup>21</sup> through touch, vocalisation and olfaction, mourning their dead<sup>22</sup> and countless other social behaviours<sup>23</sup>.

Given their complex cognitive abilities, intelligence,<sup>24</sup> empathy<sup>25</sup> and sentience<sup>26</sup>, elephants have a suite of emotional responses and physical behaviours. When elephants are held in captivity, in undersized enclosures often in indoor

---

<sup>6</sup> Naoko Irie et al, 2009. Elephant psychology: What we know and what we would like to know

<sup>7</sup> Jacobs et al. 2021 Putative neural consequences of captivity for elephants and cetaceans <https://doi.org/10.1515/revneuro-2021-0100>

<sup>8</sup> Professor Lori Marino 2021 [Big Brains in Small Spaces – the Impact of Confinement on the Brains of Cetaceans and Elephants - Bing video](#)

<sup>9</sup> Dr K Lindsay 2017 Solitary elephants in Japan [https://elephantsinjapan.com/wp-content/uploads/2017/08/EIJ\\_Final\\_report\\_ENG\\_web.pdf](https://elephantsinjapan.com/wp-content/uploads/2017/08/EIJ_Final_report_ENG_web.pdf)

<sup>10</sup> Clubb, R. and Mason, G. (2003). Captivity effects on wide-ranging carnivores. *Nature* 425: 463–474.

<sup>11</sup> Ullrey et al 1997 Elephants: Nutrition and dietary husbandry

<sup>12</sup> Meehan et al 2016 determining connections between the daily lives of zoo elephants and their welfare.

<sup>13</sup> Greco et al 2016 Using epidemiology to better understand stereotypic behaviour in elephants in zoos

<sup>14</sup> Clubb R., Rowcliffe M., Lee P., Mar K.U., Moss C. & Mason G.J. 2008. Compromised survivorship in zoo elephants. *Science*, 322:1649.

<sup>15</sup> Wiese & Willis 2004 Calculation of longevity and life expectancy in captive elephants

<sup>16</sup> Bradshaw et al, 2005. Elephant Breakdown; Bell Rizzolo J. et al, 20016. Prevalence and Patterns of Complex PTSD in Asian Elephants (*Elephas maximus*)

<sup>17</sup> C.M. Doyle, personal communication, November 4, 2020

<sup>18</sup> Sukumar R. 2003. *The Living Elephants. Evolutionary Ecology, Behavior and Conservation*. Oxford University Press, Oxford.

<sup>19</sup> Lewis KD, Shepherdson DJ, Owens T & Keele M. 2009. A survey of elephant husbandry and foot health in North American zoos. *Zoo Biology*, 29(2):221-36.

<sup>20</sup> <https://theconversation.com/the-neural-cruelty-of-captivity-keeping-large-mammals-in-zoos-and-aquariums-damages-their-brains-142240>; Poole & Granli 2008 Mind & Movement

<sup>21</sup> Moss CJ & Poole JH 1983. Relationships and Social Structure of African Elephants. In: Primate Social Relationships; An integrated approach. R Hinde (Ed). Blackwell Publ

<sup>22</sup> Goldenberg SZ & Wittmyer G. 2020. Elephant behavior toward the dead: A review and insights from field observations. *Primates*, 61:119–128.

<sup>23</sup> Marino L. 2013. Humans, dolphins, and moral inclusivity. In: R. Corbey & A. Lanjou (eds.), *The politics of species: Reshaping our relationships with other animals*. Cambridge University Press, pp.95-105.; Bradshaw GA & Schore AN. 2007. How elephants are opening doors: Developmental neuroethology, attachment and social context. *Ethology*, 113(5), 426–436.; Derham T & Mathews, F. 2020. Elephants as refugees. *People and Nature*, 2:103–110.

<sup>24</sup> Poole J. & Moss C. 2008. Elephant sociality and complexity In: Wemmer C. & Christen C.A. (Eds) *Elephants and Ethics*. Johns Hopkins University Press, Baltimore. pp.69– 100

<sup>25</sup> Bates L.A., Lee P.C., Njiraini N., Poole J. H., Sayialel K., Sayialel S., Moss C. J. & Byrne R.W. 2008. Do elephants show empathy? *Journal of consciousness Studies*, 15(10-11):204-225

<sup>26</sup> Blattner C.E.2019. The recognition of animal sentience by the law. *Journal of Animal Ethics*, 9(2):121-136 <https://www.jstor.org/stable/10.5406/janimaethics.9.2.0121>



confinement with inappropriate hard substrates and a lack of enrichment, this results in physical and psychological trauma, abnormal behaviour, and premature death.<sup>27</sup>

Stereotypy—the repetitive swaying and head-bobbing—is commonly seen in captive elephants. It is well known that these behaviours are caused by being held in unnatural, restrictive environments, and from exposure to psychological stress that has direct physiological consequences.<sup>28</sup>

The Ministerial Circular of 7<sup>th</sup> November 2009 (File 7-5/2007-CZA; Vol III), banned the keeping of elephants in Zoo collections in India.<sup>29</sup> PREN would therefore like to offer our collaborative expertise. Members of the Pro Elephant Network have participated in the successful relocation and reintegration of elephants, particularly solitary ones, into more natural environments<sup>30</sup> in Africa and Asia.

We are sure you are aware of the recent relocation of Kaavan, formerly resident at the Islamabad Zoo, to a wildlife sanctuary in Cambodia. This event made global news<sup>31</sup> and the international publicity positively highlighted the decisions taken by the administrators of Islamabad Zoo.

Therefore, in summation, we respectfully urge you to explore possible remedies and engage with members of PREN to discuss solutions for the Zoo and for Shankar, so that his biological, psychological and social needs can be better met.

PREN welcomes further engagement on this subject matter and we look forward to hearing from you in this regard,.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Stefania Falcon', is positioned above the printed name.

Stefania Falcon

PREN Coordinator

[stefania@proelephantnetwork.org](mailto:stefania@proelephantnetwork.org)

Mobile +27 (0) 73 301-21-07



[www.proelephantnetwork.org](http://www.proelephantnetwork.org)

## **MEMBERS OF PREN:**

---

<sup>27</sup> Wiese & Willis 2004 Calculation of longevity and life expectancy in captive elephants; Rizzolo JB & Bradshaw GA. 2016. Prevalence and patterns of complex PTSD in Asian elephants (*Elephas maximus*). Proceedings of Asian elephants in culture and nature. *International Conference on Asian Elephants in Culture & Nature*, Sri Lanka. pp.291-297. ; Clubb R., Rowcliffe M., Lee P., Mar K.U., Moss C. & Mason G.J. 2008. Compromised survivorship in zoo elephants. *Science*, 322:1649

<sup>28</sup> Romero LM. 2004. Physiological stress in ecology: lessons from biomedical research. *TRENDS in Ecology and Evolution*, 19(5):249-255.; Bondi CO, Rodriguez G, Gould GG, Frazer A & Morilak DA. 2008. Chronic unpredictable stress induces a cognitive deficit and anxiety-like behavior in rats that is prevented by chronic antidepressant drug treatment. *Neuropsychopharmacology*, 33:320-331.

<sup>29</sup> [CZA Circular banning elephants from zoos.pdf](#)

<sup>30</sup> Liv Baker et al, 2020. Asian elephant rescue, rehabilitation and rewilding

<sup>31</sup> [Cher rescued an elephant then sang him 'My Way' - CNN](#)



Owais Awan	Advocate High Court, Islamabad
Suparna Baksi-Ganguly	President and Co-Founder, Wildlife Rescue & Rehabilitation Center, Bangalore, India
Dr Brett Bard	Veterinarian, South Africa
Dr Jessica Bell Rizzolo	Postdoctoral Researcher, the Conservation Criminology Lab, Dep of Fisheries and Wildlife, Michigan State University
Janey Clegg	Committee Member, SPCA Mutare, Zimbabwe
Professor David Bilchitz	Director, South African Institute for Advanced Constitutional, Public and Human Rights and International Law - South Africa
Megan Carr	Founder, Rhinos in Africa
Lenin Chisaira	Founder, Advocates 4 Earth – Green Law Connect, Zimbabwe
Dr Betsy Coville	Wildlife Veterinarian – USA
Dr Harvey Croze	DPhil (Oxon) Collaborating Researcher – Amboseli Trust for Elephants – Kenya
Nomusa Dube	Founder, Zimbabwe Elephant Foundation
David Ebert	Advocate, Founder Director of The Animal Defense Partnership – USA
Stefania Falcon	Co-Founder, Future 4 Wildlife – South Africa
Daniela Freyer	Co-Founder, Pro Wildlife, Germany
Michele Franko	Captive Elephant Caregiver and Advocate – USA
Chief Stephen Fritz	Indigenous Leader, South Peninsula Khoi Council – South Africa
Dr Toni Frohoff	Ethologist and Behavioral Biologist, Founder of TerraMar
Dr Marion E. Garai	Elephant Behavior Specialist - South Africa
Rachel Harris	Managing Director, Elephant Human Relations Aid, Namibia
Dr Ross Harvey	Environmental Economist, Botswana
Heike Henderson-Altenstein	Director, Future for Elephants e.V.
Alok Hisarwala Gupta	Lawyer, Animal Law – India
Peter Hodgskin	Founder, Hands-off Fernkloof, South Africa
Sangita Iyer	B.Sc., M.A., Founder of Voice for Asian Elephants Society, Nat Geo Explorer and Wildlife Filmmaker
Lynne James	Independent, Elephant Conservation, Zimbabwe
Dr Mark Jones	Veterinarian, Born Free Foundation - UK
David Kabambo	Founder Director of Peace for Conservation – Wildlife Management - Tanzania
Dr Paula Kahumbu	WildlifeDirect, Kenya



Professor Mohan Kharel	Tribhuvan University, Kathmandu, Nepal
Nuria Maldonado	Ecologist, Environmental Science, Max Plank Institute
Jim Karani	Advocate, Lawyers for Animal Protection in Africa – Kenya
Dr Winnie Kiiru	Founder, Conservation Kenya
Brigitte Kornetzky	President and Founder of Elefanten in Not - Switzerland / India
Kahindi Lekalhaile	Africa Network for Animal Welfare, Kenya
Dr Smaragda Louw	Director, Ban Animal Trading, South Africa
Giorgio Lombardi	Warden Vogelgat Private Nature Reserve, South Africa
Linda Masudze	Advocate 4 Earth, Zimbabwe
Varda Mehrotra	Environmentalist, Climate Crisis Researcher – India
Brett Mitchell	Director, Elephant Reintegration Trust, South Africa
Dr Cynthia Moss	Director, Amboseli Trust for Elephants, Kenya
Dr Nurzhafarina Binti Othman	Founder: Seratu Aatai, Elephant Conservation and Research Coordinator at HUTAN-KOCP - Malaysia
Sharon Pincott	Elephant Behavioural Specialist, ex-Hwange, Zimbabwe
Michele Pickover	Director, EMS Foundation, South Africa
Ian Redmond OBE	Founder, African Ele-Fund and Elefriends Campaign, Chairman of Ape Alliance and Co-founder of Rebalance Earth
Ingo Schmidinger	Elephant Husbandry – Co-Founder iScapes
Dr Jan Schmidt-Burbach	Veterinarian, Head of Wildlife Research and Animal Welfare, World Animal Protection International
Dr DJ Schubert	Wildlife Biologist, Animal Welfare Institute - USA
Dr Liz Tyson	Animal Welfare Law, Programs Director - Born Free USA
Antoinette Van de Water	Director, Bring the Elephant Home, South Africa
Vasanthi Vadi	CEO – Federation of Indian Animal Protection Organisations – India
Prof Dan Wylie	Rhodes University, South Africa